Charles D. Minsavage-Davis

Doctoral Research and Teaching Assistant https://cdmdenvi.github.io/R4TS/home.html cd1231@georgetown.edu

Department of Biology Georgetown University (Univ.) 501 Regents Hall, 6411 Tondorf Rd Washington, DC 20007

Education

2027 **Ph.D.** Georgetown Univ.

Advisor: Gina Wimp Committee: Matthew Hamilton, Martha Weiss

2021 M.S. Ohio State Univ.

Advisor: G. Matt Davies Committee: Stephen Matthews, Roger Williams

2018 **B.S.** Ohio State Univ.

Academic Advisor: Brian Slater Research Advisor: G. Matt Davies

External Grants and Fellowships (TBD)

Internal Grants and Fellowships

2019 Patrick S. Osmer Graduate Research Fellowship, Ohio State Univ. (\$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. 2023. 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. 2023. Generation and evaluation of fuel models for vegetation fire behavior prediction in northern-European heathlands. *iForest*, **In review**.
- 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*. https://doi.org/10.1007/s12237-023-01192-z
- 2. **Minsavage-Davis, C.D.***; 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

Research presentations

- 2023 Spatial Habitat Structure Assembles Willow-Dependent Communities across the Primary Successional Watersheds of Mount St. Helens, USA, ESA Annual 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 Annual 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, Professional Talk
- 2019 A Physical and Chemical Stratigraphy of Peat Deposits in Flatiron Bog, northeast Ohio, SER Midwest Chapter Meeting, Poster
- 2018 Water and Soil Analysis of Recurrent Wetlands to use as Guidance for Emerging Areas at Scioto Grove Metro Park in Central Ohio, City of Columbus Metro Parks, Professional Talk
- 2018 Analysis of Hydrological Impairment at Quarry Trails Metro Park, City of Columbus Metro Parks, Professional Talk

- 2018 A Physical and Chemical Stratigraphy of Peat Deposits in Flatiron Bog, northeast Ohio, SROP Symposium, Poster and Contributed Oral Session
- 2017 **Urban Soil Restoration at a Vacant Lot in Columbus, Ohio,** City of Columbus Land Redevelopment Office, Professional Talk

Teaching experience

- 2022 23 **Experimental Design Teaching Assistant,** Georgetown Univ.
- 2021 Lab Section Leader for Introduction to Spatial Information (GIS), Ohio State Univ.
- 2020 Field Lecturer for Biology and Identification of Woody Forest Plants, Ohio State Univ.

Service

- 2022 23 Contract Bargaining Team Member, Georgetown Alliance of Graduate Employees (GAGE)
- 2022 Lead Organizer for Solidarity, Education, and Activism, GAGE
- 2019 21 **Professional Mentor for Underrepresented Students,** Ohio State Univ.

Student Mentoring

- 2023 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 Univ.
- Field and Laboratory Research Assistant, Department of Biology, Georgetown Univ.
- 2020 21 Graduate Teaching Assistant, School of Environment and Natural Resources, Ohio State Univ.
- 2019 20 Patrick S. Osmer Research Fellow, School of Environment and Natural Resources, Ohio State Univ.
- 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 Univ. / CIMER Project
- 2022 27 **Apprenticeship in Teaching Program,** Georgetown Univ.
- 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

Other extension research projects

- 2020 Burn Severity Analysis of a 5,000-acre Wildfire in Sutherland County, Scotland
- 2018 Marshland Habitat Gradients on Avian Species Richness in Western Lake Erie

Permits Acquired (TBD)

Locational experience

United States: District of Columbia, Maryland, New Jersey, Ohio, Virginia, Washington State

International: Norway, United Kingdom (England, Scotland)