CHARLOTTE M. PROBST
cprobst@umich.edu

EDUCATION:
Ph.D. student, School for Environment and Sustainability. University of Michigan. Advisor: Brian Weeks.

B.S., Biological Sciences and Philosophy, magna cum laude. University of Notre Dame. Degree awarded May 2022.

RESEARCH EXPERIENCE:
PhD student in Weeks Lab, University of Michigan

PhD student Fall 2022-present

* Conducting large-scale analysis of Bergmann’s Rule in birds
* Preparing meta-analysis examining Bergmann’s Rule across taxa
* Mentored undergraduate student research project

Research with Ralston Lab, Saint Mary’s College
Undergraduate Research Assistant, Fall 2018-Spring 2022

* Developed and guided research project on climate and bill morphology
* Extensive literature review and methods development
* Analyzed 1000+ museum specimens with digital measurement software
* Contributed to team developing a scientific image analysis program
* Meticulous data collection, entry, and management

REU with the Betts Landscape Ecology Lab, HJ Andrews Experimental Forest
Field intern, Summer 2021

* Obtained competitive internship contributing to long-term study of forest bird distributions
* Conducted independent point counts along forest transects
* Performed playback experiments examining competitive interactions along an elevational gradient
* Deployed audio playback and recording devices
* Experience selecting net sites, setting up nets, and scribing for bird banding
* Basic bird handling experience
* Thorough data entry, management, and proofing

Monitoring Chimney Swift roost, University of Notre Dame
Independent project and senior honors thesis, Fall 2020-Spring 2022

* Selected as one of top four theses in the Glynn Honors Program
* Conducted daily counts and observations of evening entries April-May, August-September
* Accessed and synthesized eBird citizen science data
* Interviewed community members to collect anecdotes that might inform future research

Undergraduate Research Fellowship, Notre Dame Institute for Advanced Study
Undergraduate research fellow, Fall 2021-Spring 2022

* Collaborated with members of an interdisciplinary faculty cohort
* Positioned as research assistant to Dr. Rebecca Stumpf
* Gathered materials to inform a grant for science infrastructure building in Uganda
* Outlined piece advocating for a better understanding of heterogenous vaginal microbiomes
* Represented NDIAS at Honors Program panels and Notre Dame admissions events
* Attended weekly seminars developing professional and research skills

TEACHING AND OUTREACH:

Graduate Student Instructor, University of Michigan

EAS 538, Fall 2022-Winter 2023

* Taught statistical analyses in R to two lab sections each semester
* Designed course materials including presentations, quizzes, and problem sets
* Graded quizzes, problem sets, exams, and weekly lab assignments

University Writing Center, University of Notre Dame
Writing Center Tutor, Fall 2019-Spring 2022

* Tutored undergraduate and graduate students in all forms of writing during nondirective, collaborative Writing Center sessions
* Empowered and encouraged students to clarify, reformulate, and argumentatively strengthen writing pieces
* Trained in Writing Center pedagogy for effective tutoring strategies
* Nominated for the position by professors and selected from competitive pool of 100+ applicants

Environmental Humanities Initiative, University of Notre Dame

Course development assistant, Spring 2022

* Developed undergraduate course integrating climate change, philosophy, and literature
* Provided feedback and suggestions for course materials, wrote course content
* Assisted in the creation of course website, including interactive syllabus

Swift Watch Outreach, University of Notre Dame
Community educator, Fall 2021

* Created two-night event to raise awareness of local Chimney Swift roost
* Engaged with community members and Notre Dame faculty, staff, and students
* Provided educational materials and talks
* Promoted event with Notre Dame Departments of Biology and Sustainability, Honors Program, and NDIAS

South Bend Writing Center, University of Notre Dame and St. Joseph County Public Libraries
Site administrator, Fall 2020-Spring 2021; Tutor Spring 2020

* Provided writing tutoring services to members of the South Bend community
* Worked with English language learners to develop writing proficiency
* Coordinated with Writing Center and public library staff
* Organized transition to virtual meetings in Fall 2020

Community Educator, Audubon Society of Portland
Swift Watch Outreach, Sanctuary Tour Leader, Summer Camp Counselor, Volunteer, 2015-2018

* Distributed ornithological information at birdwatching events with attendance of 1000+
* Led K-5 school field trips and summer camps
* Educated community members about local wildlife during outreach events

PUBLICATIONS:
Weeks BC, Klemz M, Wada H, Darling R, Dias T, O’Brien BK, **Probst CM**, Zhang M, Zimova M. (2022).Temperature, size, and developmental plasticity in birds. *Biology Letters*.

