

Maya Hall

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EDUCATION

M.S. Environmental Science, American University

August 30, 2021–May 13, 2023

Thesis: *Investigating the Variability of Urban Tree Phenology Using Volunteer-Hosted Phenocams*

GPA: 3.96

B.S. Wildlife Ecology and Conservation, University of Delaware

August 28, 2014–May 26, 2018

GPA: 3.42

RELEVANT SKILLS AND CERTIFICATIONS

Skills

- *Software/Programs*: ArcGIS Pro, ENVI, QGIS, Google Earth Engine, Google Suite, Microsoft Office Suite, R, Python
- *Analysis and Data Management*: statistical analysis, data cleaning and management, data sampling and field surveying, equipment maintenance, research study design, data visualization
- *Program Management and Community Engagement*: scientific communication, technical report writing, oral presentations, grant writing, survey creation and distribution, customer service, partner relationship management, stakeholder engagement, community event planning, program facilitation

Certifications

- GIS for Climate Action Certification (Esri MOOC) — March 2025
- Spatial Data Science Certification (Esri MOOC) — October 2024
- Inclusive STEM Teaching Certification (Boston University) — November 2022

WORK AND RESEARCH EXPERIENCE

Impact Analysis Fellow

September 2023–present

NASA DEVELOP, Ames Research Center

- *Data Analysis and Research*
 - Collecting programmatic data for quantitative and qualitative analysis to measure program success
 - Mapping program impact and producing data visualizations of impact, participant skill growth, and stakeholder capacity-building using ArcGIS Pro and QGIS
 - Conducting statistical analyses in R and improving data tracking systems, as well as refining program-wide processes to ensure program goal completion
- *Project Management*
 - Leading the first DEVELOP project based in Hilo, Hawai'i and delivering novel solutions using remote sensing methods that address partner needs
 - Providing scientific, administrative, and professional support to 65+ teams
 - Advising on robust remote sensing methodologies and providing technical edits to 11+ projects that leverage multispectral, hyperspectral, and in situ data
- *Program Facilitation*
 - Assisting with Software Carpentry trainings (Google Earth Engine (GEE), Python, R, Git, and Unix)
 - Planning and hosting professional development workshops and panels that enhanced participant skill-building and networking
 - Supporting research projects across NASA's thematic application areas and hiring activities three times per year

- *Collaboration Support and Relationship Management*
 - Cultivating and maintaining relationships between program alumni, project science advisors, and project partners
 - Establishing an alumni mentorship initiative that serves to better connect existing program participants with alumni and foster long-term engagement
 - Engaging potential project partners to understand their needs and supporting new ideation, as well as building sustainable and collaborative relationships

Project Lead

June 2023–August 2023

NASA DEVELOP, Ames Research Center

- Used Google Earth Engine (GEE), ArcGIS Pro, Landsat 8 OLI, Landsat 9 OLI-2, and Sentinel-2 MSI to examine eelgrass declines in southern Oregon
- Investigated water quality parameters such as turbidity, chlorophyll-a, and sea surface temperature using an in-house GEE tool (Optical Reef and Coastal Area Assessment Tool)
- Conducted an in-depth literature review and explored the feasibility of using Random Forest modeling to identify eelgrass under cloudy conditions
- Collaborated with research and Tribal partners to determine project end goals and produce end products that serve the partners' communities
- Successfully supported a team of three early career researchers and ensured that each member not only contributed to the project, but felt ownership of the research

Graduate Research and Teaching Assistant

August 2021–May 2023

Department of Environmental Science, American University

- Researched the variability of phenology of urban trees in Washington, D.C. as captured by digital time-lapse cameras (phenocams)
- Conducted an independent literature review and proposal defense of novel research
- Used R and ArcGIS Pro to perform statistical methods like hierarchical mixed-effects modeling to investigate relationships between variables
- Completed and defended thesis research successfully
- Provided lectures on topics ranging from air pollution to biodiversity at the undergraduate-level
- Reviewed and graded all laboratory assignments and projects

Environmental Educator

March 2021–September 2022

The Alice Ferguson Foundation

- Taught over 300 3rd through 12th grade students in DC and MD
- Participated in teacher institute trainings and coordinated the education program
- Supported grant writing for the organization

Community Engagement Coordinator

December 2019–March 2021

Rock Creek Conservancy, AmeriCorps

- Coordinated volunteer program, provided executive-level summaries of restoration progress, and successfully communicated the Conservancy's mission to new and existing board members and community stakeholders
- Implemented invasive species removal and pollution mitigation efforts across Washington, D.C. and Maryland
- Revitalized data tracking and management systems through Excel and Salesforce software

Smithsonian Intern

June–November 2019

ForestGEO, Smithsonian Environmental Research Center (SERC)

- Used vegetation measurement tools (calipers, D tape, and more) to collect forest census data
- Measured and gathered data on woody stems over 1 cm within the 16 hectare plot with a team of six

- Produced novel research on bird presence and habitat type within the research forest plot

Environmental Educator

March–May 2019

Pickering Creek Audubon Center, National Audubon Society

- Created lesson plans and led students through the topics of ecology, environmental science, and conservation
- Taught 3rd grade through high school as a field and classroom educator
- Regularly collaborated with the education team to make meaningful lesson-plan and field-course decisions

Laboratory/Field Intern

August–December 2018

The Gedan Laboratory, George Washington University

- Collected, dried, and weighed vegetation samples for projects that focused on deer herbivory and salt water intrusion
- Identified wetland plants to species and processed rhizome samples for identification

Invertebrate Ecology Intern

May–August 2017

C&O Canal National and Historical Park, National Park Service

- Created and conducted field procedures for insect identification and collection
- Led vegetation sampling throughout several regions of the C&O Canal National and Historic Park
- Prepared independently-collected spider samples to be analyzed for carbon and nitrogen levels

Research Experience for Undergraduates (REU) Intern

May–August 2016

The Mann Laboratory, Georgetown University

- Studied the correlation between dorsal fin speckling and dolphin age range
- Generated data-based figures and presented a final poster to Georgetown faculty
- Performed field research along the Potomac River in Virginia that involved identifying and recording bottlenose dolphin numbers and classifying their behaviors

CONFERENCES AND PRESENTATIONS

Invited Presenter, The Earth Science GIS Collaborative Monthly Meeting (Virtual) — April 2025

Presenter, The American Geophysical Union (AGU) Annual Meeting (Washington, D.C.) — December 2024

Attendee, Society of Asian Scientists and Engineers (SASE) National Convention (Boston, MA) — October 2024

Presenter, NASA DEVELOP Closeout (Mountain View, CA) — August 2023

Presenter, The American Association of Geographers (AAG) Annual Meeting (Denver, CO) — March 2023

Presenter, Trees in the City Symposium (Virtual) — September 2022

Attendee, Smithsonian Women in Environmental Leadership Summit (Washington, D.C.) — September 2019

ADDITIONAL INFORMATION

Relevant Involvement

Panelist, NASA ROSES A.42 Disasters Solicitation Inclusion Plan Review (Virtual) — September 2024

Mentee/Participant, Clean Water Coalition Young Professionals of Color (Virtual) — February 2021–April 2022

Relevant Courses

General Ecology, Conservation: Natural Resources, Wildlife Conservation Biology, GIS: Natural Resources, Wildlife Research Techniques, General Statistics, Wildlife Management, Wildlife Policy and Administration, Wildlife Habitat Management, Plants and Human Culture, Statistical Methods in R, Introduction to GIS, Environmental Remote Sensing, Environmental GIS, Data Visualization