

## VITA

### **Martha J. Desmond**

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#### **Educational Background**

B.A. in Environmental Studies (Biology & English), Wells College, Aurora, NY 1985  
M.S. in Wildlife Ecology, University of Nebraska, Lincoln, NE 1991. "*Ecological aspects of burrowing owl nesting strategies*".  
Ph.D. Forestry with a Wildlife Ecology emphasis. University of Nebraska, Lincoln, NE 1997.  
Dissertation: "Evolutionary history of the genus *Speotyto*: a genetic and *morphological perspective*"

#### **Professional Experience**

2016 - Present Regents Professor, New Mexico State University, Department of Fish, Wildlife and Conservation Ecology  
2012 - Present Professor, New Mexico State University, Department of Fish, Wildlife and Conservation Ecology  
2010 - 2012 Interim Department Head, Department of Fish, Wildlife and Conservation Ecology  
2004 - 2012 Associate Professor, New Mexico State University, Department of Fish, Wildlife and Conservation Ecology  
2007 E. (Kika) de la Garza Fellow, USDA Hispanic Serving Institutions Program, Washington, DC  
1999 - 2004 Assistant Professor, New Mexico State University, Department of Fish, Wildlife and Conservation Ecology  
1997 - 1999 International Research Fellow, Chihuahua Mexico, National Science Foundation, Texas A&M University, Kingsville, TX and Universidad Autónoma de Chihuahua, Chihuahua, MX

#### **Research Scholarship and Creative Activities**

##### **Peered Reviewed Journal Articles and Book Chapters**

\*graduate student; \*\* undergraduate student

Griffin, E. \*, **M.J. Desmond** and D. Vanleeuwen. 2018. Juvenile Burrowing Owl nighttime space-use in southern New Mexico. *Journal of Raptor Research* 52:158-1166

Griffin, E. \*, **M.J. Desmond** and D. Vanleeuwen. 2017. Juvenile burrowing owl movement and survival in a human-altered landscape. *Journal of Wildlife Management* 41:649-658. (M. Desmond photo published on the journal cover).

Britt, C.R.\*, R. Garcia Anleu, and **M.J. Desmond**. 2014. Nest survival of a long-lived psittacid: Scarlet Macaw (*Ara macao cyanoptera*) in the Maya Biosphere Reserve of Guatemala and chiquibul forest of Belize. *Condor: Ornithological Applications* 116:265-276.

Ruehmann, M.B\*, **M.J. Desmond**, and W. Gould. 2011. The effects of a smooth brome understory on Brewer's Sparrow nest success in the sagebrush steppe of Wyoming. *Condor* 113:419-429

Berardelli, D\*, **M.J. Desmond**, and L. Murray. 2010. Reproductive success of Burrowing Owls in urban and grassland habitats in southern New Mexico. *Wilson Journal of Ornithology* 122 (1) 51-59.

De Vries, M\*., C. Campbell, A. Klimaszewski-Patterson\*\* and **M.J. Desmond**. 2010. Grassland fragmentation effects on burrowing owl (*Athene cunicularia*) productivity. *Papers of the Applied Geography Conferences* 33: 314-323.

**Desmond, M.J.** 2010. The Burrowing Owl (*Athene cunicularia*). *In Raptors of New Mexico*, J-L. D. Catron Ed. University of New Mexico Press, Albuquerque.

Augdelo, M.S.\*, **M.J. Desmond**, and L. Murray. 2008. Influence of desertification on site occupancy by grassland and shrubland birds during the nonbreeding period in the northern Chihuahuan Desert. *Studies in Avian Biology*. 37:84-100.

**Desmond, M.J.**, C. Mendez-Gonzalez\*, and L. Abbott. 2008. Winter diets and seed selection of granivorous birds in southwestern New Mexico. *Studies in Avian Biology*. 37:101-112.

Haan, S.S\*., **M.J. Desmond**, W. J. Gould, and P. Ward. 2007. Influence of habitat characteristics on detected site occupancy by the New Mexico endemic Sacramento Mountains salamander, *Aneides hardii*. *Journal of Herpetology* 41:1-8.

Ginter, D\* and **M.J. Desmond**. 2005. Site fidelity and movement patterns of wintering savannah sparrows on North Padre Island, Texas. *Wilson Bulletin* 117: 63-71.

Haan, S.S.\* and **M.J. Desmond**. 2005. Effectiveness of 3 capture methods for a terrestrial salamander, *Aneides hardii*. *Herpetological Review* 36:143-145.

Mason, L\*\*., **M.J. Desmond** and M.S. Agudelo\*. 2005. Influence of grassland type, nest type and shrub encroachment on predation of artificial nests in Chihuahuan Desert grasslands. *Western North American Naturalist* 65:196-201.

**Desmond, M.J.**, K. Young, B. Thompson, R. Valdez and A. Lafon Terrazas. 2005. Habitat associations and conservation of grassland birds in the Chihuahuan Desert Region: two case studies in Chihuahua Mexico. Chapter 22 in J.-L. E. Carton, G. Ceballos and R. S. Felger, eds. *Biodiversity, Ecosystems and Conservation in Northern Mexico*. Oxford University Press, New York.

**Desmond, M.J.** 2004. Habitat associations and co-occurrence of Chihuahuan Desert hares: *Lepus californicus* and *L. callotis* in Chihuahua, Mexico. *American Midland Naturalist*. 151:414-419.

Ginter, D\*, and **M.J. Desmond**. 2004. Avian mortality during fall migration at communication towers along the Rio Grande corridor in southern New Mexico. *Southwestern Naturalist* 49(3):414-417.

**Desmond, M.J.** 2004. Effects of grazing practices and fossorial rodents of a winter avian community in Chihuahua, Mexico. *Biological Conservation* 116 (2): 235-242.

**Desmond, M.J.** and F. Chavez-Ramirez. 2002. The first nesting record of mountain plovers (*Charadrius montanus*) in northeast Mexico. *Cotinga* 17:17-19.

**Desmond, M.J.**, T.J. Parsons, T O. Powers and J.A. Savidge. 2001. An initial examination of mitochondrial DNA structure in burrowing owl populations. *Journal of Raptor Research* 35(4):278-281.

**Desmond, M.J.**, J.A. Savidge and K E. Eskridge. 2000. Correlations between burrowing owl and black-tailed prairie dog declines: a 7-year analysis. *Journal of Wildlife Management* 64:1067-1075.

**Desmond, M.J.** and J.A. Savidge. 1999. The importance of satellite burrows for Burrowing Owl populations in black-tailed prairie dog towns. In P.D. Vickery and J.R. Heckert, eds. *Ecology and conservation of grassland birds of the western hemisphere*. Studies in Avian Biology, Cooper Ornithological Society.

**Desmond, M J.** and J.A. Savidge. 1996. Factors influencing burrowing owl (*Speotyto cunicularia*) nest densities and numbers in Western Nebraska. *American Midland Naturalist* 136:143-148.

**Desmond, M J.**, J.A. Savidge and T.F. Seibert. 1995. Spatial patterns of burrowing owl (*Speotyto cunicularia*) nests in black-tailed prairie dog (*Cynomys ludovicianus*) towns. *Canadian Journal of Zoology* 73:1375-1379.

#### **Manuscripts Submitted and in Revision**

Meliopolous, D.\*. M.J. Desmond, and D. Daniels. *Submitted*. Impacts of solar energy development on breeding birds in desert grasslands of southcentral New Mexico. *Journal of Wildlife Management*.

Campos, M.J.\*\*, J. Davis\*, and **M.J. Desmond**. *In Revision*. Precipitation has the greatest influence on vertebrate prey deliveries to burrowing owl nests. *Wilson Journal of Ornithology*.

Palomo-Ramos, R.\* and **M.J. Desmond**. *In Revision*. Foraging ecology of the Bolson Tortoise (*Gopherus flavomarginatus*) in the Northern and Southern Chihuahuan Desert. Journal of Herpetology

### **Popular Articles**

**Desmond, M. J.** and J. Montoya. 2005. Status of Chihuahuan Desert Grasslands. In Grassland ecosystems, endangered species, and sustainable ranching in the Mexico-United States borderlands. U.S. Forest Service Technical Publication.

**Desmond, M. J.**, J.A. Savidge and R. Eckstein\*. 1997. Prairie Partners. NebraskaLAND Magazine.

### **Major Program Funding**

Seranno, E., M.E. Zavala, J. Juarez, S.Cooper, **M.J. Desmond** and M. Torres. 2018. The GANAS national resource HUB for Hispanic Serving Institutions. National Science Foundation, \$3 million.

**Desmond, M.J.**, D. Johnson and G. Clark. 2016. Assessment of burrowing owl translocations in the southwestern United States. US Fish and Wildlife Service. \$75,000 (2016-2019).

**Desmond, M.J.**, B. Baca, R. Tafoya and D. Hacker. 2015. Southwest Natural Resource Career Track Program: Preparing students for success in natural resource fields. \$2 million dollars. (2015-2019).

