

# MIRANDA WADE

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@mirandaconcolor

## EDUCATION

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Michigan State University  
**PhD; Integrative Biology and Ecology, Evolutionary Biology, and Behavior** **2017- Present**  
Dissertation: “The Effects of Anthropogenic Change on Species of Conservation Concern”  
Advisor: Mariah Meek | Committee Members: Gideon Bradburd, Sarah Fitzpatrick, Cheryl Murphy

Colorado State University  
**B.S. Biological Science** **2012-16**  
Concentrations in Ecology, Anatomy & Physiology  
Biological Sciences Honor Scholar  
Honors Thesis: “The Absorption of Omega-3 Fatty Acids in Ruminants”

## FELLOWSHIPS AND AWARDS

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EEB Summer Fellowship (\$7500)	2021
EEB Summer Fellowship (\$2100)	2020
Department of Integrative Biology John R. Shaver Award (\$1050)	2019
EEB Summer Fellowship (\$2000)	2019
MSU College of Graduate Studies Travel Fellowship (\$350)	2019

## TEACHING EXPERIENCE

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<b>Graduate Teaching Assistant, <i>Evolution</i></b> Facilitated discussion of current science literature, instructed students in scientific writing, literature searching, and citation.	<b>2021</b>
<b>Graduate Teaching Assistant, <i>Marine Biology</i></b> Taught two weekly recitation sections to facilitate discussion of current science literature, instructed students in the correct methods of scientific writing, literature searching, and citation.	<b>2019 &amp; 2020</b>
<b>Guest Lecturer, <i>Fundamentals of Genetics</i></b> Presented two lectures covering population genetics	<b>2018</b>
<b>Graduate Teaching Assistant, <i>Fundamentals of Genetics</i></b> Taught two weekly recitation sections. Attended lectures to assist with flipped classroom style learning. Wrote exam and practice questions. Proctored exams. Held weekly help hours to further assist students.	<b>2018</b>
<b>Graduate Teaching Assistant, <i>Cell and Molecular Biology Lab</i></b> Taught two weekly lab sections. Prepared presentations and quizzes for class. Attended recitation section to answer any questions over assignments or instructions. Proctored exams. Held two help room sessions per week to assist students.	<b>2017</b>
<b>Undergraduate Learning Assistant, <i>Physics</i></b>	<b>2016</b>

Facilitated student learning via one-on-one and group interactions during class. Helped disseminate lecture topics in a way to make learning easier for students. Hosted tutoring sessions twice a week. Proctored exams.

## RELATED COURSEWORK

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Statistical Methods in Ecology & Evolution  
 Population & Community Ecology  
 Pathways to Scientific Teaching in Biology  
 Evolutionary Biology  
 Evolution Discussion Group  
 Bioinformatics  
 Molecular Ecology & Conservation Genetics  
 Professional Development  
 Chromatin Dynamics and Gene Expression in Development  
 New Approaches to Ecological Risk Assessment

## RELATED EXPERIENCE

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Michigan State University | Department of Integrative Biology

### Graduate Researcher, Meek Lab

August 2017 – Present

Researching the effects of anthropogenic disturbance on small, fragmented populations of Mojave Milkweed (*Asclepias nyctaginifolia*) for the purpose of conservation. Also using Fathead Minnows (*Pimephales promelas*) as a model to determine the intergenerational effects of microplastic pollution on gene transcription and methylation.

University of Toronto | Department of Ecology and Evolutionary Biology

### International Visiting Graduate Student, Rochman Lab

June – July 2019

Raised second-generation Fathead Minnows (*Pimephales promelas*) for microplastics study in collaboration with the Ontario Ministry of the Environment and Climate Change (MECC).

Colorado State University | Department of Biology

### Undergraduate Research Assistant, Funk Lab

2016-17

Performed DNA extractions and library preparation for ddRadSeq on puma (*Puma concolor*) native to the Rocky Mountain region of the United States to determine the effects of landscape structure on puma disease dynamics. Completed the same library preparation for Anthony's poison arrow frog (*Epipedobates anthonyi*) to determine population structure for conservation purposes.

Colorado State University | Department of Bioagricultural Science and Pest Management

### Undergraduate Research Assistant, Hufbauer Lab

2016

Processed and analyzed leaf tissue samples of common mullein (*Verbascum thapsus*) using various ImageJ and JMP software. Investigated questions regarding herbivory and allocation of resources in invasive common mullein.

Colorado State University | Department of Animal Science

### Undergraduate Research Assistant, Archibeque and Engle Labs

2015-16

Performed weighing, bleeding, and liver biopsies in cattle, took measurements for water quality study to determine the effects of high levels of minerals in feedlot cattle. Performed regular maintenance on nutrition study cattle by cleaning and replacing fistulas, weighing, and placing bolus magnets in cattle reticulum through fistulas. Completed the research aspect of Senior Honors Thesis by taking rumen samples, incubating samples with various feed treatments, and analyzing the Omega-3 and -6 levels post-incubation.

## PRESENTATIONS, PUBLICATIONS AND PAPERS

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*"The Effects of Microplastic Exposure across Development, Generations, and Molecular Levels"*

American Fisheries Society/The Wildlife Society Joint Meeting	2019
<i>“Population genetics of Mojave milkweed in the Ivanpah Valley of California”</i> Midwest Population Genetics VI	2019
<i>“Effects of Solar Installations on Desert Plants”</i> MSU EEB Research Symposium	2018

#### SERVICE AND PROFESSIONAL DEVELOPMENT

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<i>President</i> EEB Graduate Group, Michigan State University	2020-21
<i>Invited Reviewer</i> Journal of Biological Conservation	2020
<i>Invited Reviewer</i> Journal of Conservation Genetics	2019
<i>Research Symposium Committee Co-Chair</i> EEB Graduate Group, Michigan State University	2018-19
<i>Undergraduate Poster Evaluator</i> Mid-Michigan Symposium for Undergraduate Research Experiences (SURE) Michigan State University Undergraduate Research & Arts Forum	2018
<i>Volunteer</i> Michigan State University Girls’ Math and Science Day	2018

#### MEMBERSHIPS

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Ecological Society of America  
Society for Conservation Biology  
Society for the Study of Evolution