

DANIELLE WALKUP
Post-Doctoral Research Associate, Natural Resources Institute, Texas A&M University
College Station, TX 77843-2258
Email: dkwalkup@tamu.edu

Education

Texas A&M University – College Station, Texas
Ph.D. – Wildlife and Fisheries Science – December 2018
Western New Mexico University - Silver City, New Mexico
M.A.T. - Secondary Education - May 2010
B.S. - Forestry & Wildlife - May 2008

Research Experience

Texas A&M University, College Station, TX

Post-doctoral Research Associate

Aug 2018 - Present

Graduate Research Assistant

Aug 2013 – Aug 2015; May 2016 – Dec 2016

Research Assistant

Apr – Sept 2011; Apr 2012 – Aug 2013

- 2012-2016 – Led mark-recapture studies with project PIs, organized field operations, maintained equipment and schedules, analyzed data, prepared publications and technical reports, trained and supervised field technicians
- 2011-13 - Led pitfall trapping studies with project PIs, conducted mark-recapture studies, supervised project logistics

Western New Mexico University, Silver City, NM

Assistant to P.I

Feb – Dec 2013

- Assisted in designing the post-fire plant survey protocol in comparative survey sites in the Gila National Forest
- Collected, identified and preserved vegetation from established survey sites

Biological Field Manager

Oct 2012 – Apr 2013

- Analyzed data; writing reports and papers on Common Blackhawk data collected from 2010-2012
- Data entry and analysis of Cliff-Gila Valley bird surveys

Biology Field Assistant

May-Aug 2009; May- Aug 2010; Apr-Dec 2011

- In plots along the Gila River, used a GPS to mark locations of Southwestern Willow Flycatchers, Yellow-Billed Cuckoos, Common Blackhawks, and other birds
- Surveyed and identified populations of Southwestern Willow Flycatchers, identifying breeding males and territories
- Assisted in writing summary reports of Southwestern Willow Flycatcher and Common Blackhawk monitoring results for distribution to the U.S. Forest Service, New Mexico Department of Game and Fish, The Nature Conservancy, Freeport-McMoRan Copper & Gold, and private landowners
- Collected and analyzed vegetation data at Common Blackhawk nests, and for Abert's Towhee and Gila Woodpecker nests and random plot points, using BBIRD protocol
- Set up survey points for a general survey of Cliff-Gila Valley bird abundance and diversity monitoring on public and private lands; assisted in surveying and analysis of survey data, using Distance survey protocol

Herbarium Technician

May 2009 – Dec 2010

- Set up plots to collect vegetation data at the San Vicente Creek restoration area as part of an initial assessment of vegetation for the purpose of restoration of a riparian area
- Determined individual plant species in each plot, collected and identified any unknown plant species, assigned cover classes
- Maintained herbarium, entered specimens into database, mounted new specimens, repaired damage to old specimens, and maintained taxonomic updates

Field Technician

May - Aug 2008

- Collected plants, under supervision of project supervisor, for purpose of compiling comprehensive list of plants in and around the Gila River. List would be used to identify endangered species, to record the movement of invasive species, and

provide a baseline record of current plant community diversity

- Pressed/labeled plants collected in preparation for inclusion in University herbarium and assisted in identification of species

Student Employee, Silver City, NM

Sept 2007 - May 2008

- Maintained herbarium, entered specimens into database, mounted new specimens, repaired damage to old specimens, reorganized specimen cabinets, and maintained nomenclatural updates

New Mexico State University, Las Cruces, NM

Field Technician

May - Aug 2007

- One of two technicians and one supervisor conducting burrowing owl study in Pawnee National Grassland in Colorado
- Set up sites, marked nests, marked prairie dog town boundaries, trapped owls at night, and banded owls with Fish and Wildlife Service bands and ACRAFT color bands
- Took blood, talon, and tail feather samples, weighed owls and measured wing and tail lengths.
- Utilized GPS to mark nests and track prairie dog town boundaries as well as to locate nests

Teaching Experience

Graduate Teaching Assistant, Texas A&M University

Sep 2015 - May 2016; Jan – May 2017

- Taught WFSC 403/613: Animal Ecology lab; Evaluations: 4.55 & 4.61 (scale 1-5)
- Taught WFSC 315: Herpetology lab; Evaluations: 4.59 (scale 1-5)

Student Teaching, Western New Mexico University

Jan – May 2010

- Taught Middle School and High School Sciences at Cobre Middle School and Cobre High School

Graduate Assistant, Western New Mexico University

Aug 2008 - Dec 2009

- Taught General Biology, Chemistry for Life, and General Geology labs
- Prepared and provided assistance during Botany and Zoology labs
- Ran study sessions for General Biology class