**Desmond, M.J.** and K Cruz-McDonnell. 2015. Burrowing owl population status, nest survival prey base and predator abundance on Kirtland Airforce Base. Department of Defense. \$123,000 (2015-2016)

**Desmond, M.J.** 2015. Distribution and habitat requirements of Bendire's Thrasher (*Toxostoma bendirei*) throughout its New Mexico range. New Mexico Department of Game and Fish. \$135,000 (2015-2017)

**Desmond, M.J.** 2013. Impacts of energy development on indicator taxa within the Nutt Grasslands of southcentral New Mexico. New Mexico State Land Office. \$100,000 (2013 - 2015).

**Desmond, M.J.**, J. Zimmerman, B. Baca, and S. VanBloem. 2011. Preparing students for career paths with the USDA Forest Service by linking student success with experiential learning opportunities. USDA NIFA, Hispanic Serving Institutions. Program. 3.2 million dollars (2011-2016).

**Desmond, M.J.**, J. Sidle, D. Augustine, C. Campbell, W. Gould, A. Lafon, and G. Roemer. 2008. Source-sink dynamics in grassland bird populations across Great Plains prairie dog colonies: implications for biological diversity and livestock management. USDA, CSREES, National Research Initiative, Managed Ecosystem Program. \$499,980 (2008-2013).

Boeing, W., **M.J. Desmond**, R. Valdez, et al. 2008. Student experiential learning in the natural resource sciences through summer internships and professional mentoring: a joint project proposal. USDA, CSREES, Higher Education Challenge Grant, \$475,889 (2008-2011).

**Desmond, M.J.** 2006. Student experiential learning in a multicultural environment through agency internships and an international exchange program. USDA, CSREES, Hispanic Serving Institution's Program. \$350,000 (2006-2008).

**Desmond, M.J.** 2005. Seed production, grazing management and winter avian community dynamics: Implications for conservation and management of desert grassland systems. USDA, CSREES, National Research Initiative, Managed Ecosystem Program. \$100,000 (2005-2007).

**Desmond, M.J.** and R. Yosef. 2001. Migrant stopover ecology for birds in arid environments: case studies in North American and Middle Eastern deserts. International Arid Lands Consortium, \$75,000 (2001-2004).

**Desmond, M.J.** 1997. Grassland bird conservation on winter grounds in the Chihuahuan Desert of Northern Mexico. International Research Fellow, National Science Foundation, \$52,000 (1997-1999).

### **Other Funding**

**Desmond, M.J.** 2018. Bendire's thrasher (*Toxostoma bendirei*) nest survival and juvenile condition and survival in relation to land management in New Mexico. New Mexico Department of Game and Fish, Share with Wildlife. \$18,000.

**Desmond, M.J.** 2017. Bendire's thrasher (*Toxostoma bendirei*) nest survival and juvenile condition and survival in relation to land management in New Mexico. New Mexico Department of Game and Fish, Share with Wildlife. \$18,616.

**Desmond, M.J.** 2017. Assessment of burrowing owl translocations in the southwestern United States. Arizona Game and Fish Department, Arizona Natural Heritage Program. \$39,000 (2017-2019).

**Desmond, M.J.**, Natural Resources Career Development Program, USDA/Natural Resources Conservation Service, \$33,000.00 (2015-2017).

**Desmond, M.J.**, Breeding burrowing owl surveys and an experimental approach to attracting owls to potential nest sites in the Chihuahuan Desert ecoregion, NM Department of Game and Fish, \$11,000.00 (2015).

Ganguli, A. and **M.J. Desmond**. 2014. Effectiveness monitoring of natural resource defense assessment projects in New Mexico Stream/Riparian Areas and Wetland Ecosystem, Grant County, New Mexico, \$50,000 (2014-2019).

**Desmond, M.J.** 2011. City of Las Cruces burrowing owl management. City of Las Cruces, \$40,880.00 (2011-2014).

**Desmond, M.J.** 2008. Bolson tortoise foraging ecology. Turner Endangered Species Fund. \$50,000 (2008-2010).

Smith, G. and **M.J. Desmond**. 2008. Survey for avian influenza A virus from wild birds in waters of the Rio Grande flyway. Interdisciplinary Research Grant, New Mexico State University \$50,000 (2008).

**Desmond, M.J.** 2002. The effects of forest thinning practices on the Sacramento Mountains Salamander (*Aneides hardii*). U.S. Forest Service, \$52,000. (2002-2005).

**Desmond, M.J.** 2004. Influences of habitat fragmentation and shrub encroachment on avian community dynamics in Chihuahuan Desert grasslands. New Mexico Department of Game and Fish, Share with Wildlife \$34,800. (2004-2008).

**Desmond, M.J.** 2003. Influence of food resources on winter avian abundance, diversity and community dynamics in desert grasslands. National Park Service, DECSU, \$16,000 (2003-2005).

**Desmond, M.J.** 2003. Influence of seed production and habitat associations on a Chihuahuan Desert avifauna. Travel Award, NMSU ADVANCE \$2,640.

**Desmond, M.J.** 2001. Release time for manuscript preparation: ecoregional study on wintering grassland birds of the Chihuahuan Desert. NMSU ADVANCE Program, \$17,292.

**Desmond, M.J.** 2001. Influence of resource manipulations on winter avian abundance, diversity and community dynamics in Chihuahuan Desert grasslands. National Park Service - Mexican Affairs Office, \$32,270. (2001-2004).

**Desmond, M.J.** 2001. Grassland bird wintering ecology on the gulf coast of south Texas and northern Tamaulipas, Mexico. National Park Service - Mexico Affairs Office, \$30,000. (2001-2004).

**Desmond, M.J.** 2001. Grassland bird wintering ecology on the gulf coast of south Texas and northern Tamaulipas, Mexico. National Park Service Desert Southwest Cooperative Ecosystems Studies Unit, \$20,000. (2001-2004).

**Desmond, M.J.** 2001. Travel Award to the 3rd North American Ornithological Conference, New Orleans, LA. NMSU ADVANCE Program, \$1,943. (brought 9 NMSU students)

**Desmond, M.J.** 2001. Spanish Language Inst. Cuernavaca, Morelos, Mexico. New Mexico State University Mexico Small Grants Program, April 21-May 10 2001. \$700.

**Desmond, M.J.** 1999. Conservation of grassland birds on wintering grounds in northern Mexico. U.S. Fish and Wildlife Service, \$13,000 (1999-2001).

**Desmond, M.J.** and F. Chavez-Ramirez. 1998. Grassland bird population monitoring in northern Mexico. Wray Trust, \$3,000.

**Desmond, M.J.** and F. Chavez-Ramirez. 1998. Conservation of grassland birds in northern Mexico. American Wildlife Conservation Foundation, \$1,500.

**Desmond, M.J.** and F. Chavez-Ramirez. 1998. Grassland Bird Wintering Ecology in northern Mexico. American Bird Conservancy, \$2,500.

### **Funding with Students**

Salas, A.\*, **Desmond, M.J.** 2018. Bendire's thrasher (*Toxostoma bendirei*) nest survival and juvenile condition and survival in relation to land management in New Mexico. T&E Inc. \$3,000.

Doublet, D.\*, **Desmond, M.J.**, 2017-2018. Assessment of burrowing owl translocations in the southwestern United States. T&E Inc., \$6000

Porro, C.M.\*, **Desmond, M.J.**, 2016-2017. Burrowing Owl Nesting Ecology and Survival in the Face of a Changing Climate, T & E, Inc., \$6,000

Bear Sutton, C.T.\*, **Desmond, M.J.**, 2015-2016. Distribution, abundance, and breeding habitat requirements of Bendire's Thrasher (*Toxostoma bendirei*) in the Southwest, T & E, Inc., \$6,000

Meliopolous, D.\* and **M.J. Desmond.** 2013-2014. Impacts of solar energy development on breeding birds of the Nutt Grasslands, NM. T&E, Inc. \$5,000.

Ruehmann, M.\* and **M.J. Desmond.** 2009. The effects of an exotic grass understory, *Bromus inermis* Leyss., on Brewer's sparrow reproduction in the sagebrush steppe of Wyoming. T&E Inc., \$2,500.

Palomo-Ramos, R.\* and **M.J. Desmond**. 2009-2010. Foraging ecology, nutritional requirements and home range movements of a semi-wild population of Bolson tortoises (*Gopherus flavomarginatus*) in the northern Chihuahuan Desert. T&E, Inc. \$5,000.

Joos, C.\* and **M.J. Desmond**. 2005-2006. Are shrub encroached grasslands sub-optimal habitat for wintering sage sparrows? T&E, Inc. \$5,000.

McNicoll, J.M.\* and **M.J. Desmond**. 2005. T&E, Inc., Burrowing owl (*Athene cunicularia*) nest site selection in relation to prairie dog colony characteristics and surrounding land-use practices in Janos, Chihuahua Mexico. \$5,000.

