

Jacob D. J. Peters

CONTACT INFORMATION	360 Prospect St The Forest School at the Yale School of the Environment New Haven, CT 06511	jacob.peters@yale.edu website 1-276-219-1757
EDUCATION	Ph.D., Remote Sensing and Applied Forest Ecology, Yale School of the Environment, New Haven, CT, USA Dissertation Advisor: Profs. Mark Ashton and Xuhui Lee Dissertation Title: <i>Temperate liana distributions, impacts, and remote sensing</i>	May 2027
	M.S., Forest Ecology, James Madison University, Harrisonburg, VA, USA Honors: <i>Summa cum laude</i> , outstanding first year graduate student Thesis Advisor: Dr. Heather Griscom	May 2020
	B.S., Environmental Science, UVA at Wise, Wise, VA, USA Honors: <i>Magna cum laude</i> , Joseph C. Smiddy Outstanding Scientist Award	May 2018
EMPLOYMENT	Teaching Fellow, Yale University, New Haven, CT, USA Geospatial Consultant, Yale University, New Haven, CT, USA Adjunct Instructor, Ecology, James Madison University, Weyers Cave, VA, USA Adjunct Instructor, Biology, Blue Ridge Community College, Weyers Cave, VA, USA GIS Intern, Smithsonian Conservation Biology Institute, Front Royal, VA, USA Teaching Assistant, James Madison University, Harrisonburg, VA, USA Vegetation Survey Crew Lead, The Pennsylvania State University, State College, PA, USA Assistant Ecological Steward, UVA at Wise, Wise, VA, USA Park Ranger Career Path Intern, Virginia State Parks, USA	January 2024–Present August 2023–August 2025 January 2022–May 2022 August 2020–May 2022 March 2021–December 2021 August 2018–May 2020 May 2018–July 2018 November 2016–May 2018 May 2015–August 2016
RESEARCH INTERESTS	My research interests revolve around using big data, traditional field methods, and remote sensing to study a range of forest phenomena. I currently study temperate liana (woody vine) ecology, impacts, and distributions using field experiments as well as satellite and UAV remote sensing. I am testing the effect of releasing temperate forests from lianas, creating large scale species distribution models for lianas using Google Earth Engine, and quantifying liana abundance from UAV LiDAR and multispectral imagery using machine learning and artificial intelligence. Additional interests include silviculture, agroforestry, urban forestry, forest restoration, microclimates, and forest regeneration.	

HONORS, AWARDS, AND SERVICE	Graduate Student Representative , Yale School of the Environment Faculty Search Committee	2025
	Student presentation winner (2nd) , Society of American Foresters Natl. Convention	2025
	Best doctoral student presentation , Yale School of the Environment Research Day	2023
	Outstanding first-year graduate student , James Madison University	2019
	Three Minute Thesis People's Choice Award , James Madison University	2019
	Joseph C. Smiddy Outstanding Scientist Award , UVA at Wise	2018
	\$5,000 — Yale Center for Geospatial Solutions Affiliated Students Grant	2025
GRANTS AND SCHOLARSHIPS	\$20,000 — Childs Forestry Research Fund, The Forest School at the Yale School of the Environment	2024
	\$525,495 — Yale School of the Environment Doctoral Fellowship	2022–2027
	\$200,000 — Yale Center for Natural Carbon Capture, Yale School of the Environment	2022
	\$3,000 — James Madison University Biology Department Summer Support Award	2019
	\$1,000 — Norlyn L. Bodkin Botany Scholarship, James Madison University	2019
	\$48,000 — James Madison University Graduate Teaching Fellowship	2018–2020
	Teaching Fellow , Yale School of the Environment	
TEACHING EXPERIENCE	ENV 659, The Practice of Silviculture: Principles in Applied Forest Ecology	Spring 2026
	ENV 660, Forest Dynamics	Fall 2025
	Yale Geographic Information Systems Accelerator	Spring 2024, 2025, 2026
	ENV 726, Observing Earth From Space	Spring 2024, 2025
	ENV 955, Seminar in Research Analysis & Communication in Forest Ecology	Spring 2024
	Guest Lectures , Yale School of the Environment	
	ENV 704, Workshop on Remote Sensing and Photogrammetry with Drones	Fall 2023, Fall 2024
	ENV 955, Seminar in Research Analysis & Communication in Forest Ecology	Spring 2024
	Adjunct Instructor , James Madison University	
	BIO 250L, Quantitative Ecology and Evolution Lab	Spring 2022
	Adjunct Instructor , Blue Ridge Community College, VA	
	BIO 101, General Biology I	Fall 2020–Spring 2022
	Teaching Assistant , James Madison University	
	BIO 140L, Foundations of Biology Lab	Fall 2018–Spring 2020