Student Employee, Western New Mexico University

Sept 2007 - May 2008

- Lab aide in Department of Natural Science in biology and botany classes - prepared labs and provided guidance to students during lab, assisted in grading assignments and make-up labs

Publications

Leavitt, D.J., **D.K. Walkup**, L.A. Fitzgerald. IN PREP. Avoiding Nero Syndrome in range-wide monitoring programs: Occupancy and extinction dynamics in a vulnerable endemic species. *Animal Conservation*

Walkup, D.K., W.A. Ryberg, J. Kachel, C. Adams, S. Frizzell, T. Johnson, D. Neuharth, and T.J. Hibbitts. IN PREP. Out in the Open: Habitat use in the plateau spot-tailed earless lizard. *Wildlife Research*

Walkup, D.K., W.A. Ryberg, S.L. Frizzell, D.B. Neuharth, T.E. Johnson, C.S. Adams, J.Z. Kachel, T.J. Hibbitts, D. Yandell. IN REVIEW. Habitat use, movement, and home ranges of the Tamaulipan Spot-tailed Earless Lizard. *Copeia*

Walkup, D.K., W.A. Ryberg, L.A. Fitzgerald, T.J. Hibbitts. IN REVIEW. Microhabitat use and landscape context determine spatial settlement and vacancy dynamics in an endemic habitat specialist. *Landscape Ecology*

Ryberg, W.A., T. Garrett, C.S. Adams, **D.K. Walkup**, and T.J. Hibbitts. IN REVIEW. Movement and home range of the reticulate collared lizard (*Crotaphytus reticulatus*). *The Southwestern Naturalist*

Walkup, D.K., T.J. Hibbitts, W.A. Ryberg, R.R. Lopez, B.W. Hagedorn, J.R. Preston, W. Pittman, and J.T. Johnson. 2019. *Gopherus Polyphemus* (Gopher Tortoise). Predation. *Herpetological Review* 50(1): 123-124.

Walkup, D.K., C.S. Adams, W.A. Ryberg, T.J. Hibbitts. 2018. *Holbrookia lacerata* (Spot-tailed Earless Lizard). Predation. *Herpetological Review* 49(4): 742-743.

Walkup, D.K., W.A. Ryberg, L.A. Fitzgerald, T.J. Hibbitts. 2018. Occupancy and Detection of an Endemic Habitat Specialist, the Dunes Sagebrush Lizard. *Herpetological Conservation and Biology* 13(3): 497-506.

- Neuharth, D.B., **D.K. Walkup**, S.L. Frizzell, J.Z. Kachel, C.S. Adams, T.E. Johnson, T.J. Hibbitts and W.A. Ryberg. 2018. *Holbrookia lacerata* (Spot-Tailed Earless Lizard). Burying Behavior. *Herpetological Review* 49(3): 536-537.
- Fitzgerald, L.A., **D. Walkup**, K. Chyn, E. Buchholtz, N. Angeli, and M. Parker. 2018. The Future for Reptiles: Advances and Challenges in the Anthropocene. IN: D. DellaSala and M. Goldstein, eds. *Encyclopedia of the Anthropocene*, Vol. 3. pp. 163-174. Elsevier Inc., Oxford.
- Hibbitts, T., L. Fitzgerald, **D. Walkup**, and W. Ryberg. 2017. Why didn't the lizard cross the road?: Dunes Sagebrush Lizards exhibit road avoidance behaviour. *Wildlife Research* 44(3): 194-199. DOI: 10.1071/WR16184
- Walkup, D.K.**, D.J. Leavitt, and L.A. Fitzgerald. 2017. Effects of habitat fragmentation on population structure of dune-dwelling lizards. *Ecosphere* 8(3): e01729. DOI: 10.1002/ecs2.1729
- Shook, R.S. and **D.K. Walkup**. 2012. Common Black-hawk (*Buteogallus anthracinus*) in New Mexico's Cliff-Gila Valley 2010-2011. *NMOS Bulletin* 40 (3&4): 34-44.

