

**Matthew James Gould**  
Postdoctoral Research Scientist  
Department of Fish, Wildlife & Conservation Ecology New Mexico State University  
Las Cruces, New Mexico, 88003  
Email: mjgould4@gmail.com

---

## **EDUCATION**

- 2019 Ph.D., Biology (Focus: Ecology and Evolution)  
Department of Biology, New Mexico State University, Las Cruces, New Mexico  
Dissertation title: *Using genetic based methods to monitor American black bears in the American Southwest*
- 2018 M.Sc., Biology (Focus: Ecology and Evolution)  
Department of Biology, New Mexico State University, Las Cruces, New Mexico
- 2011 B.Sc., Wildlife Biology (Focus: Terrestrial); Minor, Communication Studies  
Wildlife Biology Program, University of Montana, Missoula, Montana

## **PROFESSIONAL EXPERIENCE**

- 2019–Present Postdoctoral Research Scientist, New Mexico State University, Las Cruces, New Mexico
- 2016 Mountain Lion Field Coordinator, New Mexico Cooperative Fish and Wildlife Research Unit, Las Cruces, New Mexico
- 2011–2019 Research Assistant, New Mexico State University, Las Cruces, New Mexico
- 2011 Grizzly and Black Bear Technician, United States Fish & Wildlife Service, Libby, Montana
- 2009, 2010 Wildlife Technician, United States Fish & Wildlife Service, Libby, Montana

## **PUBLICATIONS**

### *Peer Reviewed*

- 2019 **Gould, M. J.**, W. R. Gould, J. W. Cain, III, G. W. Roemer. Validating habitat use and species distribution maps for highly mobile species as predicted with occupancy modeling: a case study using the American black bear. *Biological Conservation* 234:28–36.
- 2018 **Gould, M. J.**, J. W. Cain, III, G. W. Roemer, W. R. Gould, and S. G. Liley. Density of American Black Bears in New Mexico. *Journal of Wildlife Management* 82:775–788.
- 2018 **Gould, M. J.**, and R. L. Harrison. A novel approach to estimating density of American badger (*Taxidea taxus*) using automatic cameras at water sources in the Chihuahuan Desert. *Journal of Mammalogy* 99:233–241.
- 2017 Gelin, M. L., L. C. Branch, D. H. Thornton, A. J. Novaro, **M. J. Gould**, and A. Caragiulo. Response of pumas (*Puma concolor*) to migration of their primary prey in Patagonia. *PLOS ONE* 12:e0188877.

### *Technical Reports*

- 2016 **Gould, M. J.**, J. W. Cain, III, G. W. Roemer, and W. R. Gould. Estimating abundance and density of American black bears (*Ursus americanus*) in New Mexico using noninvasive genetic sampling coupled with spatially explicit capture-recapture methods. Report provided by the Cooperative Fish and Wildlife Research Unit Program, U.S.

- Department of Interior, Fish and Wildlife Service, Cooperator Science Series FWS/CSS-120-2016. 41pp.
- 2015 **Gould, M. J.**, J. W. Cain, III, G. W. Roemer, and W. R. Gould. Response to the NM Conservation Affairs Committee of The Wildlife Society re: New Regulations Concerning Bear Hunting by the NMDGF.
- 2015 **Gould, M. J.**, J. W. Cain, III, G. W. Roemer, and W. R. Gould. Estimating abundance and density of American black bears (*Ursus americanus*) in New Mexico using noninvasive genetic sampling-based capture-recapture methods: Report on 2013 data collection and analysis for the southern Sangre de Cristo Mountains and an updated analysis for the northern Sangre de Cristo Mountains. Annual project report to New Mexico Department of Game and Fish. 25pp.
- 2014 **Gould, M. J.**, J. W. Cain, III, G. W. Roemer, and W. R. Gould. Estimating abundance and density of American black bears (*Ursus americanus*) in New Mexico using noninvasive genetic sampling-based capture-recapture methods: Report on 2012 data collection in the northern Sangre de Cristo Mountains. Annual project report to New Mexico Department of Game and Fish. 21pp.
- 2014 **Gould, M. J.**, J. W. Cain, III, G. W. Roemer, W. R. Gould, and S. G. Liley. Estimating abundance and density of American black bears (*Ursus americanus*) in New Mexico using noninvasive genetic analysis. Final Report for T&E, Inc.

#### Extension/Outreach

- 2015 **Gould, M. J.**, J. W. Cain, III, G. W. Roemer, W. R. Gould, E. Goldstein, and F. Winslow. Updating the Density Estimates for Black Bears in New Mexico. Fall Newsletter - Managers Corner. Tri-Annual Newsletter of the International Association for Bear Research and Management and the IUCN/SSC Bear Specialist Group.

#### Book Contributions

- In Prep **M. J. Gould** and G. W. Roemer. Gray Fox (*Urocyon cinereoargenteus*). In *The Wild Carnivores of New Mexico*. Eds. J.-L. E. Cartron and J. K. Frey. *University of New Mexico Press*.