Haan, S.\* and **M.J. Desmond**. 2004. T & E, Inc., The effects of forest thinning practices on the Sacramento Mountains Salamander (*Aneides hardii*). \$2,500.

Mendez-Gonzalez, C.\* and **M.J. Desmond**. 2004. T&E, Inc., Influence of resource manipulations on winter avian abundance, diversity and community dynamics in Chihuahuan Desert grasslands. \$7,500. (2004-2007).

Ginter, D.\* and **M.J. Desmond**. 2002. T&E, Inc., Grassland bird wintering ecology on the gulf coast of south Texas and northern Tamaulipas, Mexico. \$2,500.

Berardelli, D.\* and **M.J. Desmond**. 2000. T&E, Inc., Burrowing owl (*Athene cunicularia*) nesting strategies and reproductive success in urban versus native habitats and among burrow types in southern New Mexico. \$2,500.

Niemela, S.\* and **M.J. Desmond**. 2000. T&E, Inc., Grassland bird conservation on wintering grounds in the Chihuahuan Desert: influences of habitat quality and seed availability. \$2,500.

#### **Technical Reports to Agencies**

**Desmond, M.J.**, B. Baca, R. Tafoya and J. Lindline. 2018. Southwest Natural Resource Career Track Program: Preparing students for success in natural resource fields. REEport. USDA Hispanic Serving Institutions Program.

**Desmond, M.J.**, and A. Salas. 2018. Bendire's thrasher (*Toxostoma bendirei*) nest survival and juvenile condition and survival in relation to land management in New Mexico. New Mexico Department of Game and Fish.

**Desmond, M.J.** 2017-2018. Assessment of burrowing owl translocations in the southwestern United States. U.S. Fish and Wildlife Service (Quarterly reports 2017).

**Desmond, M.J.** 2017-2018. Assessment of burrowing owl translocations in the southwestern United States. Arizona Game and Fish Department, Arizona Natural Heritage Program (Biannual reports 2017).



**Desmond, M.J.**, B. Baca, R. Tafoya and J. Lindline. 2017. Southwest Natural Resource Career Track Program: Preparing students for success in natural resource fields. REEport. USDA Hispanic Serving Institutions Program.

**Desmond, M.J.**, B. Baca, R. Tafoya and D. Hacker. 2016. Southwest Natural Resource Career Track Program: Preparing students for success in natural resource fields. REEport. USDA Hispanic Serving Institutions Program.

**Desmond, M.J.** 2016. Distribution and habitat requirements of Bendire's Thrasher (*Toxostoma bendirei*) throughout its New Mexico range. New Mexico Department of Game and Fish.

**Desmond, M.J.** and K Cruz-McDonnell. 2015. Burrowing owl population status, nest survival prey base and predator abundance on Kirtland Airforce Base. Department of Defense.

**Desmond, M.J.**, B. Baca, R. Tafoya and D. Hacker. 2015. Southwest Natural Resource Career Track Program: Preparing students for success in natural resource fields. REEport. USDA Hispanic Serving Institutions Program.

**Desmond, M.J.** 2015. Impacts of energy development on indicator taxa within the Nutt Grasslands of southcentral New Mexico. New Mexico State Land Office.

**Desmond, M.J.**, J. Zimmerman, and B. Baca. 2015. Preparing students for career paths with the USDA Forest Service by linking student success with experiential learning opportunities. REEport. USDA NIFA, Hispanic Serving Institutions.

**Desmond, M.J.** 2015. Distribution and habitat requirements of Bendire's Thrasher (*Toxostoma bendirei*) throughout its New Mexico range. New Mexico Department of Game and Fish.

**Desmond, M.J.** 2014. Impacts of energy development on indicator taxa within the Nutt Grasslands of southcentral New Mexico. New Mexico State Land Office.  
**Desmond, M.J.**, J. Zimmerman, and B. Baca. 2014. Preparing students for career paths with the USDA Forest Service by linking student success with experiential learning opportunities. REEport. USDA NIFA, Hispanic Serving Institutions.

**Desmond, M.J.**, J. Zimmerman, B. Baca, and S. VanBloem. 2013. Preparing students for career paths with the USDA Forest Service by linking student success with experiential learning opportunities. REEport. USDA NIFA, Hispanic Serving Institutions.

**Desmond, M.J.**, J. Zimmerman, B. Baca, and S. VanBloem. 2012. Preparing students for career paths with the USDA Forest Service by linking student success with experiential learning opportunities. REEport. USDA NIFA, Hispanic Serving Institutions.

**Desmond, M.J.**, J. Sidle, D. Augustine, C. Campbell, W. Gould, A. Lafon, and G. Roemer. 2011. Source-sink dynamics in grassland bird populations across Great Plains prairie dog colonies: implications for biological diversity and livestock management. USDA, CSREES, National Research Initiative, Managed Ecosystem Program. Annual Report.

Boeing, W., **M.J. Desmond**, R. Valdez, et al. 2011. Student experiential learning in the natural resource sciences through summer internships and professional mentoring: a joint project proposal. USDA, CSREES, Higher Education Challenge Grant. Final Report.

**Desmond, M.J.**, J. Sidle, D. Augustine, C. Campbell, W. Gould, A. Lafon, and G. Roemer. 2010. Source-sink dynamics in grassland bird populations across Great Plains prairie dog colonies: implications for biological diversity and livestock management. USDA, CSREES, National Research Initiative, Managed Ecosystem Program. Annual Report.

Palomo-Ramos, R.\* and **M.J. Desmond**. 2010.. Bolson Tortoise Foraging Ecology. Turner Endangered Species Fund. 2009. Annual Report.

Boeing, W., **M.J. Desmond**, R. Valdez, et al. 2010. Student experiential learning in the natural resource sciences through summer internships and professional mentoring: a joint project proposal. USDA, CSREES, Higher Education Challenge Grant. Annual Report.

**Desmond, M.J.**, J. Sidle, D. Augustine, C. Campbell, W. Gould, A. Lafon, and G. Roemer. 2009. Source-sink dynamics in grassland bird populations across Great Plains prairie dog colonies: implications for biological diversity and livestock management. USDA, CSREES, National Research Initiative, Managed Ecosystem Program. Annual Report.

Palomo-Ramos, R. and **Desmond, M.J.** 2010. Bolson Tortoise Foraging Ecology. Turner Endangered Species Fund. 2009. Annual Report.

Boeing, W., **M.J. Desmond**, R. Valdez, et al. 2009. Student experiential learning in the natural resource sciences through summer internships and professional mentoring – a joint project proposal. USDA, CSREES, Higher Education Challenge Grant. Annual Report.

**Desmond, M.J.** 2009. Student experiential learning in a multicultural environment through agency internships and an international exchange program. USDA, CSREES, Hispanic Serving Intuition's Program. Final Report.

**Desmond, M.J.** 2008. Student experiential learning in a multicultural environment through agency internships and an international exchange program. USDA, CSREES, Hispanic Serving Intuition's Program. Annual Report.

Desmond, M.J. 2008. New Mexico Department of Game and Fish, Share with Wildlife Influences of habitat fragmentation and shrub encroachment on avian community dynamics in Chihuahuan Desert grasslands. Final Report.

**Desmond, M.J.** 2007. Seed production, grazing management and winter avian community dynamics: Implications for conservation and management of desert grassland systems. USDA, CSREES, National Research Initiative, Managed Ecosystem Program. Final Report.

**Desmond, M.J.** 2007. New Mexico Department of Game and Fish, Share with Wildlife Influences of habitat fragmentation and shrub encroachment on avian community dynamics in Chihuahuan Desert grasslands. Final Report.

**Desmond, M.J.** 2007. Student experiential learning in a multicultural environment through agency internships and an international exchange program. USDA, CSREES, Hispanic Serving Intuition's Program. Annual Report.

**Desmond, M.J.** 2006. New Mexico Department of Game and Fish, Share with Wildlife Influences of habitat fragmentation and shrub encroachment on avian community dynamics in Chihuahuan Desert grasslands. Final Report.

**Desmond, M.J.** 2006. Seed production, grazing management and winter avian community dynamics: Implications for conservation and management of desert grassland systems. USDA, CSREES, National Research Initiative, Managed Ecosystem Program. Annual Report.

Haan, S.\* **and M.J. Desmond**, 2005. U.S. Forest Service, The effects of forest thinning practices on the Sacramento Mountains Salamander (*Aneides hardii*). Final Report.

**Desmond, M.J.** 2005. National Park Service, DECSU, Influence of food resources on winter avian abundance, diversity and community dynamics in desert grasslands. Final Report.

**Desmond, M.J.** 2005. New Mexico Department of Game and Fish, Share with Wildlife Influences of habitat fragmentation and shrub encroachment on avian community dynamics in Chihuahuan Desert grasslands. Final Report.

Haan, S. and **M.J. Desmond**, 2004. U.S. Forest Service, The effects of forest thinning practices on the Sacramento Mountains Salamander (*Aneides hardii*). Annual Report.