Technical Reports

- Walkup, D.K.**, W.A. Ryberg, T.J. Hibbitts. 2018. Movement, Home Range, and Habitat Use of the Spot-tailed Earless Lizard (*Holbrookia subcaudalis*). Interim Report submitted to Texas Parks and Wildlife Department. 27 pp.
- Walkup, D.K.**, K.L. Skow, T.J. Hibbitts, W.A. Ryberg, and R.R. Lopez. 2018. Assessing Traffic Threats for Amphibian and Reptile Species of Greatest Conservation Need on Texas Roadways. Technical memo submitted to Texas Department of Transportation. 305 pp.
- Neuharth, D., S. Frizzell, T. Johnson, J. Kachel, C.S. Adams, **D.K. Walkup**, T.J. Hibbitts, and W.A. Ryberg. 2017. Herpetofaunal Surveys for Laughlin Air Force Base with emphasis on the Spot-tailed Earless Lizard. Final report submitted to Department of Defense.
- W.A. Ryberg, **D.K. Walkup**, M.E. Young, L.A. Fitzgerald, and T.J. Hibbitts. 2016. Best Practices for Managing Dunes Sagebrush Lizards in Texas. Submitted to Endangered Species Task Force, Texas Comptroller of Public Accounts.
- W.A. Ryberg, **D.K. Walkup**, L.A. Fitzgerald, and T.J. Hibbitts. 2016. Dunes Sagebrush Lizard Final Report. Submitted to Endangered Species Task Force, Texas Comptroller of Public Accounts
- Walkup, D.K.**, D.J. Leavitt, W.A. Ryberg, and L.A. Fitzgerald. 2014. Results from 2009-2013: Effects of Landscape Fragmentation on the Mescalero Dune Landscape and Populations of the Dunes Sagebrush Lizard, *Sceloporus arenicolus*. Bureau of Land Management, Carlsbad, NM. 41 pp.
- Walkup, D.K.**, W.A. Ryberg, D.L. Leavitt, and L.A. Fitzgerald. 2013. Results from the fourth year of research: effects of management practices for oil and gas development on the Mescalero dune landscape and populations of the endemic dunes sagebrush lizard, *Sceloporus arenicolus*. Bureau of Land Management, Carlsbad, NM. 42 pp.
- Walkup, D.K.**, W.A. Ryberg, D.J. Leavitt, and L.A. Fitzgerald. 2012. Effects of landscape fragmentation on the Mescalero dune landscape and populations of the Dunes Sagebrush Lizard, *Sceloporus arenicolus*. Submitted to Bureau of Land Management, Carlsbad Office.
- Leavitt, D.J., **D.K. Walkup**, K.E. Narum, and L.A. Fitzgerald. 2011. Results from the third year of research: effects of management practices for oil and gas development on the Mescalero dune landscape and populations of the endemic dunes sagebrush lizard, *Sceloporus arenicolus*. New Mexico Department of Game and Fish, Santa Fe, NM. 11 pp.

Presentations

- Walkup, D.K.**, W.A. Ryberg, L.A. Fitzgerald, T.J. Hibbitts. February 2019. Dynamics of microhabitat use and landscape-scale settlement and vacancy in a specialist lizard. Texas Chapter of The Wildlife Society Annual Meeting.
- Hibbitts, T.J., **D.K. Walkup**, K.L. Skow, W.A. Ryberg. February 2019. On the road again: Using citizen science data to understand patterns of amphibian and reptile road mortality. Texas Chapter of the Wildlife Society Annual Meeting.