### **GRANTS AND RESEARCH SUPPORT**

- 2018 New Mexico State University Department of Biology Graduate Excellence Award in Research. Using genetic based methods to monitor black bears in the Southwest. Co-PI with J. W. Cain and G. W. Roemer (\$1,500)
- 2015 Mesilla Valley Audubon Society Richard Bischoff Memorial Scholarship. Landscape genetics of the American black bear in the Southwest. Co-PI with J. W. Cain and G. W. Roemer (\$1,000)
- 2013 T&E, Inc. Conservation Biology Research Grant. Use of noninvasive genetic analysis to estimate the abundance and density of black bears in New Mexico. Co-PI with J. W. Cain and G. W. Roemer (\$2,000)

### **PROFESSIONAL ACTIVITIES AND SERVICE**

#### Invited Reviews

Animal Conservation, Ecology and Evolution, Journal of Wildlife Management, The American Midland Naturalist, Annales Zoologici Fennici

### Professional Membership

The Wildlife Society – National (2007–present), Montana chapter (2007–2011), New Mexico chapter (2011–present), Southwest Section (2011–present)  
International Association of Bear Research and Management – National (2011–present)  
American Society of Mammalogists – National (2016–present)

### Appointments

2015–2016 Student Liaison to Council, The Wildlife Society  
2015–2016 Past Chair, Student Development Working Group of The Wildlife Society  
2014–2015 Chair, Student Development Working Group of The Wildlife Society  
2013–2014 Chair-Elect, Student Development Working Group of The Wildlife Society  
2012–2013 Secretary, Student Development Working Group of The Wildlife Society  
2010–2011 President, The University of Montana Student Chapter of The Wildlife Society  
2009–2010 President, The University of Montana Student Chapter of The Wildlife Society  
2008–2009 Section 13 Representative, The University of Montana Student Chapter of The Wildlife Society

### Committees

2017 Volunteer Subcommittee Co-Chair. 24<sup>th</sup> Annual Conference of The Wildlife Society, Albuquerque, New Mexico  
2015 Workshop Coordinator. Behind the Scenes of Scientific Publication and Critical Review. 22<sup>nd</sup> Annual Conference of The Wildlife Society, Winnipeg, Manitoba, Canada  
2014 Workshop Co-Coordinator. Behind the Scenes of Scientific Publication and Critical Review. 21<sup>st</sup> Annual Conference of The Wildlife Society, Pittsburgh, Pennsylvania  
2013 Workshop Co-Coordinator. Behind the Scenes of Scientific Publication and Critical Review. 20<sup>th</sup> Annual Conference of The Wildlife Society, Milwaukee, Wisconsin

### AWARDS AND HONORS

2019 Outstanding Student Award for Contributions to New Mexico Wildlife Conservation – New Mexico Chapter of The Wildlife Society  
2018 Wendy and Travis Traylor Memorial Award (\$650)  
2018 Best Oral Wildlife Student Research Presentation - New Mexico. 51st Joint Annual Meeting of the Arizona and New Mexico Chapters of The Wildlife Society and the Arizona/New Mexico Chapter of The American Fisheries Society (\$250)  
2016 Best Oral Graduate Student Presentation. NMSU Department of Biology Biosymposium (\$200)  
2016 New Mexico State University College of Arts and Sciences Graduate Student Travel Grant (\$400)  
2015 New Mexico State University Aggies Go Global Travel Grant (\$1,800)  
2015 Best Oral Wildlife Student Research Presentation - New Mexico. 49th Joint Annual Meeting of the Arizona and New Mexico Chapters of The Wildlife Society and the Arizona/New Mexico Chapter of The American Fisheries Society  
2014 New Mexico State University College of Arts and Sciences Graduate Student Travel Grant (\$400)

- 2014 New Mexico State University Department of Biology Graduate Student Travel Grant (\$400)
- 2012 New Mexico Chapter of The Wildlife Society Travel Grant (\$500)
- 2011 University of Montana President's Award. Wildlife Biology Program Outstanding Senior
- 2011 University of Montana Druid's Outstanding Senior Award

### **INVITED PRESENTATIONS**

- 2018 **Gould, M. J.** Lions, badgers, and bears, oh my! A tale of three species, as told by noninvasive sampling methods. Department of Biology Graduate Excellence Award in Research Seminar Series, Department of Biology, New Mexico State University, Las Cruces, New Mexico.
- 2016 **Gould, M.J.,** J.W. Cain, III, G.W. Roemer. Landscape genetics of the American black bear (*Ursus americanus*) throughout the Southwest and Intermountain West and northern Mexico. Mesilla Valley Audubon Society, Las Cruces, New Mexico.
- 2012 **Gould, M.J.,** J.W. Cain, III, G.W. Roemer, W.R. Gould, and S.G. Liley. Estimating American black bear (*Ursus americanus*) abundance and density in New Mexico using noninvasive genetic analysis. New Mexico Cooperative Fish and Wildlife Research Unit Annual Meeting, Albuquerque, New Mexico.

