

Colleen Lee Partida

Formerly Colleen Lee Smith
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EDUCATION

Humboldt State University, Arcata, CA

- BS in Forestry: Soils, minor in Geospatial Analysis
 - Degree Honors: Magna Cum Laude
 - Overall GPA: 3.76/4.0
 - Total Semester Units: 75

Jan 2016 – May 2019

College of the Redwoods, Eureka, CA

- AA in Science Exploration
 - Degree Honors: High Honors
 - Overall GPA: 3.81 / 4.00
 - Total Semester Units: 72

Aug 2014 – Dec 2016

COURSEWORK

Humboldt State University

- General Geology | Origin & Classification of Soils | Soil Fertility | Soil Microbiology | Forest & Rangeland Soil Mgmt | Cartography | Intermediate Remote Sensing | Forest Measurements & Biometry | Forest Mensuration & Growth | Hydrology & Watershed Mgmt | Silviculture

College of the Redwoods

- Intro to Chemistry | Dendrology | General Botany | Intro to GIS | Intro to Wildland Fire | Forest Health & Protection | Differential Calculus

ALPINE Summer Institute - 2021

- Completion of the ALPINE Summer Institute program in large landscape conservation. The program is staffed by experts in the field of land conservation from the Lincoln Institute, the Harvard Forest, Highstead, and the Schoodic Institute. The program selects up to 12 students for participation annually.

EXPERIENCE

Woodwell Climate Research Center | Research Assistant II

- Falmouth, MA | Full-time

Sep 2022 – present

Woodwell Climate Research Center | Research Assistant I

- Falmouth, MA | Full-time
 - Soil carbon monitoring
 - Laboratory and field work
 - Soil spectroscopy and statistical modeling
 - Supervisor: Dr. Jonathan Sanderman

Jun 2021 – Sep 2022

TerraCorps - AmeriCorps | Land Stewardship Coordinator

- Falmouth, MA | Full-time, temporary appointment
 - Fostered relationships with land owners and community members
 - Created trail maps for properties
 - Worked to update website in HTML
 - Created and implemented training for land monitors in the Landscape land conservation software
 - Coordinated and managed volunteers
 - Supervisor: Alexandra Zollo, The 300 Committee Land Trust

Aug 2020 – Jun 2021

Humboldt State University | Field Research Technician

- Arcata, CA | Full-time, temporary appointment
 - Studied drought effects on various conifer species in the Klamath, CA ecoregion
 - Worked as part of a 5-person crew
 - Tree identification and plant species inventory
 - Backpack camped and navigated rough terrain
 - Contributed to and implemented field sampling strategy
 - Cored and measured trees
 - Advisors: Drs. Lucy Kerhoulas & Rosemary Sherriff

Aug 2019 – May 2019

North Carolina State University | Research Intern

- Raleigh, NC | Basic and Environmental Soil Science (BESST) REU Aug 2018 – May 2018
 - Collected and processed soil core and leaf litter samples
 - Pipetted and microplated samples
 - Performed chloroform fumigation extraction on soil and leaf litter samples
 - Studied the impacts of intensive forest management on soil microbial biomass and functional diversity in a loblolly pine plantation
 - Presented a poster presentation of findings at a summer research symposium
 - Advisors: Drs. Rachel Cook & Zakiya Leggett

Harvard University | Research Intern

- Petersham, MA | Harvard Forest Summer REU in Ecology Aug 2017 – May 2017
 - Studied light availability and size-abundance scaling of saplings
 - Identified, tagged, and recorded all woody species over 1cm diameter in our research plots
 - Meticulously maintained spreadsheets in Excel, and processed data using R programming language
 - Presented a PowerPoint presentation of findings at a summer research symposium
 - Advisors: Drs. Sydne Record & John Grady

PUBLICATIONS

- [1] Mitu, S. M., Smith, C., Sanderman, J., Ferguson, R. R., Shepherd, K., and Ge, Y. (2024). Evaluating consistency across multiple NeoSpectra (compact Fourier transform near infrared) spectrometers for estimating common soil properties. *Soil Science Society of America Journal*, 88(4), 1324-1339. <https://doi.org/10.1002/saj2.20678>
- [2] Jonathan Sanderman, Colleen Smith, José Lucas Safanelli, Cristine L.S. Morgan, Jason Ackerson, Nathaniel Looker, Cara Mathers, Rebecca Keating, Ashok A. Kumar, Diffuse reflectance mid-infrared spectroscopy is viable without fine milling. *Soil Security*, Volume 13, 2023, 100104, ISSN 2667-0062, <https://doi.org/10.1016/j.soisec.2023.100104>.
- [3] Madurapperuma B, Lamping J, McDermott M, Murphy B, McFarland J, Deyoung K, Smith C, MacAdam S, Monroe S, Corro L, Magstadt S, Dellysse J, Mitchell S. Factors Influencing Movement of the Manila Dunes and Its Impact on Establishing Non-Native Species. *Remote Sensing*. 2020; 12(10):1536. <https://doi.org/10.3390/rs12101536>