**Desmond, M.J.** 2004. National Park Service - Mexican Affairs Office, Influence of resource manipulations on winter avian abundance, diversity and community dynamics in Chihuahuan Desert grasslands. Final Report.

**Desmond, M.J.** 2004. National Park Service - Mexico Affairs Office, Grassland bird wintering ecology on the gulf coast of south Texas and northern Tamaulipas, Mexico. Final Report.

Haan, S\*. and **M.J. Desmond**, 2003. U.S. Forest Service, The effects of forest thinning practices on the Sacramento Mountains Salamander (*Aneides hardii*). Annual Report.

### **Invited Presentations, Panels and Workshops**

**Desmond, M.J.**, 2016. Latinos in Agriculture, Dallas, TX, Building Effective Partnerships to Promote Leadership and Workforce Diversity.

**Desmond, M.J.** 2015, USDA NIFA Hispanic Serving Institutions PI Meeting, Mentoring Underrepresented Students in Natural Resource Sciences, Panel Member, Washington DC.

**Desmond, M.J.**, International Wildlife Management Congress, International Wildlife Management Working Group, 2015. International experiences in wildlife ecology fosters global connections and conservation. Saporro, Japan.

**Desmond, M.J.** 2014. Graduate education preparation, Panel Member, AGRI-Science Conference, USDA Hispanic Serving Institutions National Meeting, Miami, FL. November 2014.

Workshop, SACNAS 2014, Pathways: Strengths and Needs for Successfully Recruiting Underrepresented Students into Natural Resource and Environmental Science Careers, Los Angeles, CA. NRCT Team of faculty and students organized by Dr. Cecilia Hernandez, Department of Curriculum & Instruction, NMSU.

USDA Forest Service, Texas A&M University Workshop, Fort Collins, CO. 2014. "Pathways: Strengths and Needs for Successfully Recruiting Underrepresented Students into Natural Resource and Environmental Science Careers" This is part of a series of workshops that I am an invited participant with the goal to institute change to the US government PATHWAYS program that places students nationwide on career track positions with the federal government. (November 13, 2014 - November 14, 2014).

USDA Forest Service, Texas A&M University Workshop, 2014 "Pathways: Strengths and Needs for Successfully Recruiting Underrepresented Students into Natural Resource and Environmental Science Careers", USDA Forest Service, Albuquerque, NM. This was the first of a series of workshops that I am an invited participant in with the goal of instituting change to the US Federal Government PATHWAYS program. (July 29, 2014 - July 30, 2014).

**Desmond, M.J.** 2014. Burrowing Owl Nest Survival Across Great Plains Grasslands: Does Habitat Fragmentation Play a Role in Observed Population Declines? Sevilleta LTER, University of New Mexico. July 10, 2014.

**Desmond, M.J.**, 2015, Panel member, applying to graduate school. USDA Hispanic Serving Institutions PI Meeting. Miami, FL

**Desmond, M.J.**, J.Zimmerman, B. Baca, S. Van Bloem, A. Padilla, R. Tafoya, E. Concepcion, and J. Frey. 2013. New Mexico – Puerto Rico Natural Resource Career Track (NRCT) Program: Successfully preparing students for careers in natural resource fields.

USDA NIFA Hispanic Serving Institutions Annual Meeting, Mayquez, Puerto Rico. \*Four faculty/staff and over 20 NRCT students attended this meeting.

**Desmond, M.J.** 2011. Keynote Speaker. Women in Conservation. New Mexico Audubon Society. Santa Fe, NM. September 30, 2011.

**Desmond, M.J.** 2011. Keynote Speaker, Alliance for Minority Participation Symposium, New Mexico State University, Las Cruces New Mexico. April 29, 2011.

**Desmond, M.J.** 2010. Sparrow habitat use and diet influences avian community dynamics, movement patterns, and condition. Biology Seminar, NMSU Department of Biology, Las Cruces, NM.

**Desmond, M.J.,** D. Augustine, J. Sidle, C. Campbell, W. Gould, A. Lafon and G. Roemer. 2010. Source sink dynamics in burrowing owl populations across Great Plains prairie dog colonies: implications for biological diversity and livestock management. The Nature Conservancy, Northern Plains Prairie Dog Conservation, October 2010.

**Desmond, M.J.** 2009. Sustaining wildlife along the border. As part of a panel discussion on Sustainability. International Education Week “Semana Tarahumara” New Mexico State University. November 19, 2009.

**Desmond, M.J.** 2009. Burrowing Owl ecology, Mexico/USA. U.S. Mexico Border Field coordinating committee meeting. Las Cruces, NM November 17, 2009.

**Desmond, M.J.** 2009. Burrowing Owl population ecology across Great Plains National Grasslands and northern Mexico. Burrowing Owl Workshop Survey, Monitoring, & Migration Project. Umatilla Chemical Depot (DOD), Oregon. June 2009

**Desmond, M.J.** 2007. Recruiting and retaining minority students in the natural resource sciences. USDA Natural Resources Conservation Service, Hispanic Working Group Meeting. Minneapolis, MN. August 2007.

**Desmond, M.J.** 2007. NMSU and the College of Agriculture and Home Economics. Hispanic Serving Institutions Summer Fellowship Program. Washington DC, June 2007

**Desmond, M.J.** 2006. Student experiential learning in a multicultural environment through agency internships and an international exchange program. USDA, CSREES, National Research Initiative, Hispanic Serving Institutions Principal Investigators Meeting, Washington, DC March 25-27, 2006.

**Desmond, M.J.** 2004. Grassland bird winter ecology and building partnerships with Mexico. U.S. Forest Service, U.S. Forest Service National Grasslands Bird Conference. Socorro, NM.

**Desmond, M.J.** 2004. International planning: Cross-border bird connections. Charting a course for integrated bird conservation in New Mexico: An “All Bird” Workshop”. Rio Rancho, NM.

**Desmond, M.J.** 2004. Ecology of birds in arid environments: case studies for North American and Middle Eastern Deserts. Annual Meeting, International Arid Lands Consortium, Las Cruces, NM.

**Desmond, M.J.** 2000. Evolutionary history of the burrowing owl: a genetic and morphological perspective. Department of Biological Sciences, Fall Seminar Series, New Mexico State University-Las Cruces.

**Desmond, M.J.** 2000. Partners on the prairie: burrowing owl ecology in prairie dog systems. Mesilla Valley Audubon Society, Las Cruces, NM.

**Desmond, M.J.**, T.J. Parsons, T.O. Powers and J.A. Savidge. 1998. Evolutionary history of the Burrowing Owl: a genetic and morphological perspective. Burrowing Owl Symposium, Raptor Research Foundation, Ogden, UT.

**Desmond, M.J.** and J.A. Savidge. 1998. Conservation of Burrowing Owl populations in the Great Plains. Burrowing Owl Symposium, Raptor Research Foundation, Ogden, UT.

Savidge, J.A. and **M.J. Desmond.** 1997. Burrowing owl and prairie dog conservation in the Great Plains. 16th Annual Great Plains Animal Damage Control Workshop.

**Desmond, M.J.** 1996. Issues involving the management of black-tailed prairie dog ecosystems. Department of Forestry, Fisheries and Wildlife, University of Nebraska-Lincoln.

**Desmond, M.J.** 1996. Burrowing owl conservation: implications of multiple scales. Biology Departmental Seminar, University of Nebraska-Omaha.

**Desmond, M.J.** 1996. Burrowing owl and prairie dog conservation in the Great Plains. Fall Seminar Series, Center for Grassland Studies, Lincoln NE.

**Desmond, M.J.** 1996. Burrowing owl and prairie dog populations in Nebraska: why we need to implement a conservation strategy now. Lincoln Chapter of the Audubon Society, Lincoln NE.

**Desmond, M.J.** 1994. An introduction to conservation biology using burrowing owls and prairie dogs as an example. Nebraska Association of Science Teachers-Fremont, NE.

**Desmond, M.J.** 1993. Burrowing owl ecology in the Great Plains. Burrowing Owl Consortium, San Jose, CA.

**Desmond, M.J.** 1992. Burrowing owl ecology: nesting strategies, reproductive success and new directions in conservation biology. Ecology and Evolution Seminar, University of Nebraska-Lincoln.

**Desmond, M.J.** and J.A. Savidge. 1991. Burrowing owl ecology and suggestions for minimizing impacts of prairie dog control. 10th Great Plains Animal Damage Control Workshop, Lincoln, NE.

**Desmond, M.J.** and J.A. Savidge. 1991. Spatial patterns of burrowing owl nests: the influence of prairie dog town size and territoriality, Inland Bird Banding Association's Annual Meeting, Bellevue, NE.

### **Papers and / or Posters Presented before Professional Societies**

Tubens-Tarazona, F\*., C.R. Britt, **M.J. Desmond**, and F. Gebreselassie. 2018. Nest survival in Yellow-headed parrots *Amazona oratrix*: effects of physical properties of cavity and spatial characteristics of habitat. International Ornithological Congress, Vancouver, B.C., Canada

Bear Sutton, C.T.\*, **M.J. Desmond**, M Darr, and D. VanLeeuwen. Breeding habitat requirements of Bendire's Thrasher throughout its New Mexico range. American Ornithologists Union, April 12, 2018.

