Charles D. Minsavage-Davis

Doctoral Research and Teaching Assistant

Department of Biology 501 Regents Hall, 6411 Tondorf Rd Georgetown University (Univ.) Washington, DC 20007 cd1231@georgetown.edu

Appointments

- 2022 **Doctoral Research and Teaching Assistant,** Department of Biology, Georgetown Univ.
- 2021 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, Ohio State Univ.

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

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 preparation**.
- 3. Rippel, T.M.*; Minsavage-Davis, C.D.*; Shirey, V.; Wimp, G.M. 2022. Simple machine learning with aerial imagery reveals severe loss of a salt marsh foundation species. *Estuaries and Coasts*, In review. https://doi.org/xx.xxxx/xxxxxxxxxxx
- 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

Awards

- 2019 Patrick S. Osmer Fellowship, Ohio State Univ.
- 2018 SROP Scholar, Big Ten Academic Alliance
- 2017 VISTA Scholar, AmeriCorps

Research experience

AIC model set analysis laboratory methods synthesis public speaking ArcGIS laboratory analysis QGIS equipment handling linear model analysis significance testing field planning multivariate analysis technical writing intense field work public presentation R

Research presentations

- 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
- 2020 Analysis of Spatial, Age, and Disturbance Patterns of a Forested Plot in Fairfield County Ohio, City of Columbus Metro Parks
- 2020 Impact of Fuel Management Strategies on Potential Fire Behavior in the Heathlands and Moorlands of North-West Europe, SER Midwest Chapter Meeting
- 2019 A Physical and Chemical Stratigraphy of Peat Deposits in Flatiron Bog, northeast Ohio, SER Midwest Chapter Meeting
- 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
- 2018 Analysis of Hydrological Impairment at Quarry Trails Metro Park, City of Columbus Metro Parks
- 2018 A Physical and Chemical Stratigraphy of Peat Deposits in Flatiron Bog, northeast Ohio, SROP Poster Symposium
- 2017 Urban Soil Restoration at a Vacant Lot in Columbus, Ohio, City of Columbus Land Redevelopment Office

Teaching experience

- 2022 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.

Student Mentoring

- 2023 Philip Thomson
- 2022 Urooj Ahmed
- 2022 Mary Nguyen
- 2022 Nouran Alim
- 2022 Shelby Benz
- 2022 Jenna Antonacci
- 2022 Vanessa Amezcua
- 2022 Seamus Caslin
- 2022 Tyller Mensa
- 2022 Kevin Moreno
- 2022 Dawson Hillyer
- 2022 Jamyson Smith
- 2022 Cathilyn McIntosh
- 2022 Billie Maguire
- 2022 Jean-Paul Nguyen

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

Other work experience

- 2019 **R&D Chemistry Technician,** Sherwin-Williams
- 2017 18 Undergraduate Researcher, Ohio State Univ.
- 2017 **Urban Farm Associate,** AmeriCorps at Franklinton Farms

Training and professional development

- 2022 27 Apprenticeship in Teaching Program, Georgetown Univ.
- 2019 S130 and S190 Wildland Firefighter Certification, National Wildfire Coordinating Group
- 2013 Leadership Development Conference, Ohio Univ.

Professional memberships

- 2022 Lepidopterists' Society
- 2022 Ecological Society of America
- 2022 Georgetown Alliance of Graduate Employees, American Federation of Teachers
- 2017 Society for Ecological Restoration

Service

2019 – 21 **Professional Mentor for Underrepresented Students,** Ohio State Univ.

Locational experience

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

Languages

English (native), Norwegian (early proficiency), Spanish (late proficiency)