- Walkup, D.K.**, C.S. Adams, S. Frizzell, T.J. Hibbitts, T. Johnson, J. Kachel, D. Neuharth, W.A. Ryberg. October 2018. Home range and habitat associations of the Spot-tailed Earless Lizard. Texas Herpetological Society 2018 Fall Symposium.
- Walkup, D.K.**, W.A. Ryberg, L.A. Fitzgerald, T.J. Hibbitts. July 2018. Dynamics of microhabitat use and landscape-scale settlement and vacancy in a specialist lizard. 2018 Joint Meeting of Ichthyologists and Herpetologists.
- Walkup, D.K.**, S. Frizzell, D. Neuharth, C.S. Adams, T. Johnson, W.A. Ryberg, T.J. Hibbitts. February 2018. Home range and habitat associations of the Spot-tailed Earless Lizard. Texas Chapter of The Wildlife Society Annual Meeting.
- Walkup, D.K.**, D.J. Leavitt, L.A. Fitzgerald. October 2017. Effects of habitat fragmentation on population structure of dune-dwelling lizards. Texas Herpetological Society 2017 Fall Symposium.
- Walkup, D.K.** October 2017. Guest Lecture, Texas A&M University. WFSC 302: Natural History of the Vertebrates
- Walkup, D.K.**, W.A. Ryberg, T.J. Hibbitts, and L.A. Fitzgerald. November 2016. Frac It All! Exploring the Mechanisms of Dunes Sagebrush Lizard Declines in Fragmented Habitats. Department of Wildlife & Fisheries Sciences Brown Bag Seminar.
- Walkup, D.K.** November 2016. Putting the pieces together: dunes sagebrush lizard population persistence in fragmented habitat. Texas A&M Herpetological Society, invited speaker.
- Walkup, D.K.**, W.A. Ryberg, T.J. Hibbitts, and L.A. Fitzgerald. July 2016. Survivorship and movements of the Dunes Sagebrush Lizard in disturbed and undisturbed habitat. 2016 Joint Meeting of Ichthyologists and Herpetologists.
- Walkup, D.K.**, W.A. Ryberg, T.J. Hibbitts, and L.A. Fitzgerald. April 2016. Survivorship of the Dunes Sagebrush Lizard in disturbed and undisturbed habitat. 17th Annual Ecological Integration Symposium, Texas A&M University. *Won 3rd place in Graduate Oral Presentations.
- Walkup, D.K.**, W.A. Ryberg, T.J. Hibbitts, and L.A. Fitzgerald. February 2016. Survivorship of the Dunes Sagebrush Lizard in disturbed and undisturbed habitat. Texas Chapter of The Wildlife Society Annual Meeting.
- Ediger, L., **D.K. Walkup**, W.A. Ryberg, L.A. Fitzgerald, and T.J. Hibbitts. February 2016. Substrate utilization among the Dunes Sagebrush Lizard and its relationship with two sympatric. Texas Chapter of The Wildlife Society Annual Meeting.
- Walkup, D.K.** February 2016. Guest Lecture, Texas A&M University. WFSC 315: Herpetology.
- Walkup, D.K.** February 2016. Guest Lecture, Texas A&M University. WFSC 403: Animal Ecology.
- Walkup, D.K.**, W.A. Ryberg, T.J. Hibbitts, and L.A. Fitzgerald November 2015. Survivorship of the Dunes Sagebrush Lizard in disturbed and undisturbed habitat. Texas Herpetological Society 2015 Fall Symposium.
- Walkup, D.K.**, W.A. Ryberg, T.J. Hibbitts, and L.A. Fitzgerald November 2014. Population study of the dunes sagebrush lizard (*Sceloporus arenicolus*) in west Texas. Texas Herpetological Society 2014 Fall Symposium.
- Walkup, D.K.** and L.A. Fitzgerald. July 2014. Landscape Fragmentation Disrupts Population Dynamics in Dune Dwelling Lizards. Poster. 2014 Joint Meeting of Ichthyologists and Herpetologists.
- Walkup, D.K.** and M.A. Young. March 2014. The dunes sagebrush lizard (*Sceloporus arenicolus*). Texas A&M Herpetological Society. Invited Speaker.
- Walkup, D.K.** January 2013. Conservation of the Dunes Sagebrush Lizard. Albuquerque BioPark. Invited Speaker.
- Shook, R.S. and **D.K. Walkup**. March 2012. Common Black-hawk (*Buteogallus anthracinus*) in New Mexico's Cliff-Gila Valley 2010-2011. New Mexico Ornithological Society 50th annual meeting.
- Norris, W. and **D.K. Walkup**. August 2010. Sedge Identification Workshop. Native Plant Society of New Mexico Annual Meeting.

Funding & Awards

- Texas Parks and Wildlife Department. Movement, Home Range, and Habitat Use of the Spot-tailed Earless Lizard (*Holbrookia lacerata*) on Laughlin Air Force Base. (\$18,539)
- Tom Slick Graduate Research Fellowship, College of Agriculture and Life Sciences, Texas A&M University (\$32,686)
- Outstanding Ph.D. Student, Department of Wildlife and Fisheries Sciences, Texas A&M University, 2017-2018

Outreach & Volunteer

- Taught Intro to R Session, Ecology and Evolutionary Biology Open Source Open Science Workshop, Texas A&M University, 2018
- Volunteer, Software Carpentry Workshop, Texas A&M University, 2019
- Science Olympiad Event Coordinator, Texas A&M University, 2017 – 2018
 - Western New Mexico University, 2009-2011
- Moderator/Science Judge, Texas A&M Regional Junior Science Bowl, 2017
- Moderator/Science Judge, Texas A&M Regional Science Bowl, 2017, 2019
- Texas A&M Ecological Integration Symposium,
 - Member of Organizing Committee, 2014-2015
 - Volunteer & Undergraduate Poster Judge, 2014; 2016 - 2018

Professional Affiliations

- Society for the Study of Amphibians and Reptiles (2012 – Present)
- Texas Herpetological Society (2014 – Present)
 - Board Member, 2019 - 2021
- Ecological Society of America (2013 – 2017)
- Tucson Herpetological Society (2012 – 2014)
- AAAS (2010 – 2014)
- Graduate Students of Wildlife & Fisheries Sciences, Texas A&M University (2013 – 2018)
 - President, 2017-2018
 - Graduate and Professional Student Council Delegate, 2016 – 2017