MENTORING/
SUPERVISION**Graduate students**

Louis Cimmino, Yale School of the Environment	Fall 2025–Present
Kumba Jammeh, Yale School of the Environment	Fall 2024–Present
Nate McMullen, Yale School of the Environment	Fall 2024–2025
Jackson Cooper, Yale School of the Environment	Summer 2024–2025
Cindy Cifuentes, Yale School of the Environment	Summer 2024–2025
Yeim We, Yale School of the Environment	Summer 2024
Sangam Paudel, Yale School of the Environment	Summer 2024
Michael Freiburger, Yale School of the Environment	Fall 2022–Spring 2023

Undergraduate students

Riley Johnson, Washington College, MD	Summer 2024
Emilie Fowler, James Madison University, VA	Fall 2018–2019
Zachary Warning, SUNY ESF, NY	Summer 2018
Kaj Overturf, University of Maine, ME	Summer 2018
Rosa Kome, Clemson University, SC	Summer 2018

MEMBERSHIPS

Member, Society of American Foresters	2025–Present
Member, Yale Graduate Student Forestry Club	2023–Present
Member, Yale Center for Geospatial Solutions Affiliated Students	2024–Present
President, UVa-Wise Environmental Club	Spring 2017–2018
Darden Society member	2016–Present

COMPUTER SKILLS

Languages—Expert in R. Proficient in Javascript, Bash, Python, Git.
Markup languages: L^AT_EX, HTML, Markdown.

Software—ArcGIS, QGis, ENVI, Google Earth Engine, Agisoft Metashape, OpenDroneMap, DJI Terra, Cloud Compare, R, Adobe Photoshop and Illustrator, GIMP, Inkscape, GitHub, Microsoft Suite.

Operating systems—Windows, Mac OS, Linux.

PUBLICATIONS IN
PROGRESS

5. **Peters, J. D. J.**, Grant Connette, Xuhui Lee, Bronson W. Griscom, P. Mark Ashton (2025) *North American Liana Distributions Highlight Significant Opportunities for Improved Carbon Sequestration*. In Revision, Diversity and Distributions.
4. Nyanzu, B. A., Kumba Jammeh, David Woodbury, **Jacob D. J. Peters**, Hugh C. A. Brown, and P. Mark Ashton (2026) *Assessing the composition and structural degradation of tropical forest fragments within a cocoa-based agricultural landscape*. In Revision.
3. Jammeh, K., P. Mark Ashton, **Jacob D. J. Peters** (2026) *Assessment of Tree Growth Responses Following Liana Removal in Urban Woodlands*. In Preparation.
2. **Peters, J. D. J.**, David Woodbury (2026) *Forest fuels management effect on wildfire severity in the United States*. In Preparation.
1. Jammeh, K., Bernard A. Nyanzu, P. Mark Ashton, **Jacob D. J. Peters**, and Hugh C.A. Brown (2026) *Assessing the understory vegetation of teak (*Tectona grandis*) in relation to plantation age and ownership Ghana*. In Preparation.