Porro, C.\*, **M.J. Desmond**, J.A. Savidge, F. Gebreselassie, R. Griebel, K. Cruz-McDonnell, R. Eckstein, J. Davis, and N. Hernandez. 2018. Influence of drought on nest phenology of the Burrowing Owl throughout the Great Plains Region. American Ornithologists Union. April 13, 2018.

Meliopoulos, D.\*, **M.J. Desmond**, and D. Daniel. 2018. Impacts of solar energy development on breeding birds of the Nutt grasslands, NM. American Ornithologists Union, April 13, 2018.

Doublet, D.\*, **M.J. Desmond**, F. Gebreselassie, and D. Johnson. 2018. Assessment of western Burrowing Owl (*Athene cunicularia*) translocations from urban development sites in Arizona. American Ornithologists Union. April 11, 2018.

Tubens-Tarazona, F.\*, C.R. Britt, **M.J. Desmond**, and F. Gebreselassie. 2018. What factors influence nest survival of the endangered Yellow-headed Parrot (*Amazona oratrix*) in Belize? MSB, Belmopan, Belize.

Bear Sutton, C.T.\*, **M.J. Desmond**, M Darr, and D. VanLeeuwen. Breeding habitat requirements of Bendire's Thrasher throughout its New Mexico range. New Mexico Ornithological Society, April 22, 2017.

Porro, C.\*, **M.J. Desmond**, J. Savidge, F. Gebreselassie, R. Griebel, K. Cruz-McDonnell, and R. Eckstein. Is climate change influencing nest phenology of the Burrowing Owl? New Mexico Ornithological Society, April 22, 2017.

Hayes, Q. and **M.J. Desmond**. New Mexico Higher Education Department Assessment and Retention, Albuquerque, NM. February 25, 2016.

Meliopoulos, D.\*, **M.J. Desmond**, D. Daniels. New Mexico Ornithological Society, Albuquerque, NM, Impacts of solar energy development on breeding birds of the Nutt grasslands, New Mexico. April 2016

Bear Sutton, C.\*, **Desmond, M.J.**, Darr. M., New Mexico Ornithological Society Meeting, Albuquerque, NM, "Distribution and breeding habitat requirements of Bendire's Thrasher (*Toxostoma bendirei*) throughout its New Mexico Range. April 2016.

Meliopoulos, D\*., **Desmond, M.J.** New Mexico Ornithological Society, Roswell, New Mexico, "Impacts of solar energy development on breeding birds of the Nutt Grasslands, NM. April 2015.

Dominguez, D.\*, **M.J. Desmond**, G.W. Roemer, W.R.Gould. 4th International Burrowing Owl Symposium, Pasco, WA, "Stable Isotopes Reveal High Breeding Dispersal of a Migratory Owl (*Athene cunicularia hypugaea*)." February 4, 2014.

Williams, C.\*\*., J. Davis \*, **M.J. Desmond**. 4th International Burrowing Owl Symposium, Pasco, WA, "Reproductive Success of The Western Burrowing Owl (*Athene cunicularia hypugaea*) in Agricultural and Urban Habitats of Dona Ana County, New Mexico." February 2014.

Campos, M\*\*., J. Davis, \*, **M.J. Desmond**. 4th International Burrowing Owl Symposium, Pasco, WA, " Influence of nest density and landscape fragmentation on Burrowing Owl prey deliveries to nests ". February 2014.

Duke, E.\*, **M.J. Desmond**, D. VanLeeuwen. 4th international Burrowing Owl Symposium, Pasco, WA, "Juvenile Burrowing Owl survival and dispersal in the urban/agricultural interface of Las Cruces, NM." February 2014.

Campos, M\*\*., J. Davis\*, **M.J. Desmond**. 2014. New Mexico Alliance for Minority Participation, Las Cruces, NM, "Influence of nest density and landscape fragmentation on burrowing owl prey deliveries to nests"

Duke, E.\* and **M.J. Desmond**. New Mexico-Arizona Joint Meetings of the Wildlife Society, Albuquerque, NM. Juvenile Burrowing Owl survival and movement patterns in an urban and agricultural landscape. February 2013.



Campos, M.\*\* , J. Davis\*, **M.J. Desmond**. New Mexico-Arizona Joint Meetings of the Wildlife Society, Albuquerque, NM., "Influence of nest density and landscape fragmentation on Burrowing Owl prey delivery to nests". February 2013.

Curley, K,\*\* **M.J. Desmond**, and V. DiAndrea\*\*. 2013. New Mexico-Arizona Joint Meetings of the Wildlife Society, Albuquerque, NM. Nonbreeding roadside survey on the western burrowing owl, *Athene cunicularia hypugea*.

Good, J.\* , **M.J. Desmond**, R. Treminio\*, W. Gould, G. Roemer, and C. Campbell. 2011. Factors influencing nest survival and productivity in western burrowing owls across the Great Plains. New Mexico Ornithological Society, Las Cruces NM

Cobos, H\*\* , V. DiAndrea\*\* , and **M.J. Desmond**. 2011. City of Las Cruces burrowing owl management project. New Mexico Ornithological Society, Las Cruces NM. (poster)

Campos, M.\*\* , J. Good\* , and **M.J. Desmond**. 2011. Influence of nest density and landscape fragmentation on burrowing owl prey delivery to nests. New Mexico Ornithological Society, Las Cruces NM. (poster)

Hagman, M.B\*\* , J. Good\* and **M.J. Desmond**. 2011. Identification of burrowing owl predators in black-tailed prairie dog colonies across the Great Plains. New Mexico Ornithological Society, Las Cruces NM. (poster)

Williams, C\*\* , J. Good\* , and **M.J. Desmond**. 2010. Does burrowing owl (*Athene cunicularia*) nest density influence time devoted to alert behaviors? New Mexico Ornithological Society, Las Cruces NM. (poster)

**Desmond, M.J.**, C. Mendez\* , and L. Abbott. 2010. Response of a winter sparrow community to a seed manipulation experiment. New Mexico Ornithological Society Meetings, Albuquerque, NM.

Treminio\* , R, **M.J. Desmond** and M. DeVries\* . 2010. Burrowing owl nest site selection and productivity in relation to local and landscape factors across Great Plains National Grasslands. New Mexico Ornithological Society Meeting, Albuquerque, NM.

**Desmond, M.J.**, C. Mendez\* , and L.B. Abbott. 2010. Response of a winter sparrow community to a seed manipulation experiment. COS, AOU, CO joint meetings, San Diego, CA.

Treminio\* , R, **M.J. Desmond** and M. DeVries\* . 2010. Burrowing owl nest site selection and productivity in relation to local and landscape factors within three northern Great Plains National Grasslands. Joint TWS/AFS meeting, Flagstaff, AZ.

Good, Jennifer\*, **M.J. Desmond**, C. Campbell, W. Gould, and G. Roemer. 2010. Factors influencing productivity and nest site selection in western burrowing owls on the Comanche, Kiowa, and Rita Blanca National Grasslands. Joint TWS/AFS meeting, Flagstaff, AZ.

Boeing, W.J. and **M.J. Desmond**. 2009. Combining scholarship and teaching with recruitment: how to kill two birds with one stone. Western Region Teaching Symposium, Las Cruces, NM, USA (poster).

Joos, C\*, **M.J. Desmond**, R. Holberton. 2007. Are shrub encroached grasslands sub-optimal habitat for wintering sage sparrows (*Amphispiza belli*)? Society for Southwestern Naturalists, Annual Meeting, Colima, Mexico.

Joos, C\*, **M.J. Desmond**, R. Holberton. 2006. Are shrub encroached grasslands sub-optimal habitat for wintering sage sparrows (*Amphispiza belli*)? North American Ornithological Society Meeting in Veracruz Mexico.

McNicoll\*, J.M., Boyle\*\*, R. and **M.J. Desmond**. 2006. Burrowing owl (*Athene cunicularia*) nest site selection in relation to prairie dog colony characteristics and surrounding land-use practices in Janos, Chihuahua, Mexico. International Burrowing owl symposium at the North American Ornithological Society Meeting in Veracruz Mexico, Sept. 2006.

Mendez, C.\* , **M.J. Desmond**, and L.B. Abbott. 2006. Avian community dynamics in Chihuahua Desert grasslands: Influence of seed type and quantity. North American Ornithological Society Meeting in Veracruz Mexico, Sept. 2006.

Boyle, R.\*\* , **M.J. Desmond** and L. C. Mason\*\*. 2006. Is nest decoration an indication of parental ability in the burrowing owl (*Athene cunicularia*)? New Mexico-Arizona Joint Meetings of the Wildlife Society. Flagstaff, AZ.