Probst CM, Ralston J, Bentley I. (2021). The effect of climate on bill morphology within and across Toxostoma thrashers. Journal of Avian Biology. <https://doi.org/10.1111/jav.02871>

Ralston J, Garman S, Hershberger O, Probst CM, Washer C, Bentley I. Manuscript in progress. SIA: a free and user-friendly program for morphometric and color measurements from digital images.

Bentley I, Kloepper L, Ralston J, Probst CM, Becker M, Weesner A. Manuscript in progress. Introducing the Scientific Image Analysis (SIA) Application for Length, Angle, Area, and Color Measurements on Digital Images.

**CONFERENCE PRESENTATIONS:**

Probst CM, Ralston J. Seasonal differences in Chimney Swift (Chaetura pelagica) roosting behaviors. Oral presentation at: Northeast Natural History Conference; 2022, April 24; Albany, NY.

Probst CM. Quantifying the importance of a local Chimney Swift (Chaetura pelagica) roost. Poster session presented at: Notre Dame Fall Undergraduate Research Fair; 2021 October 29; Notre Dame, IN.

Probst CM, Ralston J, Bentley I. The effect of climate on bill morphology in Toxostoma thrashers. Paper session presented at: Society of Integrated and Comparative Biology Annual Meeting 2021; 2021 January 3-7; online.

**Probst CM**, Ralston J. The effect of climate on bill morphology in *Toxostoma* thrashers. Poster session presented at: 2019 Joint Meeting of the Association of Field Ornithologists and the Wilson Ornithological Society; 2019 October 27-30; Cape May, NJ.

**IN THE MEDIA:**

Research featured in: Fosmoe, M. (2022, Sep 05). The Chimney Swifts of Columba Hall. *Notre Dame Magazine*. <https://magazine.nd.edu/stories/the-chimney-swifts-of-columba-hall/>

**Probst, CM**. (2022, May 20). A spectacle of nature in our backyard: Thousands of birds return to Notre Dame. *South Bend Tribune*. [https://www.southbendtribune.com/story/opinion/
columns/2022/05/20/chimney-swifts-migratory-birds-return-notre-dame-campus-spring/9765707002/](https://www.southbendtribune.com/story/opinion/columns/2022/05/20/chimney-swifts-migratory-birds-return-notre-dame-campus-spring/9765707002/)

HONORS, AWARDS, AND GRANTS:

NSF Graduate Research Fellowship Program Honorable Mention, National Science Foundation

Spring 2022

* Honorable mention in prestigious national grant competition
* Proposals assessed by intellectual merit and broader societal impact

John A. Oesterle Award in Philosophy, University of Notre Dame Department of Philosophy
Spring 2022

* Recognizes a graduating philosophy major who has excelled in the study of philosophy
* Recipient nominated by philosophy faculty

Honors Final Colloquium Invited Speaker, University of Notre Dame Glynn Honors Program

Spring 2022

* One of four honors students invited to present their research
* Nominated by thesis advisor and selected by honors program faculty on basis of graduate-level work

Glynn Honors Program, University of Notre Dame

2018-2022

* Glynn Honors students represent the top 5% of their admitted class
* Enrollment in rigorous honors courses
* Completion of honors thesis

Dean’s List, University of Notre Dame College of Science

2018-2019, spring 2020, spring 2021, fall 2021, spring 2022

* Honor given to the top 30% of students in the College of Science

Conference funding, Glynn Honors Program

Spring 2022, Fall 2019

* $1,300 travel award to present at the 2022 Northeast Natural History Conference
* $750 travel award to present at the 2019 Wilson Ornithological Society meeting

RELEVANT SKILLS:

* Coursework including ecology, aquatic ecology, ornithology, mammalogy, and graduate-level entomology
* Extensive experience in R and Excel
* Experience conducting point counts in an intensive field work setting
* Experience with mist-netting, weighing, banding, and collecting blood samples from birds
* Experience preparing skeletal and skin specimens
* Self-motivated and willing to self-teach

REFERENCES:

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| --- | --- |
|  | Joel Ralston |
| Brian C. Weeks | Undergrad research advisor |
| Ph.D. advisor | (574) 284-4671 |
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