

Joseph Drake

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Department of Biological Sciences
926 W. Campus Dr., Blacksburg, VA 24141

Current Postdoctoral Researcher
 Virginia Polytechnic Institute and State University
 Supervisor: Dr. Meryl Mims

Education

2021 Ph.D. Organismic & Evolutionary Biology
 University of Massachusetts
 Advisors: Dr. Chris Sutherland & Dr. X. Lambin

2016 M.Sc. Wildlife, Aquatic, and Wildlands Sciences
 Graduate Certificate in Geographic Information Science and Technology
 Texas Tech University
 Advisors: Dr. Kerry Griffis-Kyle & Dr. Nancy McIntyre

2010 B.A. Biology, B.A. Anthropology (Minor in Animal Behavior Science)
 Underwater Resources Management Certificate
 Indiana University

Grants and Fellowships

2022 ICAT SEAD Grant: Acoustic Invasion Art/Science Research

2019 People's Trust for Endangered Species, UK

2018 UMass Graduate School Field Work Grant

2018 Organismal and Evolutionary Biology Research Grant

2017 UMass Environmental Conservation Fellowship

2017 New England Outdoor Writer's Association Scholarship

2016 TTU Graduate School *Water Conservation Research Fellowship*

2015 TTU Summer Dissertation/Thesis Research Award

2006 Eli-Lilly Community Endowment Scholar

Peer-Reviewed Publications

In Prep Goetting, J., Griffis-Kyle, K., **Drake, J.C.**, Alvidrez, A., & Vanlandeghem, M.
 Weather and Site Attributes Influence Large Mammal use of Wildlife Waters

In Review Mims, M. **Drake, J.C.**, Lawler, J., & Olden, J., Simulating the response of a
 threatened amphibian to climate-induced reductions in breeding habitat

In Revision **Drake, J.C.**, Lambin, X., & Sutherland, C., Spatiotemporal connectivity
 dynamics in spatially structured populations

2021 **Drake, J.C.**, Lambin, X., & Sutherland, C., [The value of considering
demographic contributions to connectivity: a review](#). *Ecography* 44:1-18

- 2021 Griffis-Kyle, K., Mougey, K., **Drake, J.C.**, Sharmistha, S., VanLandeghem, M. [Qualitative species vulnerability: model sensitivity to climate and spatial parameters](#). *Climate Services* 22: 100217
- 2021 Golden, N., Devarajan, K., Balantic, C., **Drake, J.C.**, Hallworth, M., Morelli, T. [Ten Simple Rules for Productive Lab Meetings](#). *PLOS Computational Biology* 17(5): e1008953
- 2020 Sales*, N.G., Mckenzie, B.*,**Drake, J.C.***, Browett, S., Coscia, I., Harper, L., Wangensteen, O., Baillie, C., Bryce, E., Dawson, D., Ouchu, E., Hanfling, B., Handley, L., Mariani, S., Lambin, X., Sutherland, C., & McDevitt, A. [Fishing for mammals: eDNA metabarcoding versus conventional survey methods for monitoring terrestrial mammalian communities](#). *Journal of Applied Ecology* 57(4): 707-716 [* These authors contributed equally to this manuscript]
- 2018 Griffis-Kyle, K.L., Mougey, K., Vanlandeghem, M., Swain, S., & **Drake J.C.** [Comparison of climate vulnerability among desert herpetofauna](#). *Biological Conservation*. 225: 164-175
- 2017 **Drake, J.C.**, McIntyre, N.E. Griffis-Kyle, K.L. [Nesting connectivity models to resolve management conflicts of isolated water networks in the Sonoran Desert](#). *Ecosphere* 8(1):e01647.10.1002/ecs2.1652
- 2017 **Drake, J.C.**, McIntyre, N.E. Griffis-Kyle, K.L. [Graph theory as an invasive species management tool: Case study in the Sonoran Desert](#). *Landscape Ecology*. 32(8): 1739-1752.
- 2016 McIntyre, N.E., **Drake, J.C.**, Griffis-Kyle, K.L. [A Connectivity and Wildlife Management Conflict in Isolated Desert Waters](#). *Journal of Wildlife Management* 80(4): 655-666.
- 2015 **Drake, J.C.**, Jenness, J.S., Calvert, J., Griffis-Kyle, K.L. [Testing a model for the prediction of isolated water sites in the Sonoran Desert](#). *Journal of Arid Environments* 118:1-8

