

Shayne R. Halter

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Education

- 1991: BS, Aviation Management, Metropolitan State College of Denver, Vice President's Honor Roll
- 2004: MBA, Military Management, Touro University International
- 2018: BS, Anthropology (Evolutionary Subfield), *summa cum laude*: Evaluation of a Modern Chimpanzee Site as a Model for an Early Hominin Habitat, Honor's Thesis. Advisor: Dr. Sherry V. Nelson, University of New Mexico
- 2024: MS, Biology, University of New Mexico. Advisor: Dr. Blair O. Wolf
- 2024-Present: PhD in Biology, University of New Mexico

Industry/Military Experience (USAF)

- 1991-2013: Officer, United States Air Force
 - USAF System Program Office Finance Officer: 1992-1993
 - C-130H Mission/Instructor/Fight Examiner Navigator: 1995-1999
 - Flight Commander: 1998-1999
 - MC-130P and HC-130P Mission/Instructor/Flight Examiner Navigator: 2000-2013
 - MC-130P Special Operations Group Chief Navigator: 2002-2003
 - MC-130P/HC-130 Training Program Manager: 2003-2005
 - Squadron Assistant Operations Officer: 2004-2005
 - Special Operations Wing Chief of Plans: 2005-2006
 - HC-130P Rescue Group Chief Navigator: 2007-2009
 - MC-130P/HC-130 Training Program Manager: 2010-2013

Professional Recognition and Honors (USAF)

- 27 medals and decorations including Air Medal, Aerial Achievement Medal, Meritorious Service Medal, and Joint Service Commendation Medal

Publications (USAF)

- 58th Special Operations Wing Plans Manual (2005)

- Air Force Instruction 11-2HC-130 Volume 3, Chapter 10 (563rd Rescue Group Local Operating Procedures) (2009)
- HC-130P/N Mission Navigator Initial Qualification Syllabus of Instruction (2011)
- MC-130P Mission Navigator Initial Qualification Syllabus of Instruction (2011)
- MC-130P Senior Officer Orientation Syllabus of Instruction (2011)

Publications (Journal Articles)

- Shankar A, Welch KC Jr, Eberts ER, Geiser F, Halter S, Keicher L, et al. Daily Torpor in Birds and Mammals: Past, Present, and Future of the Field. *Integr Comp Biol.* 2023 Jul 7; icad095.
- Halter SR, Wolf BO, Martinez del Rio C. The hummingbird's adipostat: can a simple rule explain torpor frequency and duration in hummingbirds? *Proc R Soc B Biol Sci.* 2025 Jan 15;292(2038):20242489.

Activities and Outreach

- Undergraduate Anthropology Society Evolutionary Subfield Chair (2016-present)
- Organized and staffed UNM Anthropology Department table at the Summer Orientation Discover Fair (2017)
- Presented on the Anthropology Department at the UNM STEM Collaborative Center (2017)
- Competed in the 2018 UNM Undergraduate Research Opportunity Conference. Won second place (\$150.00)
- Instructed students on cryogenic extraction of water from plants and soils at UNM IsoCamps 2022, 2023, and 2024.

Research Funding

- Evaluation of a Modern Chimpanzee Site as a Model for Early Hominin Habitats. UNM Anthropology Department. Maxine Graves Award. \$500.00
- Use of Stable Isotopes in Tooth Enamel to Compare Modern Chimpanzee and Early Hominin Sites. UNM Center for Stable Isotopes Pilot Grant. \$500.00
- University of New Mexico Graduate and Professional Student Association Student Research Grant (Summer 2019). \$500.00 to pay for remote sensing software to conduct vegetation surveys in southern Arizona.
- Use of Stable Isotopes to analyze mycorrhizal interactions between cottonwood and tamarisk along the Middle Rio Grand River. UNM Center for Stable Isotopes Pilot Grant. \$500.00
- Analysis of feather hydrogen stable isotopes to determine natal and molting locations of migrating hummingbirds. UNM Center for Stable Isotopes (\$500), Graduate and

professional Student Association (\$500), University of New Mexico Graduate Research Allocation Committee (\$400), UNM Graduate Scholarship Grove Award (\$1,000)

Field Research

- 2019: Capture, transport and Metabolic respirometry trials on 6 species of bats to determine heat tolerance, Tucson, AZ.
- 2020: Collection, processing and isotopic analysis of cottonwood and tamarisk plant tissues and soils along the Middle Rio Grande River, Belen, NM.
- 2021: Collection and analysis of sound recordings and temperature data at the Rocky Mountain Research Laboratory to determine nocturnal roosting locations of male Broad-tail Hummingbirds.
- 2022: Capture, Quantitative Magnetic Resonance Scanning and respirometry trials on 1,329 hummingbirds of four species along the Mimbres River, Mimbres, NM.

Conference Presentations

- Halter, S. R. (2019, July 23). *Remote Sensing and Desert Plant Classification* [Conference Presentation]. 2019 Hot Birds Research Project, Gobabeb Training and Research Centre, Namibia, Africa.
- Halter, S. R. (2022, November 17). *Energy Management in Migrating Hummingbirds* [Conference Presentation]. International Education Week, University of New Mexico, Albuquerque, NM, United States.
- Halter, S. R. and Wolf, B. O., (2023, January 3-6). *Torpor Use as a Mechanism to Spare Fat in Migrating Hummingbirds*. [Conference Presentation]. Society of Integrative and Comparative Biology 2023, Austin, TX, United States.
- Halter, S. R. (2024, February 19). *Energy Management in Migrating Hummingbirds*. [Brown Bag Seminar]. Center for Stable Isotopes, University of New Mexico, Albuquerque NM, United States
- Halter, S. R. (2024, February 28). *Energy Management of Migrating Hummingbirds in the Mimbres Valley* [Conference Presentation]. 10th Natural History of the Gila Symposium, Western New Mexico University, Silver City, NM, United States
- Halter, S. R. (2024, April 5). Energy Management in Migrating Hummingbirds [Research Talk Competition]. University of New Mexico Biology 33rd Annual Research Days, University of New Mexico, Albuquerque, NM, United States
- Halter, S. R. (2024, October 30). *Energy Management in Migrating Hummingbirds*. [Brown Bag Seminar]. Department of Biology, University of New Mexico, Albuquerque NM, United States

Invited talks

- Halter, S. R. (2024, August 20). *Energy Management in Migrating Hummingbirds*. [61st Annual Meeting]. New Mexico Ornithological Society. Rio Grande Nature Center, Albuquerque NM. United States
- Halter, S. R. (2024, October 9). *Energy Management in Migrating Hummingbirds*. [NMWLF Wildlife Wednesday Event] Bird Alliance of Central New Mexico, Albuquerque NM. United States
- Halter, S. R. (2024, November 14). *Energy Management in Migrating Hummingbirds*. [BACNM Monthly Program]. Bird Alliance of Central New Mexico, Albuquerque NM. United States

Professional Associations

- American Ornithological Society
- New Mexico Ornithological Society
- The Society for Integrative and Comparative Biology
- Friends of the Rio Grande Nature Center
- New Mexico Wildlife Federation