

Anyll Markevich

5570 Magnolia Drive, Nederland, CO 80466
(303) 800-6342
anyllmarkevich@gmail.com

Environmental studies undergraduate student interested in graduate research focusing on behavioral ecology and evolutionary biology. Significant background in academic research, field research, conservation issues, programming, and GIS.

Education

In-Progress B.S. in Environmental Studies, Prescott College, AZ **2022–Present**

Senior-Year Student
Faculty Advisor: Molly Bigknife Antonio
GPA: 4.0/4.0
Expected 4-year program completion in 3 years

In-Progress Non-Degree Coursework, University of Colorado Boulder, CO **2024–Present**

12 Credit Hours over 3 Courses
GPA: TBD
Will be counted towards B.S. at Prescott College

Non-Degree Coursework, Front Range Community College, CO **2020**

4 Credit Hour Course
GPA: 4.0/4.0
Counted towards B.S. at Prescott College

Homeschooling through High School **Graduated 2022**

GPA: 4.0/4.0
Focus on self-directed learning in environmental studies and animal behavior

Publications

Peer-Reviewed Publications

Berl, R. E. W., Sekar, S., Markevich, A., Camara, C., & Niemiec, R. M. (2022). Assessing the impacts of normative and efficacy-based messaging on the social diffusion of conservation science. *Conservation Science and Practice*, 4(4).
<https://doi.org/10.1111/csp2.12647>

Pre-Publications

Markevich, A., Jones, S. R., Markevich, C. G., & Seastedt, T. R. (2024). *Cheatgrass, Mammals, Birds, Butterflies, and Wildfire: A Study of Ecosystem Interactions* [Unpublished Manuscript]. ResearchGate. <https://doi.org/10.13140/RG.2.2.14486.77126>
Gielstra, D., Markevich, A., Butler, D. R., Hunkins, E. A., Gielstra, E. D., Kelly, J., Cervený, N. V., Gielstra, J., Moll, H., Oberding, T., & Guerrero, K. (2024). *Exploring Zoogeomorphological Landscapes: Enhancing Learning Through Virtual Field Experiences of Beaver Ponds Along the Red Eagle Trail, Glacier National Park, Montana, USA* [Manuscript submitted for publication]. University of Phoenix.

Reports

Markevich, A., Jones, S. R., & Markevich, C. G. (2022). *Impacts of Cheatgrass on Mammal, Bird, and Butterfly Populations in a Rocky Mountain Foothills Grassland*. Boulder County Parks & Open Space. <https://assets.bouldercounty.gov/wp-content/uploads/2020/12/cheatgrass.pdf>

Markevich, A., Jones, S. R., Markevich, C. G., & Seastedt, T. R. (2022). *Cheatgrass, Mammals, Birds, Butterflies, and Wildfire: A Study of Ecosystem Interactions*. Boulder County Parks & Open Space. <https://assets.bouldercounty.gov/wp-content/uploads/2024/02/cheatgrass-wildlife-wildfire.pdf>

Opinion Pieces and Letters to the Editor

Markevich, A. (2022, July 18). Turning the tables. *The Mountain-Ear*. <https://www.themtnear.com/articles/turning-the-tables/>

Markevich, A. (2022, July 19). When dogs are around, moose pose a greater danger. *Longmont Times-Call*. <https://www.timescall.com/2022/07/19/anyll-markevich-when-dogs-are-around-moose-pose-a-greater-danger/>

Markevich, A. (2022, July 28). Opinion Letters: Dogs and moose. *Boulder Weekly*. <https://archives.boulderweekly.com/opinion/letters/letters-7-28-22/>

Markevich, A. (2022, November 16). Letters to the editor: Cloud seeding may be harmful. *Boulder Daily Camera*. <https://www.dailycamera.com/2022/11/16/letters-to-the-editor-cloud-seeding-may-be-harmful-camping-ban-is-cruel-womens-rights-are-important-archdioceses-guidance-is-harmful/>

Research Interests

Researching the interactions between animal behavior and ecological processes, including behavioral responses to changing environmental conditions, co-evolution between species, inter-trophic interactions, and communication in social species. Applying research to conservation efforts, especially through community conservation approaches.