Other Publications

- 2021 Drake, J.C. “A Freezer Too Full” in Backcountry Journal, Spring 2021
- 2019 **Drake, J.C.** “Bender Springs” in [The Wildlife Confessional: An Anthology of Stories](#). Ed. T.A. Roberts & M. P. Bettelheim. The Western Section of TWS.
- 2019 **Drake, J.C.** “The First Day” in [The Wildlife Confessional: An Anthology of Stories](#). Ed. T.A. Roberts & M. P. Bettelheim. The Western Section of TWS.
- 2016 **Drake, J.C.** [Arctic Dreams in the Desert](#). Archivation Exploration. Vol 1. No. 1

- 2016 **Drake, J.C.**, Griffis-Kyle, K., & McIntyre, N. [Landscape connectivity of isolated waters for wildlife in the Sonoran Desert](#). *Report submitted to the Desert Landscape Conservation Cooperative and the Bureau of Reclamation*. Texas Tech University, Lubbock, TX.
- 2016 **Drake, J.C.** The role of isolation in Sonoran Desert water site connectivity based conservation strategies. *Master's Thesis*. Texas Tech University, Lubbock, TX.

Invited Symposia & Seminars

- 2022 **Drake, J.C.**, X. Lambin, & C. Sutherland. [Spatiotemporal connectivity: Perspectives from a fragmented world](#). The Wildlife Society Biological Diversity Working Group. April 2022 Webinar.
- 2022 **Drake, J.C.**, Mims, M., Lawler, J., & Olden, J. Risk and Resilience on a Drying Landscape: Simulating Amphibian Response to Breeding Habitat Reduction. Broad-Scale Ecological Drought: Exposure, Effects, and Future Vulnerabilities. US-IALE 2022 Annual Meeting. Virtual.
- 2022 **Drake, J.C.**, X. Lambin, & C. Sutherland. Demographically-informed Connectivity for Spatially Structured Populations. Landscape Connectivity: Science and Applications from Gene Flow to Migrations and Beyond. US-IALE 2022 Annual Meeting. Virtual.
- 2019 **Drake, J.C.**, X. Lambin, & C. Sutherland. [A patch is not a population: Spatio-temporal Perspectives on Connectivity Dependent Processes](#). Wildlife Connectivity for Dynamic Landscapes: TWS/AFS Joint 2019 Annual Meeting. Reno, NV.
- 2019 **Drake, J.C.**, X. Lambin, & C. Sutherland. [A patch is not a population: Modeling dynamic spatio-temporal processes using graph theoretic approaches](#). Innovation in Spatiotemporal Landscape Design to Support Dynamic Conservation. US-IALE 2019 Annual Meeting. Fort Collins, CO.
- 2017 **Drake, J.C.**, N. McIntyre, & K. Griffis-Kyle. Nested Connectivity Models to Resolve Management Conflicts and Promote Climate Change Resilience Using Mule Deer and American Bullfrogs in the Sonoran Desert as Study System. Climate-Wise Connectivity: How to Plan and Implement. The 24th Annual Conference of the Wildlife Society. Albuquerque, NM.
- 2017 **Drake, J.C.**, X. Lambin, & C. Sutherland. Graph-Theoretic Approaches to Connectivity and Dynamic Spatial Processes. Freedom to Roam - Wildlife Connectivity in Action from Data to Implementation and Assessment 1. The 24th Annual Conference of the Wildlife Society. Albuquerque, NM.

