

# ELIZABETH A. LEIPOLD

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- EDUCATION:** **Earning (in progress) Ph.D. Ecology and Environmental Science** *September 2018-Present*  
*Montana State University, Bozeman, MT. Advisor: Dr. Lance McNew*
- Graduate coursework
  - Field Research: Estimating the occupancy, abundance, and density of dusky grouse: developing methods of unbiased population monitoring in Montana
- M.S. Fisheries and Wildlife Ecology:** *August 2015- December 2018*  
*New Mexico State University, Las Cruces, NM. Advisor: Dr. Scott Carleton*
- Minor: Applied Statistics
  - Thesis: Breeding season ecology of scaled and Gambel's quail: Assessing demography and resource selection in the Chihuahuan Desert in New Mexico
- B.S. Biology:** *Cum Laude, Departmental Honors* *May 2011*  
*Washington College, Chestertown, MD*
- Major: Biology
  - Thesis: Effect of Prozac on the Startle Response in Zebrafish
  - Study Abroad; Granada Spain
- International Baccalaureate Diploma, High School Diploma** *May 2007*  
*Annapolis Sr. High School, Annapolis MD*

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**WORK EXPERIENCE:** **Graduate Student – Montana State University** *September 2018-Present*  
*Montana State University, Advisor: Dr. Lance McNew* *Bozeman, MT*

- Graduate coursework
- Conducted Field Research in Spring & Summer 2019 (4-month field season), and Spring 2020 (2-month field season; provided training for 55+ surveyors either in-person or with a PPT presentation & answering questions via email, text, and phone
- Field Skills: conducted point count surveys for mountain grouse (dusky grouse, ruffed grouse, spruce grouse) with and without electronic playback; designed and implemented survey protocol; data entry; data proofing
- Resource selection/habitat suitability map for dusky grouse in Montana
- Generated a total of 500+ transects (made up of 5 or 6 points) over western Montana
- Abundance analyses using N-mixture models, Distance Sampling
- Analysis: R, ArcMap, ArcGIS Pro

**Graduate Student – New Mexico State University** *August 2015-December 2018*  
*New Mexico State University, Advisor: Dr. Scott Carleton* *Las Cruces, NM*

- Conducted Field Research over two 9-month field seasons; hired and trained 8 field technicians
- Field Skills: trapping quail: use of funnel traps, baiting trap sites, banding, attaching VHF transmitters, aging and sexing of scaled and Gambel's quail; triangulation and homing telemetry; use of LOAS program; designing and implementing nest monitoring protocol; vegetation surveys: Robel pole/VOR, line-point intercept, canopy gap, basal gap, belt transects for shrub counts, identification of desert grasses, forbs, and shrubs; data entry; data proofing
- Analysis using Program Mark and R
- Lab Work: sorted vegetation and seeds in quail crop samples; dried and weighed samples, identification of seeds

**Fisheries Technician**

May 2018-June 2018

New Mexico State University, Lauren Flynn (Masters Student) & Lauren Kremer (Masters student), Dr. Colleen Caldwell

Las Cruces, NM

- Electrofishing; fish ID; stream invertebrate sampling; data recording

**Mexican Wolf Capture Volunteer**

November 2017-May 2018

Ladder Ranch, Chris Wiese

Las Cruces, NM

- Assisted intermittently with capture of Mexican wolves inside their enclosures; Participated as part of a human chain used to coral wolves into holding boxes.

**Graduate Student Project Volunteer**

August 2015-May 2018

New Mexico State University

Las Cruces, NM

- Mountain lion study: learned and assisted with the building of traps; assisted with measuring and photographing of a caught mountain lion as it was being prepped for tagging and receiving a VHF collar
- Burrowing owl study: Assisted with capturing burrowing owls inside their enclosure; held owls as they were banded and received VHF collars
- Sandhill Crane study: assisted with capture: net set-up, retrieving cranes & additional captured birds from net, restraining cranes for banding purposes and morphological measurements
- Telemetry: taught telemetry workshop to NM 4-H students, taught telemetry to graduate students in informal workshops

**Bell's Vireo and Willow Flycatcher Nesting Ecology Technician**

May 2015-August 2015

University of Illinois, Bryan Reiley (PhD student)

Springfield, IL

- Nest searching; locating every bell's vireo and willow flycatcher nest in a site; determination of nest success or possible cause of failure; camera setup on nests, battery changes, vegetation surveys
- Point Count Surveys: 10 minute survey of songbirds (ID by sight, song and call) at survey locations

**Wildlife Research/ Senior Prairie Chicken Technician**

September 3, 2014-May 2015

Kansas State University, Dan Sullins (PhD student) &

Ashland, KS

Jonathan Lauetenbach (Masters student), Dr. David Haukos

- Trapping: use of drop-nets and funnel traps, banding, attaching vhf and satellite transmitters, obtaining morphological measurements; Triangulation telemetry, use of LOAS program; Point Counts: raptor identification; ArcGis: adding and displaying data; Vegetation surveys: robel pole/VOR, daubenmier frame, identification of grass, forb, and shrub species of mixed grass and tall grass prairies; trapping; bird banding; attaching of satellite transmitters; data entry: Excel, Access

**Wildlife Research/Prairie Chicken Technician**

September 2, 2013-December 3, 2013

Kansas State University, John Kraft (Masters student), Dr. David Haukos

Oakley, KS

- Triangulation telemetry, use of LOAS program; Vegetation surveys: robel pole, daubenmier frame, identification of grass, forb, and shrub species of short grass prairies and CRP; ArcGIS

**Vegetation Survey Technician**

October 2013

Common Ground Capital

Oakley, KS

- Vegetation surveys based on soil type: identification of short grass prairie grass species, forbs, and shrubs.