McNicoll, J.\* and **M.J. Desmond**. 2005. Burrowing owl (*Athene cunicularia*) nest site selection in relation to prairie dog colony characteristics and surrounding land-use practices in Janos, Chihuahua, Mexico Joint Meeting of the Wilson Ornithological Society and the Society for Field Ornithology. Washington D.C.

Mendez-Gonzalez, C.\* , **M.J. Desmond** and L. B. Abbott. 2004. Seed selection by winter sparrows in southwest New Mexico. Chihuahuan Desert Research Symposium, Sul Ross State University, Alpine, TX.

Mason, L.C.\*\* , **M.J. Desmond**, and M. S. Agudelo\*. 2004. Influence of grassland type, nest type and shrub encroachment on artificial nests in Chihuahuan Desert grasslands. Western Regional Undergraduate Student CONCLAVE, Lubbock, TX.

- Haan, S.S.\* and **M.J. Desmond**. 2004. Effectiveness of 3 capture methods for a terrestrial salamander, *Aneides hardii*. New Mexico State University, Graduate Research Annual Symposium. Las Cruces, NM.
- Haan, S. S.\* and **M.J. Desmond**. 2004. Effectiveness of 3 capture methods for a terrestrial salamander, *Aneides hardii*. New Mexico-Arizona Joint Meetings of the Wildlife Society. Safford, AZ.
- Mason, L.C.\*\*, **M.J. Desmond**, and M. S. Agudelo\*. 2004. Influence of grassland type, nest type and shrub encroachment on artificial nests in Chihuahuan Desert grasslands. New Mexico-Arizona Joint Meetings of the Wildlife Society. Safford, AZ.
- McNicoll, J.\* and **M.J. Desmond**. 2004. Burrowing owl nest site selection in relation to prairie dog colony characteristics and surrounding land-use practices in Janos, Chihuahua Mexico. New Mexico-Arizona Joint Meetings of the Wildlife Society, Safford, AZ.
- Desmond, M.J.**, A. Lafon and F. Chavez-Ramirez. 2002. Assemblage composition and diversity of grassland birds wintering in northern Mexico: influence of land management practices. 3rd North American Ornithological Conference, New Orleans LA, September 24-28.
- Niemela, S.A.\* and **M.J. Desmond**. 2002. Influence of seed abundance and diversity on a wintering Chihuahuan Desert avifauna. 3rd North American Ornithological Conference, New Orleans, LA, September 24-28.
- Berardelli, D.\* and **M.J. Desmond**. 2002. Burrowing Owl (*Athene cunicularia*) nesting strategies and reproductive success in urban versus native habitats and among burrow types in southern New Mexico. 3rd North American Ornithological Conference, New Orleans, LA, September 24-28.
- Niemela, S.A.\* and **M.J. Desmond**. 2001. Winter habitat associations of a Chihuahuan Desert avian community: effects of vegetation structure and floristic composition. The Wildlife Society Annual Meeting, Reno, NV, September.
- Desmond, M.J.**, F. Chavez-Ramirez and A. Lafon-Terrazas. 2001. Grassland bird habitat associations, distribution and abundance on winter grounds in Chihuahua, Mexico. Cooper Ornithological Society, Grassland Bird Symposium. Albuquerque, NM., April.
- Niemela, S.A.\* and **M.J. Desmond**. 2001. Winter habitat associations of a Chihuahuan Desert avian community: effects of vegetation structure and floristic composition. Cooper Ornithological Society, Grassland Bird Symposium. Albuquerque, NM., April.
- Desmond, M.J.**, F. Chavez-Ramirez and A. Lafon-Terrazas. 2001. Grassland bird habitat associations on winter grounds in Chihuahua, Mexico. New Mexico-Arizona Joint Meetings of the Wildlife Society, Gallup, NM., February.

Niemela, S.A.\* and **M.J. Desmond**. 2001. Winter habitat associations of a Chihuahuan Desert avian community: effects of vegetation structure and floristic composition. New Mexico-Arizona Joint Meeting of The Wildlife Society, Gallup, NM., February.

Berardelli, D.\* and **M.J. Desmond**. 2001. Burrowing owl (*Athene cunicularia*) nesting strategies and reproductive success in urban versus native habitats and among burrow types in southern New Mexico. New Mexico-Arizona Joint Meeting of The Wildlife Society, Gallup, NM., February.

**Desmond, M.J.**, F. Chavez-Ramirez and A. Lafon-Terrazas. 2000. Grassland bird habitat associations on winter grounds in Chihuahua, Mexico. The Wildlife Society Annual Meeting, Nashville, TN., September.

**Desmond, M.J.**, T.J. Parsons, T.O. Powers and J.A. Savidge. 1997. Evolutionary history of the Burrowing Owl: a genetic perspective. American Ornithologist Union Annual Meeting, Minneapolis, MN.

**Desmond M.J.** and J.A. Savidge. 1996. Importance of black-tailed prairie dogs to burrowing owl populations. 58th Midwest Fish and Wildlife Meeting, Omaha, NE.

**Desmond, M.J.** and J.A. Savidge. 1995. Satellite burrow use by Burrowing Owl chicks: the importance of black-tailed prairie dog populations for maintaining Burrowing Owl populations. Grassland Bird International Conference and Training Workshop and AFO Annual Meeting, Tulsa, OK.

**Desmond, M.J.** and J. A. Savidge. 1995. Burrowing Owl foraging behavior and its relevance to their conservation. Grassland Bird International Conference and Training Workshop and AFO Annual Meeting, Tulsa, OK.

**Desmond, M.J.** and J.A. Savidge. 1995. Influence of prairie dog reductions on burrowing owl populations in western NE. Society for Conservation Biology, Fort Collins, CO.

**Desmond, M.J.** and J.A. Savidge. 1994. Factors influencing Burrowing Owl reproductive success in the Great Plains. Joint Meeting of the American, Cooper and Wilson Ornithological Societies, Missoula, MT.

**Desmond M.J.** and J.A. Savidge. 1994. The influence of prairie dog reductions on burrowing owl populations in western Nebraska. Center for Great Plains Studies, Grassland Symposium, Lincoln, NE.

**Desmond, M.J.** and J.A. Savidge. 1994. Burrowing owl population declines in western Nebraska, Nebraska Chapter of The Wildlife Society, Halsey, NE.

**Desmond, M.J.** and J.A. Savidge. 1990. Solitary versus gregarious nesting in burrowing owls. Midwest Fish and Wildlife Conference, Minneapolis, MN.

**Desmond, M.J.** and J.A. Savidge. 1990. Solitary versus gregarious nesting in burrowing owls. Nebraska Academy of Sciences, Lincoln, NE.

**Desmond, M.J.** and J.A. Savidge. 1990. The ecology of burrowing owls in the Nebraska Panhandle. Nebraska Chapter of The Wildlife Society, Aurora, NE.

**Desmond, M.J.**, L.J. Goodrich and S.E. Senner. 1986. Migrant raptor use of the farmland region surrounding the Kittitanny Ridge in Berks and Lehigh Counties, PA. Pennsylvania Academy of Sciences, Philadelphia, PA.

### **Other Research/Professional Presentations**

**Desmond, M.J.**, J. Zimmerman, J. Davis, E. Concepcion, B. Baca, A. Padilla, R. Tafoya, and Q. Hays. 2014, Preparing students for career paths with the USDA Forest Service by linking student success with experiential learning opportunities in forest management and climate change ecology. USDA NIFA Hispanic Serving Institutions National Meeting. Washington DC. Brought four faculty and four students. (poster and presentation)

**Desmond, M.J.**, J. Zimmerman, J. Davis, E. Concepcion, B. Baca, A. Padilla, R. Tafoya, and Q. Hays. 2014, Preparing students for career paths with the USDA Forest Service by linking student success with experiential learning opportunities in forest management and climate change ecology. USDA NIFA Hispanic Serving Institutions National Meeting, Beltsville, MD. \*brought four faculty members and seven students. (Poster)

Campos, M.\*\*, J. Davis, J.\*, **M.J. Desmond**, 2013. New Mexico Alliance for Minority Participation, State Meeting, Las Cruces, NM, "Influence of Nest Density and Landscape Fragmentation on Burrowing Owl Prey Delivery To Nests". October 2013 (Second place for best student presentation).

**Desmond, M.J.**, Zimmerman, J., Baca-Sanchez, B., Padilla, A., Tafoya, R., Concepcion, E., Frey, J. K. 2013. USDA HSI ROCN PI Meeting, Mayaguez, PR, "New Mexico-Puerto Rico Natural Resource Career Trak (NRCT) Program: Successfully Preparing Students for Careers in Natural Resource Fields". August 2013

**Desmond, M.J.**, D. Augustine, J. Sidle, C. Campbell, W. Gould, A. Lafon and G. Roemer. 2011. Source-sink dynamics in grassland bird populations across Great Plains prairie dog colonies: implications for biological diversity and livestock management. USDA-NIFA-NRI Managed Ecosystems Project Director Meeting, Washington DC July 19- 21, 2011. (poster)

Campos, M.\*\*.J. Good\*, and **M.J. Desmond**. 2011. Influence of nest density and landscape fragmentation on burrowing owl prey delivery to nests. Alliance for Minority Participation Symposium, New Mexico State University, Las Cruces NM

Williams, C\*\*, J. Good\*, and **M.J. Desmond**. 2011. Does burrowing owl (*Athene cunicularia*) nest density influence time devoted to alert behaviors? NMSU Minority Biomedical Research Support- Research Initiative for Scientific Enhancement (RISE), Las Cruces NM, July 22, 2011.