Presentations *indicates presenter

- 2021 **Drake, J.C.***, X. Lambin, & C. Sutherland. Spatiotemporal connectivity perspectives in a fragmented world. VT Ecology, Evolution, and Behavior Seminar Series. Blacksburg, VA
- 2021 **Drake, J.C.***, Golden, N., Devarajan, K., Balantic, C., Hallworth, M., Morelli, T. Effective Lab Meetings. VT Integrative Organismal Biology Seminar Series. Blacksburg, VA.
- 2021 **Drake, J.C.***, X. Lambin, & C. Sutherland. Spatiotemporal connectivity dynamics in spatially structured populations. US-IALE 2021 Annual Meeting. Virtual.
- 2021 **Drake, J.C.***, X. Lambin, & C. Sutherland. Spatiotemporal connectivity dynamics in spatially structured populations. The 4th Annual Environmental Conservation Graduate Student Symposium. University of Massachusetts - Amherst, MA.
- 2020 **Drake, J.C.***, Sales, N.G., Mckenzie, B., Browett, S., Coscia, I., Harper, L., Wangensteen, O., Baillie, C., Bryce, E., Dawson, D., Ouchu, E., Hanfling, B., Handley, L., Mariani, S., Lambin, X., Sutherland, C., & McDevitt, A. [Fishing for Mammals: Using eDNA from Riverine Systems to Monitor Terrestrial and Semi-Aquatic Communities](#). The Wildlife Society 2020 Annual Conference, Virtual.
- 2020 **Drake, J.C.***, McIntyre, N.E., Griffis-Kyle, K.L. Transient Connectivity windows across space and time in the Sonoran Desert: Spatio-temporal changes in connectivity for native, at-risk, and invasive species. 6th Tri-National Symposium of the Sonoran Desert, Ajo, Arizona
- 2018 McKenzie, M., Sales, N., **Drake, J.C.**, Browett, S., Harper, L., Bryce, E., Coscia, I., Mariani, S., Handley, L.L., Hänfling, B., Sutherland, C., Lambin, X., Wangensteen, O., & McDevitt, A*. Environmental DNA metabarcoding as a tool to detect and monitor elusive and common mammals in the United Kingdom. UK DNA Working Group Conference. University of Derby, Derby, UK.
- 2018 McKenzie, M., Sales, N., **Drake, J.C.**, Browett, S., Harper, L., Bryce, E., Coscia, I., Mariani, S., Handley, L.L., Hänfling, B., Sutherland, C., Lambin, X., Wangensteen, O., & McDevitt, A*. Environmental DNA metabarcoding as a tool to detect and monitor elusive and common mammals in the United Kingdom. Mammal Society Autumn Symposium. Arup Offices, London, UK.
- 2018 Griffis-Kyle, K.L., N.E. McIntyre, J. Calvert, **J. Drake.**, A. Kiesow. The role of wetland habitat quality in evaluating functional connectivity for desert amphibians. International Aridlands Conference. Lubbock, Texas [Poster]

- 2018 **Drake, J.C.**, N.E. McIntyre, K.L. Griffis-Kyle. Landscape connectivity and isolation: The management of waters for wildlife in the Sonoran Desert. International Aridlands Conference. Lubbock, Texas [Poster]
- 2018 **Drake, J.C.**, Jenness, J.S., Goetting, J., Griffis-Kyle, K.L. Testing a model for the prediction of isolated water sites in the Sonoran Desert. International Aridlands Conference. Lubbock, Texas [Poster]
- 2018 **Drake, J.C.***, X. Lambin, & C. Sutherland. Graph-Theoretic Approaches to Connectivity and Dynamic Spatial Processes. The 1st Annual Environmental Conservation Graduate Student Symposium. University of Massachusetts - Amherst, MA.
- 2017 Griffis-Kyle, K.*, K. Mougey, S. Swain, M. Van Landeghem, **J.C. Drake**, & S. Kahl. Modeling Qualitative Vulnerability of Desert Amphibians and Reptiles to Climate Change. The Wildlife Society 24th Annual Conference, Albuquerque, NM.
- 2016 **Drake, J.C.**, N.E. McIntyre, K.L. Griffis-Kyle*. Landscape connectivity and isolation: The management of waters for wildlife in the Sonoran Desert. Western LCCs and Southwest Climate Science Center Joint Meeting. Asilomar, California
- 2016 McIntyre, N.E., **Drake, J.C.***, Griffis-Kyle, K.L. Impacts of temporary and permanent isolated water resources in the Sonoran Desert on connectivity, isolation, and wildlife management strategies: an example of transient connectivity. US Regional Association of the International Association for Landscape Ecology's 2016 Annual Meeting, Asheville, North Carolina
- 2016 **Drake, J.C.***, McIntyre, N.E., Griffis-Kyle, K.L. The Past, Present, and Future of Isolated Water Site Connectivity in the Sonoran Desert and a Framework for Maintaining Biodiversity. 4th Tri-National Symposium of the Sonoran Desert, Ajo, Arizona
- 2015 McIntyre, N.E., **Drake, J.C.***, Griffis-Kyle, K.L. Transient connectivity windows: Impacts of temporary and permanent isolated water resources in the Sonoran Desert on connectivity, isolation, and wildlife management strategies. 49th Joint Annual Meeting of the Arizona/New Mexico Chapters of the Wildlife Society and the Arizona/New Mexico Chapters of the American Fisheries Society, Flagstaff, Arizona
- 2015 **Drake, J.C.***, McIntyre, N.E., Griffis-Kyle, K.L. Using Nested Frameworks for Maintaining Biodiversity of Aquatic Resources in the Sonoran Desert. International Association for Landscape Ecology's 2015 World Congress, Portland, Oregon