**Shrubland Nesting Ecology Technician**

May 20, 2013- August 18, 2013

University of Illinois, Scott Chiavacci (PhD student)

McHenry, IL

- Nest searching; songbird identification via sight and sound; nest checks (number of eggs – host vs. parasitic); determination of nest success or possible cause of failure; camera setup on nests, battery changes, vegetation surveys

**Prairie Chicken Technician**

February 25, 2013- May 18, 2013

Kansas State University, Dan Sullins (tentative PhD student), Dr. David Haukos Lamar, CO

- Vegetation Surveys: robel pole, step counts, and grass, forb, shrub identification; Drop net, funnel trap set up and use; Bird banding, attaching rump style satellite radio transmitters, measuring of tarsus, wing, weight, and age identification; Sighting color bands; ATV training certification; Defensive Driving certification; ArcGIS

**Elk Habitat Assessment Field Technician**

Summer 2012

University of Alberta, Dana Seidel (Masters student), Dr. Mark Boyce

Alberta, Canada

- Telemetry – GPS downloads using LowTech and Telonics equipment; Identification of grammoids, forbs, shrubs; Group size estimates; Biomass estimation; Data Entry; Other Duties

**Ferruginous Hawk Project Volunteer**

June 2012

University of Alberta, Melynda Johnson (Masters student)

Alberta, Canada

- Nest checks, marking and measuring nestlings; Trap setup for adults at nest site; Adult Hawk handling, Barn Owl handling

**Prairie Chicken Trapping Technician**

March 2012 - May 2012

Texas Tech University, Phil Borsdorf (Masters student), Dr. Clint Boal

Lubbock, TX

- Drop nets, funnel traps – set up and use; Bird banding, radio collaring, measuring of tarsus, wing, weight, and age identification; Telemetry triangulation; ATV training and use; Defensive Driving certification; Other Duties

**Jug Bay Volunteer**

December 2011

Jug Bay Wetlands Sanctuary

Bristol, MD

- Telemetry training for box turtle tracking

**Stream Monitoring Intern**

Summer 2009, Summer 2011

Department of Environmental Protection in Montgomery County

Rockville, MD

- Data entry and Field work- fish sampling, geomorphic surveys, herptofauna searches, habitat assessment surveys, lab work – benthic macroinvertebrate subsampling

**General Teacher's aid**

Fall 2009

Washington College, Biology Department, Dr. Verville

Chestertown, MD

- Teacher's Aid for microbiology and general biology lab prep

**General Teacher's aid**

Fall 2007- Spring 2009

Washington College, Biology Department, Dr. Connaughton

Chestertown, MD

- T.A. for General Biology Lab Section
- General Biology lab prep, Ecology Lab Prep

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**POSTERS &****PRESENTATIONS:****Montana Wildlife Society Meeting***February 2020*

- Presentation: Developing methods for estimating density and abundance of dusky grouse
- Poster: Help wanted: Volunteer observers needed for mountain grouse population study

**National Wildlife Society Meeting in Reno, NV***September 2019*

- Poster: Developing methods for estimating abundance and density of dusky grouse for unbiased population monitoring

**Montana Wildlife Society Meeting***February 2019*

- Poster: Predicting habitat suitability for dusky grouse in Montana

**American Ornithological Society National Meeting***April 2018*

- Presentation: Comparing demography and nesting ecology of sympatric scaled and Gambel's quail populations in response to temperature and precipitation in the Chihuahuan desert

**New Mexico and Arizona Joint Annual Meeting***February 2017*

- Poster: Comparing demography and nesting ecology of sympatric scaled and Gambel's quail populations in response to climate in the Chihuahuan Desert

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**HONORS:****Hodson Scholar***August 2007 - May 2011***Capital Gazette Academic All-Star Scholarship***March 2007***Rose O'Neill Literary House Fellow***September 2010 - May 2011***Beta Beta Beta (Biological Honors Society)***April 2010 - May 2011***Writers' Union Award***May 2011*

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**LEADERSHIP:****Active Minds Chapter Founder/President, Washington College:***2008 - 2009***Active Minds Club Treasurer***Fall 2009***Treasurer of Writers' Union***Fall 2008 - Spring 2009, Fall 2010 - Spring 2011***Girl Scouts***1997-2007*