

Charles D. Minsavage-Davis

Doctoral Research and Teaching Assistant

<https://cdmdenvi.github.io/R4TS/home.html>

cd1231@georgetown.edu

Department of Biology
Georgetown University
501 Regents Hall, 6411 Tondorf Rd
Washington, DC 20007

Education

- 2027 **Ph.D.** Georgetown University
Advisor: Matthew Hamilton Committee: Shweta Bansal, *et al.*
- 2021 **M.S.** Ohio State University
Advisor: G. Matthew Davies Committee: Stephen Matthews, Roger Williams
- 2018 **B.S.** Ohio State University
Academic Advisor: Brian Slater Research Advisor: G. Matthew Davies

External Grants and Fellowships^{*Pending}

- 2024 **Research Award**, Washington Biologists' Field Club (\$3,000)
- 2024 **Lewis and Clark Fund***, American Philosophical Society (\$5,000)

Internal Grants and Fellowships

- 2023 **GradGov – GSAS Research Grant**, Georgetown University (\$350)
- 2019 **Patrick S. Osmer Graduate Research Fellowship**, Ohio State University (\$25,800)
- 2018 **Summer Research Opportunities Program (SROP)**, Big Ten Academic Alliance (\$4,000)

Publications^{*First or shared first author}

5. **Minsavage-Davis, C.D.***; Davies, G.M.; et al. 2024. Fuel management and traditional managed burning reduce potential landscape-scale rates of spread and fireline intensities in northern-European heathlands. **In preparation.**
4. **Minsavage-Davis, C.D.***; Davies, G.M.; Haugum, S.V.; Velle, L.G.; Vandvik, V. 2024. Generation and evaluation of fuel models for vegetation fire behavior prediction in northern-European heathlands. *iForest*, **In press.**
3. Rippel, T.M.*; **Minsavage-Davis, C.D.***; Shirey, V.; Wimp, G.M. 2023. Simple machine learning with aerial imagery reveals severe loss of a salt marsh foundation species. *Estuaries and Coasts*, 46, 1110-1122. <https://doi.org/10.1007/s12237-023-01192-z>
2. **Minsavage-Davis, C.D.***; Garthwaite, I.J.; Fisher, M.D.; Leigh, A.; Ramstack Hobbs, J.M.; Claeson, S.M.; Wimp, G.M.; LeRoy, C.J. 2023. Spatial Habitat Structure Assembles Willow-Dependent Communities across the Primary Successional Watersheds of Mount St. Helens, USA. *Forests*, 14, 322. <https://doi.org/10.3390/f14020322>
1. **Minsavage-Davis, C.D.***; Davies, G.M. 2022. Evaluating the Performance of Fire Rate of Spread Models in Northern-European *Calluna vulgaris* Heathlands. *Fire*, 5, 46. <https://doi.org/10.3390/fire5020046>

Select Research presentations^{*Presenting author}

- 2024 **Assessing the impacts of vertical forest structure on a common insect pest***, 2024 Spotlight on National Park Resources, Contributed Oral Session
- 2023 **Assessing the impacts of vertical forest structure on a common insect pest***, EntSoc Annual Meeting, Contributed Oral Session
- 2023 **How does local adaptation vary with diet breadth? A meta-analysis of local adaptation in specialist versus generalist herbivorous insects**, EntSoc Annual Meeting, Contributed Oral Session
- 2023 **Dietary parental effects in a generalist herbivore**, EntSoc Annual Meeting, Contributed Oral Session
- 2023 **Understanding the scope of diet breadth in a generalist herbivore**, EntSoc Annual Meeting, Contributed Oral Session
- 2023 **Spatial Habitat Structure Assembles Willow-Dependent Communities across the Primary Successional Watersheds of Mount St. Helens, USA***, ESA General Meeting, Contributed Oral Session

- 2023 **Clonal structure and landscape genetics of Long Island, NY populations of the salt marsh plant *Spartina patens****, ESA Mid-Atlantic Region Meeting, Poster
- 2022 **The grass is always greener: remote sensing and machine learning reveal severe and enigmatic loss of a salt marsh foundation species***, ESA General Meeting, Poster
- 2020 **Analysis of Spatial, Age, and Disturbance Patterns of a Forested Plot in Fairfield County Ohio***, City of Columbus Metro Parks, Professional Talk
- 2020 **Impact of Fuel Management Strategies on Potential Fire Behavior in the Heathlands and Moorlands of North-West Europe***, SER Midwest Chapter Meeting, Contributed Oral Session
- 2019 **A Physical and Chemical Stratigraphy of Peat Deposits in Flatiron Bog, northeast Ohio***, SER Midwest Chapter Meeting, Poster

Teaching experience

- 2024 **Evolutionary Processes Teaching Assistant**, Georgetown University
- 2022 – 23 **Experimental Design Teaching Assistant**, Georgetown University
- 2021 **Instructor of Record – General Environmental Science I**, Northern Virginia Community College
- 2021 **Lab Section Leader for Introduction to Spatial Information (GIS)**, Ohio State University
- 2020 **Field Lecturer for Biology and Identification of Woody Forest Plants**, Ohio State University

Scientific Peer Review

- 2024 **Landscape Ecology**, Springer
- 2024 **International Journal of Wildland Fire**, CSIRO
- 2023 **Life & Environment**, PeerJ

Service

- 2023 – **Student Ambassador Program**, Georgetown University
- 2022 – 23 **Contract Bargaining Team Member**, Georgetown Alliance of Graduate Employees
- 2022 **Lead Organizer for Solidarity, Education, and Activism**, Georgetown Alliance of Graduate Employees
- 2019 – 21 **Professional Mentor for Underrepresented Students**, Ohio State University

Student Research Mentoring ^{**Independent research presentations*}

- 2023 Tallulah Bowden*, Camille Gaston*, Luke Halpern, Ashley Jeong*, Carly Rauh, Philip Thomson, Sophia Trone
- 2022 Urooj Ahmed, Nouran Alim, Vanessa Amezcua, Jenna Antonacci*, Shelby Benz, Seamus Caslin*, Billie Maguire*, Cathilyn McIntosh*, Jean-Paul Nguyen, Mary Nguyen

Appointments

- 2022 – **Doctoral Research and Teaching Assistant**, Department of Biology, Georgetown University
- 2021 **Adjunct Professor**, Environmental Science, Northern Virginia Community College
- 2021 **Field and Laboratory Research Assistant**, Department of Biology, Georgetown University
- 2020 – 21 **Graduate Teaching Assistant**, School of Environment and Natural Resources, Ohio State University
- 2019 – 20 **Patrick S. Osmer Fellow**, School of Environment and Natural Resources, Ohio State University
- 2018 **SROP Research Associate**, Big Ten Academic Alliance

Awards

- 2018 **SROP Scholar**, Big Ten Academic Alliance
- 2017 **VISTA Scholar**, AmeriCorps

Training and professional development

- 2023 **Entering Mentoring Program**, Georgetown University / CIMER Project
- 2022 – 27 **Apprenticeship in Teaching Program**, Georgetown University
- 2019 **S130 and S190 Wildland Firefighter Certification**, National Wildfire Coordinating Group

Professional memberships

2022 – **Lepidopterists' Society**
2022 – **Ecological Society of America**
2017 – **Society for Ecological Restoration**

Locational experience

United States: District of Columbia, Maryland, New Jersey, Ohio, Virginia, Washington State
International: Norway, United Kingdom (England, Scotland)