- 2015 Griffis-Kyle, K.L.*, N.E. McIntyre, J. Calvert, **J.C. Drake**, A. Kiesow. The role of wetland habitat quality in evaluating functional connectivity for desert amphibians. Ecological Society of America's 2015 Annual Meeting, Baltimore Maryland.
- 2015 **Drake, J.C.***, McIntyre, N.E., Griffis-Kyle, K.L. From Bighorns to Bullfrogs: Connectivity of Aquatic Resources in the Sonoran Desert Landscape. 6th Texas Tech Annual Biological Symposium in Lubbock, Texas. [Award: 2nd place in Natural Resources Management Category]
- 2015 **Drake, J.C.***, McIntyre, N.E., Griffis-Kyle, K.L. Connectivity and Isolation in the Management of Aquatic Resources in the Sonoran Desert. 48th Joint Annual Meeting of the Arizona/New Mexico Chapters of the Wildlife Society and the Arizona/New Mexico Chapters of the American Fisheries Society, Las Cruces, New Mexico
- 2015 **Drake, J.C.***. *Dreams, Lost Socks, & Field Biology*. 5th Conference on the Sowell Collection. Texas Tech University Southwest Collection/Special Collections Library in Lubbock, TX.
- 2014 **Drake, J.C.***, McIntyre, N.E., Griffis-Kyle, K.L. Connectivity and Isolation in the Management of Aquatic Resources in the Sonoran Desert. 21st Annual Conference of The Wildlife Society, Pittsburgh, Pennsylvania [Poster]
- 2014 **Drake, J.C.***, Jenness, J.S., Goetting, J., Griffis-Kyle, K.L. Testing a model for the prediction of isolated water sites in the Sonoran Desert. 25th TX Cooperative F&W Research Unit Meeting in Lubbock, Texas. [Poster]
- 2014 **Drake, J.C.***, Jenness, J.S., Goetting, J., Griffis-Kyle, K.L. Testing a model for the prediction of isolated water sites in the Sonoran Desert. 5th Texas Tech Annual Biological Symposium in Lubbock, Texas. [Poster]
- 2013 Griffis-Kyle, K.L.*, J. Goetting, **J.C. Drake**, J. Arnett. Sonoran Desert Amphibians and Isolated Waters: Cause for Concern. The Wildlife Society's 20th Annual Conference in Milwaukee, Wisconsin.

Professional Experience

- 2021-Present Postdoctoral Researcher, Biological Sciences Department, Virginia Tech
- 2016-2021 Graduate Research Assistant, Department of Environmental Conservation, UMass
- 2014-2016 Graduate Research Assistant, Texas Tech University
- 2013 Biological Technician (Crew Lead), Shasta-Trinity National Forest – USDA

- 2012 Ecological Research Technician, Barry M. Goldwater Airforce Range, AZ, Texas Tech University
- 2012 Biological Technician, Federated States of Micronesia, University of Missouri – Columbia
- 2011 Invasive Plant Biological Intern, Whiskeytown National Recreation Area – NPS
- 2011 Wildlife Ecologist Internship, Kaibab National Forest - USDA
- 2007-2010 Research Assistant, Center for Underwater Sciences, Department of Anthropology, Indiana University – Bloomington

Teaching Experience

- 2020 Evolution: Diversity of Life through Time (BIO 280) - Teaching Assistant (TA)
Introductory Ecology (BIO 287) – TA
University of Massachusetts - Amherst.
- 2019 Analysis of Environmental Data Lecture/Lab (ECO634/602) – TA
Quantitative Ecology for Undergraduates (NRC290B) – TA
Teaching Assistant, Introductory Ecology (BIO 287) – TA
University of Massachusetts - Amherst.
- 2018 Quantitative Ecology for Undergraduates (NRC290B) – TA
Introductory Biology for Science Majors (BIO 110) – TA
University of Massachusetts - Amherst.
- 2016 Vegetation and Wildlife Inventory and Analysis Techniques (NRM 3407) - TA
Texas Tech University
- 2015 Introduction to Natural Resources Management (NRM 1401) – TA
Vegetation and Wildlife Inventory and Analysis Techniques (NRM 3407) - TA
Texas Tech University
- 2014 Introduction to Natural Resources Management (NRM 1401) – TA
Vegetation and Wildlife Inventory and Analysis Techniques (NRM 3407) - TA
Texas Tech University