**Desmond, M.J.**, D. Augustine, J. Sidle, C. Campbell, W. Gould, A. Lafon and G. Roemer. 2009. Source-sink dynamics in grassland bird populations across Great Plains prairie dog colonies: implications for biological diversity and livestock management. USDA-NIFA-NRI Managed Ecosystems Project Director Meeting, Pittsburgh, PA. November 3, 2009. (poster)

Boeing, W.J. and **M.J. Desmond**. 2009. Combining scholarship and teaching with recruitment – how to kill two birds with one stone. Western Region Teaching Symposium, Las Cruces, NM, USA (poster).

**Desmond, M.J.** 2008. Seed production, grazing management, and winter avian community dynamics: Implications for conservation and management of desert grassland systems. Advance recognition and celebration. November 2008.

De La O, I.\*\* and **M.J. Desmond**. 2008. Effects of cattle grazing and environmental factors on seed production in dropseed dominated grasslands of the Chihuahuan Desert. NMSU AMP Program, New Mexico State University, December 2008. (received best presentation award)

De La O, I.\*\* and **M.J. Desmond**. 2008. Effects of cattle grazing and environmental factors on seed production in dropseed dominated grasslands of the Chihuahuan Desert. NMSU AMP Program, New Mexico State University, May 2008

Cobos, H.\*\*, R. Treminio\*, and **M.J. Desmond**. 2008. Movement patterns of burrowing owls determined through stable isotope and molecular techniques. AMP program, NMSU.

**Desmond, M.J.** 2007. Burrowing owl ecoregional research across Great Plains National Grasslands. USDA Forest Service, Denver CO (March 2007).

**Desmond, M.J.**, C. Mendez-Gonzalez\* and L.B. Abbott. 2007. Seed production, grazing management and winter avian community dynamics: applications to desert grassland systems. NMSU Advance Science Symposium. April 2007.

Dominguez, D\*. and **M.J. Desmond**. 2007 Student experiential learning in a multicultural environment through agency internships and an international exchange program. USDA, CSREES, Hispanic Serving Institution, Student Leadership Program, Washington, DC January 2007.

**Desmond, M.J.**, C. Mendez-Gonzalez\* and L.B. Abbott. 2006. Seed production, grazing management and winter avian community dynamics: applications to desert grassland systems. USDA Project Directors Meeting, Indianapolis, in November 2006.

**Desmond, M.J.** 2006. Student experiential learning in a multicultural environment through agency internships and an international exchange program. USDA, CSREES, National Research Initiative, Hispanic Serving Institutions Principal Investigators Meeting, Washington, DC March 25-27, 2006.

**Desmond, M.J.** 2005. Cooperative grassland bird research along the U.S./Mexico border. U.S./Mexico Border Conference, National Park Service. New Mexico State University, Las Cruces, NM.

**Desmond, M.J.** 2004. Field presentation on grassland bird communities in semidesert and southern plains grasslands of the Chihuahuan Desert. Tour of Otero Mesa. Sponsored by Society for Range Management, New Mexico Section.

**Desmond, M.J.** 2003. La avifauna del norte de México. Biología Simposio, Universidad Autónoma de Ciudad de Juárez, Chihuahua, México.

McNicoll, J.\*, and **M.J. Desmond.** 2003. Selección de nidos por la lechuza llanera (*Athene cunicularia*) en relación a las características de las colonias de perritos llaneros y los usos de suelo alrededor a las colonias en Janos, Chihuahua, México. Biology Symposium, Universidad de la Ciudad de Juárez, Chihuahua, MX.

McNicoll, J.\* and **M.J. Desmond.** 2003. (November 4) Burrowing owl (*Athene cunicularia*) nest site selection in relation to prairie dog colony characteristics and surrounding land-use practices in Janos, Chihuahua, Mexico. Western Regional Partners in Flight Conference, Silver City, NM., November 4.

Agudelo, M.S.\* and **M.J. Desmond.** 2003. Influence of habitat fragmentation and shrub encroachment on avian community dynamics in Chihuahuan Desert grasslands. Western Regional Partners in Flight Conference, Silver City, NM., November 4.

**Desmond, M.J.** 2003. Composición y diversidad de la comunidad de aves de pastizal en el Norte de Mexico durante el invierno. Workshop, Universidad Autónoma de Chihuahua y la estación La Campana, Chihuahua, MX, May.

**Desmond, M.J.** 2003. National 4-H Competition Field presentation on small mammals and birds in the Chihuahuan Desert. Las Cruces, NM., July.

**Desmond, M.J.** 2001. Status of Chihuahuan Desert grasslands: Grassland ecosystems, endangered species, and sustainable ranching in the Mexico-United States borderlands. Invited speaker. Casas Grandes, Chihuahua, Mexico.

**Desmond, M.J.** 1998. Bird Banding Workshop. Universidad Autónoma de Chihuahua in Chihuahua, Mexico for students in Wildlife Sciences.

**Desmond, M.J.** 1998. Bird Banding Workshop. Co-organized with Felipe Chavez-Ramirez at Rancho Los Angeles in Saltillo, Mexico for students from the Universidad Agraria Autónoma Antonio Narro.

### **Awards and Recognition for Excellence**

2017 USDA Partnership Award, presented for “outstanding leadership and dedicated commitment to diversity programs and student success.” USDA Hispanic Serving Institutions, Annual PI Meeting, Albuquerque, NM February 17, 2017.

2016 Regents Professorship, New Mexico State University, January 19, 2016

2015, Professional of the Year, New Mexico Chapter of the Wildlife Society, February 6, 2015.

2011 USDA Forest Service, Wings Across the Americas, 2011 Conservation Award for International Cooperation, North American Wildlife and Natural Resources Conference, Kansas City, MO, March 14-18, 2011.

2010 College of Agricultural, Consumer and Environmental Sciences, TEAM AWARD for the development of the New Mexico Natural Resources Consortium

2010 USDA Forest Service, National Grassland Interpreter Award, for introducing over 70 NMSU and UACH undergraduate and graduate students to careers in research and the USDA Forest Service through summer internship experiences on USDA Forest Service National Grasslands. National Grasslands Annual Conference, Black Kettle National Grassland, Granite OK, May 4-5.

### **Teaching Scholarship and Creative Activities**

#### **Classes Taught (New Mexico State University)**

FWCE 110 Introduction to Natural Resources (high enrollment science general education lab class)

FWCE 536 Advanced Avian Ecology

FWCE 430 Avian Field Ecology

FWCE 402 Undergraduate Seminar

FWCE 515 Graduate Seminar

FWCE 450 Tropical Field Ecology (4 classes in Belize)

WLSC 440/545 Habitat Management

WLSC 450 Ecology and Natural History of the Great Plains

WLSC 455/545 Systems Ecology in Wildlife Management

WLSC 356 Field Techniques

#### **Graduate Students – In Progress**

Cody Bear Sutton (MSc) Distribution and habitat requirements of Bendire’s Thrasher (*Toxostoma bendirei*) throughout its New Mexico range.



Catie Porro (MSc) Burrowing Owl nesting ecology in the face of a changing climate  
 Fabio Tarzona- Tubens (MSc) Nest survival in Yellow-headed parrots *Amazona oratrix*:  
 effects of physical properties of cavity and spatial characteristics of habitat.  
 Dejeanne Doublet (MSc) Assessment of Western Burrowing Owl (*Athene cunicularia*)  
 translocations from urban development sites in the southwestern United States  
 Allison Salas (MSc). Subject: Bendire's Thrasher daily nest survival and juvenile survival in  
 southwestern, New Mexico.