Research Skills

Field

Study design, mammal identification, bird identification, plant identification, behavioral observation, mammal and bird monitoring, vegetation surveys, camera traps

Analysis

Statistical analysis, remote sensing, GIS, programming (R, Python, Rust, Swift, Java)

Conservation Approaches

Community conservation, invasive plant removal, stream restoration, advocacy, rewilding, animal reintroduction

Research and Field Experience

Cheatgrass, Wildlife, and Wildfire Research Project

2019–Present

As lead researcher, coordinated field efforts, analysis, and report writing for a two-year county-funded research project. Deployed remote sensing of mammal species using camera traps and conducted vegetation surveys across 1000 sampling points. Participated in bird point counts and butterfly transect counts. Managed data and ran statistical analyses. Led writing of a pre-publication manuscript now being prepared for peer-reviewed publication. Developed a

custom iPad app in Swift to streamline vegetation data entry, saving over 100 person-hours of fieldwork. (see Publications: Markevich et al., 2024)

Waterbird Monitoring Program at Prescott College's Kino Bay Center **2024**

Collaborated with an international non-profit conservation research team as their GIS expert to highlight the importance of mangroves and mudflats to migratory shorebirds. Developed and applied machine-learning-based remote sensing methodology on high-resolution multispectral satellite imagery to map habitat types in the Humedales de la Laguna La Cruz Ramsar Site in Mexico. Designed and tested methodology to record spatial distribution of spotting-scope observations of waterbird species within estuaries. Participated in shorebird surveys. Accompanied camera trap monitoring of IUCN Red List Vulnerable Craveri's murrelet, brown pelican nest monitoring, right whale population monitoring using photo identification of dorsal fins, and seabird surveys across multiple estuaries. (see Relevant Press Appearances: Meltzer et al., 2024 and *Linking wetland and shorebird conservation*, 2024)

Messaging and the Social Diffusion of Conservation Science Paper **2019–2022**

Conducted surveys of a convention's attendees as part of a pilot study and refined the methodology based on results. Collected data at a festival by recording study participants' responses to varied science-based informational texts about wolf conservation. Conducted categorization of qualitative responses and aided data interpretation following methodology alterations due to the COVID-19 pandemic. This study is now published in a peer-reviewed journal. (see Publications: Berl et al., 2022)

Regular Yellowstone National Park Visitor **2015–Present**

Observed wolves and other wildlife as a yearly visitor to Yellowstone National Park. Tracked and observed large carnivores and scavengers through spotting scopes for over 100 hours. Regularly accompanied and interacted with wolf researchers and experts. Developed in-depth knowledge of wolf behavior and Yellowstone wolf pack history. Frequently aided visitors in observing wolves and provided educational information on wolf behavior and conservation.

Prescott College Field Experiences **2023–Present**

Aided in data collection on aspen regrowth on The Nature Conservancy's Hart Prairie Reserve in Arizona's San Francisco Peaks area. Participated in the design and implementation of stream restoration projects, including removal of invasive Siberian Elm, planting of native riparian species, and bank stabilization using branches. Learned plant identification during field excursions in Arizona ecosystems ranging from alpine forests to the Sonoran Desert. Trained in group wilderness leadership and safety during a 6-day backpacking trip in undeveloped regions of Grand Canyon National Park. Visited a cottonwood survival study site investigating drought resistance in hybrids of Narrowleaf and Fremont Cottonwoods.

Virtual Learning Experiences in Beaver Habitat Paper **2024–Present**

Provided ecological expertise for a paper on a pedagogical framework that utilizes virtual learning experiences to increase college student ecological literacy in communities where field trips are logistically impossible. The paper uses the exploration of beaver habitats in Glacier National Park as a case study to apply this teaching method. As second author, wrote sections about beaver ecology and their importance to climate resilience. This paper is currently undergoing peer review. (see Publications: Gielstra et al., 2024)

Wintering Raptor Surveys **2017–2020**

Identified buteos, accipiters, falcons, and other large predatory bird species and recorded spatial data during Boulder County Nature Association Wintering Raptor Surveys.

Pathways Conference

2019

Attended the Pathways Conference organized by Colorado State University's Center for Human-Carnivore Coexistence, an academic platform for discussing applications of the human dimensions of wildlife discipline in conservation.

Presentations

Anyll Markevich. (2020a, January 25). *Wild Patagonia*. Boulder County Nature Association, Boulder George Reynolds Branch Library.

Anyll Markevich. (2020b, February 24). *Wild Patagonia*. Denver Field Ornithologists. <https://archive.org/embed/dfo202002&autoplay=1>

Anyll Markevich. (2020c, December 10). *Wild Patagonia*. Colorado Native Plant Society. <https://conps.org/home-2/events/event-listing/#!event/2020/12/10/boulder-chapter-virtual-meeting-wild-patagonia>

Anyll Markevich. (2021, April 27). *Wild Patagonia*. Boulder County Audubon Society. <https://youtu.be/L-LuJFIjLRo>

Anyll Markevich, & Jones, S. R. (2021, December 16). *Impacts of Cheatgrass on Mammal, Bird and Butterfly Populations*. Boulder County Parks and Open Space Advisory Committee (POSAC). <https://youtu.be/iSZBvOGG-Oc>