Mentorship

- 2021-Present Mentor of Undergraduate for Virginia Tech Independent Research Credits
- 2020 Mentor of Undergraduate for University of Aberdeen Honor's Thesis Student.
Developed and helped mentor student on field-based data collection and analysis
- 2019 Mentor of Undergraduate for University of Aberdeen Honor's Thesis Student.
Developed and helped mentor student on field-based data collection and analysis

2018 Mentor of Undergraduate for University of Aberdeen Honor's Thesis Student. Developed and helped mentor student on field-based data collection and analysis

Workshops

- 2019 Lead Presenter & Course Developer, IntRo & Refresher: Introduction to Data Handling and Analysis in R. 1/2 Day workshop presented to the Department of Environmental Conservation
- 2018 Lead Presenter & Course Developer, IntRo & Refresher: Introduction to Data Handling and Analysis in R. 1/2 Day workshop presented to the Department of Environmental Conservation
- 2017 Lead Presenter & Course Developer, IntRo: Introduction to Data Handling and Analysis in R. 1 Day workshop presented to the North Atlantic Chapter of the Society of Environmental Toxicology and Chemistry.
- 2016 Co-instructor for a small mammal trapping workshop for undergraduate students participating in the South-Central Climate Science Center's Summer Internship for Underrepresented Minorities. Texas Tech University.
- 2015 *Good R Practices*. Presentation to The R Book Club, a group of R users at Texas Tech University

Honors and Awards:

- 2020 TWS Wetlands Working Group Conference Grant
- 2020 TWS Biodiversity Working Group Conference Grant
- 2019 TWS Wetlands Working Group Travel Grant
- 2019 TWS Biometrics Working Group Travel Grant
- 2017 UMass ECo Travel Grant
- 2017 TWS Biological Diversity Working Group Travel Grant
- 2016 [TTU Outstanding Thesis/Dissertation Award](#)
- 2016 Conservation Leaders for Tomorrow (CLfT) Leadership Training Scholarship
- 2016 [High Country News Magazine National Park Photography Contest](#)
- 2016 TTU Graduate School *Grant-in-aid*
- 2016 ANRS Travel and Professional Development Grant
- 2016 NRM photography contest, TTU (1st place)
- 2015 NASA-MSU Professional Enhancement Award – 2015 IALE World Congress
- 2015 TTU Graduate School Travel Funding Award
- 2015 ANRS Travel and Professional Development Grant
- 2015 TTABSS Warren B. Ballard Memorial Award – Oral Presentation (2nd place)
- 2015 *Illuminance 2015* - national competitive photography exhibition (presenter)
- 2015 TTU Sowell Collections Essay Contest (2nd place)
- 2014 TTU Sowell Collections Essay Contest (1st place)
- 2014 The Wildlife Society Spatial Ecology and Telemetry Working Group Travel Funding Award

- 2014 ANRS Travel and Professional Development Grant
- 2014 TTU Graduate School Travel Funding Award
- 2007-2010 Dean's List – Indiana University – Bloomington

Professional Community Service

Ad-hoc reviewer: *Amphibia-Reptilia* (2016-present), *Northwest Naturalist* (2019-present), *Ecological Modeling* (2019-present), *Biological Conservation* (2019-present), and *Freshwater Science* (2022-Present)
UMass College of Natural Sciences Assistant Dean Graduate Student Advisory Group (2020-2021)

Professional Organization Membership

- 2018-Cur. CCAST: Collaborative Conservation and Adaptation contributor & community member for invasive species community of practice
- 2015-Cur. International Association for Landscape Ecology, North America – Member
- 2015-Cur. International Network of Next-Generation Ecologists - Contributing *Ecoblogger*
- 2015-Cur. N-Gen Researcher: [Next Generation Sonoran Desert Researchers](#)
- 2014-Cur. The Wildlife Society – Member
- 2018-2021 Backcountry Hunters and Anglers – New England Chapter Leadership - founded UMass Collegiate Chapter and mentored new outdoor enthusiasts while collaborating with local business and other college groups
- 2016-2019 ECo Grad Council - UMass Amherst
- 2014-2016 Association of Natural Resource Scientists - Texas Tech University