### **CONTRIBUTED PRESENTATIONS**

\* = presenter

- 2018 \***Gould, M. J.,** W. R. Gould, J. W. Cain, III, and G. W. Roemer. Predicting population level resource use with occupancy modeling and validating with independent data. Biosymposium, Department of Biology, New Mexico State University, Las Cruces, New Mexico.
- 2018 \***Gould, M. J.,** W. R. Gould, J. W. Cain, III, and G. W. Roemer. Predicting population level resource use with occupancy modeling and validating with independent data. Wildlife Student Research Competition at the 51<sup>st</sup> Joint Annual Meeting of the Arizona and New Mexico Chapters of The Wildlife Society and the Arizona/New Mexico Chapter of The American Fisheries Society, Flagstaff, Arizona.
- 2017 **Gould, M. J.,** and \*R. L. Harrison. A novel approach to estimating density of American badger (*Taxidea taxus*) using automatic cameras at water sources in the Chihuahuan Desert. 24<sup>th</sup> Annual Conference of the Wildlife Society, Albuquerque, New Mexico
- 2016 \***Gould, M.J.,** J.W. Cain, III, G.W. Roemer. American black bear density in three New Mexico Mountain ranges. Biosymposium, Department of Biology, New Mexico State University, Las Cruces, New Mexico.
- 2016 \***Gould, M.J.,** J.W. Cain, III, G.W. Roemer, W.R. Gould, and S.G. Liley. American black bear density in three New Mexico Mountain ranges. Graduate Research and Arts Symposium, New Mexico State University, Las Cruces, New Mexico.
- 2016 \***Gould, M.J.,** J.W. Cain, III, G.W. Roemer, W.R. Gould, and S.G. Liley. Estimating density of American black bears in New Mexico using noninvasive genetic sampling-based spatial capture-recapture methods. 2016. Wildlife Student Research Competition at the 49<sup>th</sup> Joint Annual Meeting of the Arizona and New Mexico Chapters of The Wildlife Society and the Arizona/New Mexico Chapter of The American Fisheries Society, Flagstaff, Arizona.

- 2015 \***Gould, M.J.**, J.W. Cain, III, G.W. Roemer, W.R. Gould, and S.G. Liley. Estimating density of American black bears in New Mexico, United States of America. 5<sup>th</sup> International Wildlife Management Congress, Sapporo, Japan.
- 2015 \***Gould, M.J.**, J.W. Cain, III, G.W. Roemer, and W.R. Gould. Estimating abundance and density of American black bears (*Ursus americanus*) in New Mexico using noninvasive genetic sampling-based capture-recapture methods. Wildlife Student Research Competition at the 48<sup>th</sup> Joint Annual Meeting of the Arizona and New Mexico Chapters of The Wildlife Society and the Arizona/New Mexico Chapter of The American Fisheries Society, Las Cruces, New Mexico.
- 2014 \***Gould, M.J.**, J.W. Cain, III, G.W. Roemer, W.R. Gould, and S.G. Liley. Estimating the abundance and density of American black bears (*Ursus americanus*) in New Mexico using non-invasive genetic analysis. 47<sup>th</sup> Joint Annual Meeting of the Arizona and New Mexico Chapters of The Wildlife Society and the Arizona/New Mexico Chapter of The American Fisheries Society, Pinetop, Arizona.
- 2013 \***Gould, M.J.**, J.W. Cain, III, G.W. Roemer, W.R. Gould, and S.G. Liley. Estimating American black bear (*Ursus americanus*) abundance and density in New Mexico using noninvasive genetic analysis. Graduate Research and Arts Symposium, New Mexico State University, Las Cruces, New Mexico.
- 2010 \*Douglas, C., \*L. Jenkins, \***M. J. Gould**, and E. Greene. Record low temperatures, a colorless autumn, and a recession in the nutrient economy of Norway maples. National Conference on Undergraduate Research, Missoula, Montana.

Poster Presentations

- 2014 \***Gould, M.J.**, J.W. Cain, III, G.W. Roemer, and W.R. Gould. Estimating abundance and density of American black bears (*Ursus americanus*) in New Mexico using noninvasive genetic sampling-based capture-recapture methods. 21st Annual Conference of The Wildlife Society, Pittsburgh, Pennsylvania.
- 2013 \***Gould, M.J.**, J.W. Cain, III, G.W. Roemer, W.R. Gould, and S.G. Liley. Estimating American black bear (*Ursus americanus*) abundance and density in New Mexico using noninvasive genetic analysis. Graduate Research & Arts Symposium. New Mexico State University, Las Cruces, New Mexico.
- 2013 \***Gould, M.J.**, J.W. Cain, III, G.W. Roemer, W.R. Gould, and S.G. Liley. Estimating American black bear (*Ursus americanus*) abundance and density in New Mexico using noninvasive genetic analysis. 19<sup>th</sup> Annual National Conference of The Wildlife Society, Portland, Oregon.
- 2013 \***Gould, M.J.**, J.W. Cain, III, G.W. Roemer, W.R. Gould, and S.G. Liley. Estimating American black bear (*Ursus americanus*) abundance and density in New Mexico using noninvasive genetic analysis. 46<sup>th</sup> Joint Annual Meeting of the Arizona and New Mexico Chapters of The Wildlife Society and the Arizona/New Mexico Chapter of The American Fisheries Society, Albuquerque, New Mexico.