PUBLICATIONS	6. Freiburger, M., Danica Doroski, Colleen M. Dunning, P. Mark Ashton, Jacob D. J. Peters (2025) <i>The 10/20/30 Planting Rule Aligns with Traditional Plant Diversity Metrics across Spatial Scales</i> , <i>Urban Forestry and Urban Greening</i> 114.	
	5. Schnitzer, Stefan A., Begüm Kaçamak, Isaac Zombo, et al., including Jacob D. J. Peters ... (2025) <i>The Search for Champion Lianas: The Largest Lianas on Six Continents.</i> , <i>Biotropica</i> 57(6).	
	4. Peters J.D.J. , J.M. Portmann, B.W. Griscom (2023) <i>Lianas (Vitis spp.) reduce growth and carbon sequestration of light-demanding tree species in a temperate forest</i> , <i>Restoration Ecology</i> 31(5), 1-10.	
	3. Peters J.D.J. , H. Griscom (2022) <i>Highlighting an overlooked hotspot for American ginseng (Panax quinquefolius L.) in Virginia</i> , <i>Natural Areas Journal</i> 42(2), 209-119.	
	2. Peters J.D.J. , S. Schoen, M. Rhodes, H. Griscom (2021) <i>Up Smith Creek without a paddle: a case study on the barriers to stream restoration assessment</i> , <i>Journal of Ecological Restoration</i> 39(3), 151-155. Alternative link to avoid paywall.	
	1. Peters J.D.J. , R. Huish, D. Taylor, B. Munson (2020) <i>Comparative Analysis of Four Maple Species for Syrup Production in South-Central Appalachia</i> , <i>Journal of Agriculture, Food Systems, and Community Development</i> 9(2), 267-276.	
INVITED TALKS	9. Yale Center for Geospatial Solutions' Website Building Workshop	December 2025
	8. Yale Environmental Training Initiative's Forest Monitoring Workshop	June 2025
	7. Smithsonian Conservation Biology Institute's Conservation Ecology Center	January 2025
	6. "Upgoer 5" at Yale School of the Environment Research Day	April 2023
	5. Smithsonian Conservation Biology Institute's Conservation Ecology Center	August 2021
	4. Research Day, University of Virginia's College at Wise	April 2018
	3. Virginia Master Naturalists, Clinch Valley Chapter	December 2017
	2. Clinch River Valley Initiative Youth Summit	March 2017
	1. Letcher Co. KY Maple School	December 2016
CONTRIBUTED TALKS (SELECTED)	13. Society of American Foresters National Convention	October 2025
	12. New England Society of American Foresters Annual Meeting	March 2025
	11. Yale Center for Geospatial Solution Affiliated Students Luncheon	October 2024
	10. Yale Center for Natural Carbon Capture Showcase	September 2024
	9. Yale Center for Natural Carbon Capture Showcase	October 2023
	8. Yale School of the Environment Research Day	April 2023
	7. Annual Conference for the Assoc. of Southeastern Biologists	April 2019
	6. Annual Conference for the Assoc. of Southeastern Biologists	March 2018
	5. Annual North American Agroforestry Conference	April 2017
	4. National Conference on Undergraduate Research	April 2017
	3. Annual Conference for the Assoc. of Southeastern Biologists	March 2017
	2. Annual Conference Society of Economic Botany	June 2016
	1. National Conference on Undergraduate Research	April 2016

REFERENCES

Dr. Mark S. Ashton, Professor of Silviculture and Director of Yale Forests, Yale School of the Environment
email: mark.ashton@yale.edu
office phone: [203-432-9835](tel:203-432-9835)

Dr. Xuhui Lee, Professor of Meteorology, Yale School of the Environment
email: xuhui.lee@yale.edu
office phone: [1-203-432-6271](tel:1-203-432-6271)

Dr. Joseph Orefice, Lecturer & Director of Forest & Agricultural Operations, Yale School of the Environment
email: joseph.orefice@yale.edu
office phone: [1-518-354-3170](tel:1-518-354-3170)

Dr. Heather Griscom, Professor of Biology & Associate Unit Head, James Madison University
email: griscohp@jmu.edu
office phone: [1-540-568-5525](tel:1-540-568-5525)