Community Outreach/Science Communication

- 2014-Cur. [Secret Life of a Field Biologist](#) – Ecology-oriented blog featured on International Network of Next Generation Ecologists [EcoBloggers](#) list
- 2017-2021 That's Life Science Blog [Contributor](#)
- 2015-2016 *Scales, Tales, and Trails* Annual Community Outreach and Youth Education Event held by the Association of Natural Resource Scientists, Lubbock, Texas
- 2015 [Dearth](#) – contributing artist. Scientific and artistic interdisciplinary expression of water scarcity issues in the Texas Panhandle

Selected Workshops Attended

- 2022 Building a Better Field Work Future: Preventing Sexual Harassment in the Field. Led by Mandy Frazier IALE-North America 2022 Annual Meeting, Virtual.
- 2020 Multi-Species Occupancy Modeling. Lead by Christopher Rota TWS Annual Meeting 2020, Virtual.
- 2019 Hierarchical statistical modeling with NIMBLE. Led by Perry deValpine TWS/AFS Joint Meeting 2019, Reno, NV.
- 2019 Optimizing Landscape Resistance Surfaces Using ResistanceGA. Led by Bill Peterman

- US-IALE 2019 Annual Meeting. Fort Collins, CO.
- 2017 An Introduction to Spatial-Capture Recapture.
Do the Genetics 101: Matching Techniques and Technologies to Research Questions in Wildlife Genetics.
The Wildlife Societies 24th Annual Conference. Albuquerque, NM.
- 2017 Modeling Patterns & Dynamics of Species Occurrence: Introductory Workshop.
Lead by Darryl MacKenzie. Ithaca, NY
- 2016 Venomous Reptile Handling.
Incorporating Climate Change Data.
49th Joint Annual Meeting of the Arizona/New Mexico Chapters of the Wildlife Society and the Arizona/New Mexico Chapters of the American Fisheries Society, Flagstaff, AZ.
- 2015 Using R to Model, Manipulate, and Manage Spatial Data.
Telecoupling Framework for Studying Cross-Border and Cross-Scale Interactions.
International Association for Landscape Ecology's 2015 World Congress, Portland, Oregon
- 2014 SciFund Challenge Video Outreach 101 for Scientists: Public outreach and videography skills for scientists. Lead by Jai Ranganathan
- 2014 Analyses of Wildlife Spatial Behaviors with T-LoCoH. 21st Annual Conference of The Wildlife Society, Pittsburgh, Pennsylvania

Selected Media Coverage

- 2021 EurakAlert!: [To understand ecology, follow the connections](#)
- 2020 The Scientist: [Researchers Detect Land Animals Using DNA in Nearby...](#)
- 2020 UMass Press Office: [Environmental DNA in Rivers Offers New Tool...](#)
- 2020 The Applied Ecologist's Blog: [Fishing for Mammals](#)
- 2020 British Ecological Society: [Fishing for Mammals](#)
- 2018 Lab Talk with Laura: [Episode 16](#)
- 2016 Department of NRM, TTU [interview on fieldwork and photography](#)
- 2016 *In the Field: Life on the Devils Highway (Part 1 & 2)*

Selected Professional Skills

Statistical Analysis: Bayesian and frequentist modelling, (generalized) linear modeling, stochastic patch occupancy models, graph-theoretic/network modelling applications, experimental design

Spatial Data Analysis & other Software: ArcGIS 10.x, HexSim IBM Software, Circuitscape, LinkageMapper Connectivity Analysis Software, Google Earth Pro, git, digiKam, Microsoft Office Suite

R Programming: ggplot2 and the tidyverse, unmarked, camtrapR, igraph, NIMBLE, ResistanceGA, geospatial packages

Field & Logistics: National Park Service Operational Leadership Training, GPS/Compass/Orienteering/Route-finding, data-management and QAQC, safety training and logistics, coordination with military security, underwater resource mapping and monitoring, backcountry travel and camping skills, 4WD and high-clearance driving, team leadership, firearms safety

Wildlife Applications: Pit-tagging, camera-trapping, live-trapping small-mammals, avifaunal point counts, bird-of-prey transect/callback surveying; breeding bird small owl mist-netting/banding, herpetofauna surveying, aquatic and terrestrial invertebrate sampling and ID, water quality testing, T/E experience, I-button data logger deployment, invasive species monitoring and control, vegetation surveys

Other Certifications: Wildland firefighting red-card and training, PADI Divemaster Professional Certification, Search and Rescue SARTECH III (Lapsed), Eagle Scout

References

Available upon request.