

Emma Lather

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Career Objective: To complete a PhD in Ecology and pursue a career in original research.

Education:

University of Wisconsin – Madison	M.S.	Forestry	Expected May 2023
William & Mary	B.S.	Data Science, Environmental Science and Policy	2019

Undergraduate Honors Thesis:

Bird response to prairie wetland loss and to adjacent land-cover change differs depending on conversion type and spatial extent – examined the response of prairie wetland bird populations to wetland loss and adjacent Δ LULC using BBS point counts and adapted NLCD land cover data at large spatial and temporal scales.

Research Experience:

University of Wisconsin – Madison

2021 - present
SILVIS Lab
Mentors: Anna Pidgeon and Volker Radeloff
Graduate Research Assistant
Utilize NEXRAD data to study the importance of National Forests as stopover sites for migratory birds

William & Mary

January 2017 - May 2019
Applied Conservation and Ecological Research Laboratory
Mentor: Matthias Leu
Undergraduate Researcher, Honors Fellow
Create GIS model of land cover change in Virginia from 2001 to 2011
Conduct honors thesis research

August 2015 - December 2015
Parks Research Laboratory
Mentor: Dorothy Ibes
Undergraduate Researcher
Design and conduct pilot study on the impact of indoor greenspaces on mood

Research Interests:

Landscape Ecology – the impact of Δ LULC on species composition/ecosystem structure
Wetland Ecology – habitat factors that increase resilience of resident populations to habitat loss/degradation due to Δ LULC
GIS and Statistical Analysis – exploring new methods of analyzing ecological data and adapting existing datasets for new uses

Fellowships, Honors, and Awards

Graduated Magna Cum Laude, W&M	2019
Departmental Honors, W&M Biology	2019
Charles Center Honors Fellowship, W&M	2018

Techniques:

ESRI's ArcGIS suite	R Statistical Programming Language
Python	Java
Microsoft Excel	ENVI
QGIS	Statistical Analysis
Linear Regression	

Professional Affiliations:

Earth Science Women's Network

Oral and Poster Presentations:

Bird response to prairie wetland loss and to adjacent land-cover change differs depending on conversion type and spatial extent – oral, public Honors Thesis Defense, W&M. Williamsburg, VA, 2019.

Assessing campus stream quality using a macroinvertebrate biotic index – poster, Earth Day, W&M. Williamsburg, VA, 2019.

Response of wetland bird populations to neighboring land use land cover change – poster, Summer Research Showcase, W&M. Williamsburg, VA, 2018.

Edible and Medicinal Plants: A Long Tradition on the Camino – poster, Annual Symposium for Pilgrimage Studies, W&M. Williamsburg, VA, 2017.

Effect of Indoor Greenspaces on Mood – oral, Campus Parks Class Research Symposium, W&M. Williamsburg, VA, 2015.

Publications:

Original Journal Articles:

E Lather. Bird response to prairie wetland loss and to adjacent land-cover change differs depending on conversion type and spatial extent. In prep.