Relevant Coursework

Advanced Placement Tests

AP Biology
AP Computer Science A
AP Chemistry
AP English Language and Composition

Front Range Community College

Environmental Science with Lab

Prescott College

Conservation Biology (emphasis on community conservation)
Geographic Information Science, Advanced (emphasis on remote sensing)
Restoration Ecology: Watersheds of the Southwest (emphasis on stream restoration)
Waterbird Conservation in Sonora, Mexico
Environmental Policy in the Context of Wolf Reintroduction
Natural History and Ecology of the Southwest (8 Credits, emphasis on plant identification)
Environmental Topics for Outdoor Educators and Advocates
Data Analysis and Academic Writing
Soil and Compost Science
The Rust Programming Language (in progress)
Senior Project: The Role of Theoretical Ecology and Computer Simulation in Conservation Efforts (in progress)

University of Colorado, Boulder

Intro to Statistics and Quantitative Thinking for Biologists (in progress)
Calculus I (in progress)
General Physics I (in progress)

Community Service and Participation

Rocky Mountain Wolf Project

2017–2019

Volunteered frequently for the Rocky Mountain Wolf Project, educating the public at local fairs and markets on the ecological importance of wolves and opportunities for coexistence in support of wolf reintroduction to Colorado.

WildEarth Guardians

2023

Collaborated with WildEarth Guardian's advocacy staff to encourage Colorado Parks and Wildlife to adopt conservation-centric approaches to wolf reintroduction, particularly focusing on promoting programs incentivizing ranching communities to implement coexistence measures.

Endangered Species Coalition

2020

Participated in media creation and advocacy for the Endangered Species Coalition's Western Slope Connectivity Project to encourage the creation of wildlife crossings.

Community Leadership

2019–2021

Co-led a neighborhood project organizing community members to pull invasive weeds, especially cheatgrass, in community gathering spaces. The weeds were properly disposed of in municipal composting facilities.

Boulder County Audubon Teen Naturalists

2017–2019

Participated actively in the Boulder County Audubon Teen Naturalist Program.

Employment

Resident Advisor (RA), Prescott College

2023

Ensured resident safety and engaged in community organizing for Prescott College student housing.

Grants, Scholarships, Awards, and Certificates

Research Grants

Boulder County Small Grants 2020

Boulder County Nature Association Research Grant 2020

Scholarships

Boulder County Audubon Society Teen Birding Camp Scholarship 2019

Knaup Family Scholarship at Prescott College 2023

Awards

Boulder County Audubon Society Community Conservation Award 2019

AP Scholar with Distinction 2022

Certificates

Black Belt in Ki-Aikido (following 12 years of practice) 2022

Pending Applications

Applied to the National Science Foundation Graduate Research Fellowship Program 2024

Relevant Press Appearances

Meltzer, L., Reyes, F. J. M., & Dolinski, L. A. (2024). *Waterbird Monitoring Program Final Report 2023–2024*. Prescott College Kino Bay Center for Cultural and Ecological Studies.

https://drive.google.com/file/d/18JJ5yuYyVQ1hJciUhEoOH37FjVuVgfgQ1/view?usp=share_link

Linking wetland and shorebird conservation: Point Blue Conservation Science and MSP+ in Kino Bay. (2024, February). *The Kino Bay Center Newsletter*.

https://drive.google.com/file/d/1LiTSXMfKW1wUv1p5FIF4g-3IWRxJV89t/view?usp=share_link

Jones, S. R. (2020, October 1). *Teen Naturalists Uncover Tallgrass Treasures*. Boulder County Audubon Society. <https://www.boulderaudubon.org/articles/teen-naturalists-uncover-tallgrass-treasures>

Nichta, T. (2018, December 6). Young Conservationist Makes a Difference. *Merlin Tuttle's Bat Conservation*. <https://www.merlintuttle.org/young-conservationist-makes-a-difference/>

Languages and Nationalities

English and French native speaker

Citizen of the United States of America, Canada, and France

Other Skills and Interests

Photography, Argumentative and Creative Writing, Graphic Design, Video Editing, VFX, 3D Graphics

References

Dr. Rebecca Niemiec

rebecca.niemiec@colostate.edu

(310) 569-0703

Colorado State University

Dr. Timothy Seastedt

timothy.seastedt@colorado.edu

(303) 492-3302

University of Colorado, Boulder

Dr. Dianna Gielstra

dianna.gielstra@phoenix.edu

(512) 422-1943

University of Phoenix

Dr. Molly Bigknife Antonio

mbigknifeantonio@prescott.edu

(928) 871-5463

Prescott College