PRESENTATIONS

- [1] Smith, C.L., Sanderman, J., Safanelli, J.L., Shepherd, K., Ge, Y., Mannan Mitu, S., Ferguson, R. (2023, November). Application of a Handheld Near Infrared Spectrophotometer to Farm-Scale Soil Monitoring. Poster presentation at the 2023 ASA, CSSA, SSSA International Annual Meeting. St. Louis, Missouri, USA.
- [2] Sanderman, J., Smith, C.L., Shepherd, K., Ge, Y., Mannan Mitu, S., Ferguson, R. (2022, August). Development of an open soil spectral estimation service with a handheld near infrared spectrophotometer. Poster presentation at the 2022 World Congress of Soil Science. Glasgow, Scotland, UK.
- [3] Smith, C.L., Hinojosa, E., Madrigal, J. (2019, May). The Culturing and Identification of Fungal Colonies Present in Bear Damage Wounds to Coast Redwood (*Sequoia sempervirens*) Trees. Oral presentation of capstone research at Humboldt State University. Arcata, CA.
- [4] Smith, C.L., Cook, R., Leggett, Z., Gardner, T. (2018, October). An Evaluation of Intensive Management Effects on Soil Microbial Biomass and Functional Diversity. Poster presentation at the Society of American Foresters National convention. Portland, OR.
- [5] Smith, C.L., Cook, R., Leggett, Z., Gardner, T. (2018, September). An Evaluation of Intensive Management Effects on Soil Microbial Biomass and Functional Diversity. Poster presentation at the INRSEP/CNRS Research Symposium. Arcata, CA.
- [6] Lamping, J., Murphy, B., McFarland, J., Porteous, Z., Smith, C.L., Monroe, S., ... Fleming, S. (2018, September). UAV Photogrammetry for Surveying Dune Habitats: A Review of Research Needs of the Friends of the Dunes Land Trust. Poster presentation at the INRSEP/CNRS Research Symposium. Arcata, CA.
- [7] Smith, C.L., Cook, R., Leggett, Z., Gardner, T. (2018, July). An Evaluation of Intensive Management Effects on Soil Microbial Biomass and Functional Diversity. Poster presentation at the 17th Annual NC State University Summer Undergraduate Research & Creativity Symposium. Raleigh, NC.

- [8] Smith, C.L.(2017, August). Light availability and size-abundance scaling of saplings at Harvard Forest. Oral presentation at the 25th Annual Harvard Forest Student Symposium. Petersham, MA.

AWARDS	▪ Dean’s List, Fall 2017 through Spring 2019, Humboldt State University For attaining a semester GPA of at least 3.50.	2017 – 2019	
	▪ Presidential Scholar, Spring 2017, Humboldt State University For attaining a semester GPA of at least 3.85.	2017	
	▪ President’s Honors, Fall 2015 through Fall 2016, College of the Redwoods	2015 – 2016	
	▪ Vice President’s Honors, Spring 2015, College of the Redwoods	2015	
SCHOLARSHIPS	▪ CAMBIO Scholarship, Humboldt State University \$5,000	2018	
	▪ Dillard Bailey Undergraduate Scholarship, Humboldt State University \$500	2018	
	▪ NC-WIT Scholarship, North Coast Women in Timber \$1,000 each year	2017 & 2018	
	▪ Robert Cary Forestry Scholarship, Humboldt State University \$500	2017	
	▪ Emanuel Fritz Memorial Scholarship, Redwood Region Logging Conference \$2,500	2017	
	▪ Holmgren Memorial Scholarship, Redwood Region Logging Conference \$1,000	2016	
SKILLS	Data Analysis		
	▪ R ArcGIS Excel Google Cloud Computing		
	Field		
	▪ Extensive field experience Soil and leaf litter sampling Handheld NIR Spectral Scanner Tree Identification Laser Rangefinder/Hypsometer Total Station Clinometer Increment Borer GPS		
	Laboratory		
	▪ Significant laboratory experience NIR & MIR Spectroscopy Soil processing Elemental Analyzer Hydrofluoric Acid demineralization of soils Pipetting DNA extraction PCR Fungal Culture		
	General		
	▪ Organized Quick Learner Enthusiastic Word \LaTeX Adobe Illustrator Google Suite		
	PROFESSIONAL AFFILIATIONS	The 300 Committee Land Trust, Falmouth, MA	
		▪ Stewardship Committee Member	2020– 2023
North Coast Chapter of California Women in Timber, Humboldt County, CA			
▪ Member		2016 – 2020	
▪ Vice President		2017 – 2018	
▪ Secretary		2016 – 2017	
CAMPUS ACTIVITIES	Society of American Foresters,		
	▪ Student Member	2018 – 2019	
	Forestry Club, Humboldt State University		
▪ Member	2017 – 2019		
CAMPUS ACTIVITIES	Marine Debris Program, Humboldt State University		
	▪ Member	2017 – 2019	
	Range and Soils Club, Humboldt State University		
▪ Member	2017 – 2019		