### **Graduate Students - Completed**

DeeAnne Meliopoulos (MSc) Impacts of solar energy development on breeding birds of the  
 Nutt Grasslands, NM. 2017.  
 Eboni Duke Griffin (MSc) 2014. Burrowing owl ecology during the post-fledging period in  
 an urban and agricultural interface of southern New Mexico.  
 Nancy Hernandez (MSc Universidad Autonoma de Chihuahua) 2013. Nesting ecology and  
 habitat selection of burrowing owls in relation to habitat fragmentation in Northern  
 Mexico. (although Nancy received her degree from UACH she was very much a part of  
 my lab and I was her main research advisor).  
 Rosalinda Palomo (MSc – nonthesis). 2013. Foraging ecology of the Bolson tortoise  
 (*Gopherus flavomarginatus*) in the northern and southern Chihuahuan Desert.  
 Jennifer Davis (MSc) 2012. A multi-scale approach to burrowing owl (*Athene cunicularia*  
*hypugaea*) nest survival and productivity across Great Plains black-tailed prairie dog  
 colonies.  
 Charles Britt (MSc) 2011. Thesis title “Nest survival and nest-site selection of Scarlet  
 Macaws (*Ara macao cyanoptera*) in the Maya biosphere reserve of Guatemala and  
 Chiquibul forest of Belize.”  
 Megan Reuhmann (MSc.) 2010. The effects of an exotic grass understory, *Bromus inermis*  
 Leyss., on avian community composition and Brewer's Sparrow reproduction in the  
 sagebrush steppe  
 Cesar Mendez Gonzalez (Ph.D) 2010Dissertation: Influence of resource manipulation on the  
 abundance, diversity and community dynamics of a winter Chihuahuan Desert avifauna  
 Dayna Dominquez (MSc.) 2009. Western burrowing owl (*Athene cunicularia hypugaea*)  
 breeding dispersal across Great Plains black-tailed prairie dog colonies using stable  
 hydrogen isotope analysis.  
 Cara Joos (M.Sc.) 2007. Are shrub encroached grasslands sub-optimal habitat for wintering  
 sage sparrows (*Amphispiza belli*)?”  
 Sofia Agudelo (M.S.) 2005 Influence of habitat fragmentation and shrub encroachment on  
 avian community dynamics in Chihuahuan Desert grasslands  
 Jennifer McNicoll (MSc.) 2005 Burrowing owl ecology in the Janos/Nuevo Casas Grandes  
 prairie dog complex in Chihuahua, Mexico  
 Stephanie Haan (M.Sc.) 2005 Effects of forest thinning practices on the Sacramento  
 Mountains Salamander (*Annedies hardii*)  
 Daniel L. Ginter (MSc) 2004 Winter ecology and behavior of grassland sparrows on north  
 Padre Island, TX  
 Daniele Berardelli (MSc) 2003, A comparative study of burrowing owl (*Athene cunicularia*)  
 reproductive success in urban and grassland habitats in southern New Mexico.

Steve Niemela (MSc. 2002, Habitat selection by wintering sparrows: influences of habitat quality and seed availability).

**Graduate Committees-** Served on committees of approximately 40 graduate students within and outside of Fish, Wildlife and Conservation Ecology as well as two MSc students at the Universidad Autonoma de Chihuahua.

**Funded Educational Programs** (also listed under various categories of research support)  
Seranno, E., M.E. Zavala, J. Juarez, S.Cooper, **M.J. Desmond** and M. Torres. 2018. The GANAS national resource HUB for Hispanic Serving Institutions. National Science Foundation, \$3 million.

**Desmond, M.J.**, B. Baca, R. Tafoya and D. Hacker. 2015. Southwest Natural Resource Career Track Program: Preparing students for success in natural resource fields. \$2 million dollars. (2015-2019). \*We received an additional \$50,000 to host the USDA National Hispanic Serving Institutions Program Annual National Meeting in Las Cruces in 2016-2017.

**Desmond, M.J.**, J. Zimmerman, B. Baca, and S. VanBloem. 2011. Preparing students for career paths with the USDA Forest Service by linking student success with experiential learning opportunities.\$3.2 million. This program directly mentored 112 under-represented minority students in natural resource fields)

**Desmond, M.J.**, J. Sidle, D. Augustine, C. Campbell, W. Gould, A. Lafon, and G. Roemer. 2008. Source-sink dynamics in grassland bird populations across Great Plains prairie dog colonies: implications for biological diversity and livestock management. USDA, CSREES, National Research Initiative, Managed Ecosystem Program. Integrated Research and Teaching Proposal. \$499,980 (active 2008-2012) (This program mentored 5 graduate and 70 undergraduate students in wildlife ecology)

Boeing, W., **M.J. Desmond**, R. Valdez, et al. 2008. Student experiential learning in the natural resource sciences through summer internships and professional mentoring – a joint project proposal. USDA, CSREES, Higher Education Challenge Grant, \$475,889 (active 2008-2011)

**Desmond, M.J.** 2006. Student experiential learning in a multicultural environment through agency internships and an international exchange program. USDA, CSREES, Hispanic Serving Intuition's Program. \$350,000 (active 2006-2008)

### **Service and Professional Affiliations**

#### **Leadership**

ADVANCING Leaders – 2005-2006 Academic Year

ADVANCE Faculty Development Committee 2009-2013

ADVANCE/Teaching Academy Faculty Mentor 2005 – present

USDA E. (Kika) de la Garza Fellowship, Washington, DC

- Competitive fellowship (2007). Leadership training with the USDA in Washington DC

NMSU, Plan to Plan Committee 2006

ACES Action Team

ACES – College Strategic Planning

### **Committees (University, College, Departmental)**

2018-Present	ACES Open House Planning Committee
2018-Present	ACES Awards Committee
2017	NMSU, Search Committee, Vice President for Research
2016 - 2018	NMSU, University Research Council (URC), ACES Representative
2016 - Present	NMSU, Westhafer Award Committee, ACES Representative
2006 - Present	FWCE, Promotion and Tenure Committee (Current Chair)
2015 - Present	FWCE, Recruitment and Careers Committee (Current Chair)
2015 - Present	NMSU, Alliance for Minority Participation (AMP) Advisory Committee
2015 - Present	FWCE, Scholarship and Awards Committee
2016	ACES, Search Committee, Dean College of Agricultural, Consumer and Environmental Sciences
2013-2014	NMSU, International enrollment management committee
2012	FWCE, Search Committee, FWCE USGS Coop Unit Position
2011	ACES, Search Committee, Associate Dean and Director of the Agricultural Research Station
2006	NMSU, NSF funded Advancing Leaders Program
2006 - 2012	ACES, Chihuahuan Desert Rangeland Research Center Steering Committee.
2006 - 2010	NMSU, New Mexico Higher Education Department - Articulation Taskforce Discipline Review Team Member (chair 2009)
2007	NMSU, Plan to Plan Committee
2004	FWCE, Faculty Search Committee, Aquatic Ecology
2004	NMSU, Search Committee Member, Department of Biology, Faculty Position, Systems Ecology
2004-2009	ACES, Scholarship Committee (Committee Chair 2005-2006)
2002-2010	FWCE, Course of Study Committee (Chair 2003-2005)
2001-2005	FWCE Facilities Committee
2001	FWCE, Faculty Search Committee, Terrestrial Ecology
2001	FWCE, Faculty Search Committee, Aquatic Ecology
2000	FWCE, Faculty Search Committee, USGS Coop Unit Position
1999-2010	FWCE, Advisor – Student Chapter of the Wildlife Society
1999-2001	FWCE, Graduate Studies Committee (Chair 2001)
2003-2005	ACES, Advisement Committee

### **Scientific Committees**

2006 - Present	Scientific Advisory Committee -New Mexico Dept. Game & Fish, Gray Vireo
2004 - Present	Scientific Advisory Committee – Malpai Borderlands Group
2004 - Present	Tri-national Burrowing Owl Technical Advisory Committee

- 2005 - 2010  
2004 Scientific Advisory Committee – Colorado Bird Observatory  
Participated in the Forest Assessment of the Lincoln National Forest in Alamogordo, NM (March 29 – April 2, 2004/June 21-24)
- 2003 – 2014  
2002-2003 Chihuahuan Desert Rangeland Research Center Steering Committee  
Scientific Chair, New Mexico/Arizona Joint Meetings of the Wildlife Society, in Gallup NM, February 6 – 8
- Received, reviewed, and edited abstracts
  - Put meeting program together
  - Organized the scientific program
- 2001 – Present  
2001- Present New Mexico Burrowing Owl Working Group  
Member committee to address tri-national grassland issues (United States, Canada and Mexico). Organized by the Commission for Environmental Cooperation (Montreal, Canada).
- 1999-Present State of New Mexico – Black-tailed Prairie Dog Working Group (Scientific Advisory Committee)

### **Symposia**

Organized and chaired the National USDA NIFA Hispanic Serving Institutions Annual National Meeting in Albuquerque, NM February 2017.

Organized and co-chairing a symposium on the “Ecology and Conservation of Grassland Birds” at the Cooper Ornithological Society Meeting in Albuquerque, NM in April of 2001.

- Co-hosted and co-organized symposium
- Edited abstracts
- Presented opening remarks
- Secured funds through the World Wildlife Fund to pay travel and per diem for researchers and students from Mexico

Co-chaired and organized a scientific session on the "Ecology and management of black-tailed prairie dog ecosystems" at the 58th Midwest Fish and Wildlife Meeting in Omaha, NE, Dec 7 - 11, 1996. Hosted and moderated an evening roundtable discussion.

### **Professional Societies**

The Wildlife Society - National and New Mexico Chapters

- International working group (Secretary 2006-008, Chair 2008-2012)
- Gender and Ethnic Diversity working group

New Mexico Ornithological Society

- Board Member

American Ornithologists Union

Cooper Ornithologists Union

Raptor Research Foundation