Lorraina S. Rojas

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Education

University of New Mexico, *Albuquerque, NM* Aug 2023 –Present
PhD Student | Earth Systems Ecology Lab | Dept of Biology
Concentration: Terrestrial Ecology | GPA: 4.00
Anticipated graduation date: May 2028

University of Pennsylvania, *Philadelphia, PA* Aug 2018–May 2022
Bachelor of Arts, College of Arts and Sciences
Major: Earth Science, *honors* | *Minor:* Biology | GPA: 3.28
Undergraduate thesis: Alluvial coal silt and heavy metal pollution of Schuylkill river floodplain

Appointments

Research Assistant *Earth Systems Ecology Lab* | UNM Spring 2024—Present
- Agisoft Metashape image processing of remotely sensed visual and thermal imagery
- Repair and maintenance of 400 microclimate data loggers (casing, circuitry, sensors)
- Lab website: www.hurteaulab.org

Teaching Assistant *Intro Biology Lab 1140L* | UNM Fall 2023
- Taught 70+ students introductory lab procedures and biology concepts for three 3 hour sessions and two 1 hour study periods per week
- Independently created review materials and accommodated working students with extra study hours

Biological Technician (Wildlife) GS-0404-5 Feb 2023–Nov 2023
Santa Fe National Forest, USFS | Jemez Springs, NM
- Surveyed for Mexican Spotted Owl, Jemez Mountains salamander, Northern Leopard frog and conducted bat acoustic surveys
- Managed spatial data to map project work across platforms, including ArcGIS, ArcPro, and Avenza Maps Pro

Research assistant
Plante Lab | University of Pennsylvania, PA Aug 2019 – May 2020
- Operated lab machinery to prepare soil samples and run HACH nutrient analysis to support post-doctorate researchers
- Lab website: https://web.sas.upenn.edu/aplante/

Sustainability Intern
Penn Sustainability | University of Pennsylvania, PA Aug 2021– May 2022
- Project assistant for Penn Sustainability to prevent bird-window collisions through monitoring (specimen collection), assessment (ArcGIS products), and outreach (table sessions and workshops)

Publications

Hurteau, M. D., Baker, R., Gonterman K., Granath, A., Lopez-Binder J., Taylor, M. D., **Rojas, L. S.**, Rotche, L., Graves, A., Goodwin, M. J. , Jones, G., & Marsh C. (2025). Changing climate and disturbance effects on southwestern US forests. *Forest Ecology and Management, vol. 575*. https://doi.org/10.1016/j.foreco.2024.122388

Presentations

Rojas, L. S., Hurteau, M. D., & Marsh, C. *Soil texture influences time to mortality for southwestern US Pinus ponderosa seedlings*. 4th annual meeting of the Laboratoire International de Recherche sur les Forêts Froides. Ifrane, Morocco. October 22-25, 2024.

Rojas, L. S. *Coal Mining Legacy: Bioavailable Heavy Metals in Schuylkill Soil.* Department of Earth and Environmental Sciences Annual Senior Thesis Presentation, Philadelphia, PA. May 2022.

Awards

Hayden Summer Scholars, 2021. Summer fellowship for independent research through the University of Pennsylvania Center for Undergraduate Research & Fellowships.

Outreach

Envirothon Assistant Coach Hot Springs High School, Truth or Consequences, NM | Present

- Mentored students from Hot Springs High School in environmental topic groups (forestry, soil, wildlife, aquatic ecology) for their NM State Envirothon competition in April (1st overall) and the NCF Envirothon National competition in July (9th overall)

Soil Instructor *National Hispanic Environmental Counsel: New Mexico STEM Institute*
Albuquerque & Pecos, NM | November 5-14, 2022

- Created lectures and field survey procedure to teach introductory soil science to visiting college students from around the US including Puerto Rico
- Taught soil field sampling in 3 different riparian and upland ecosystems in both English and Spanish during 9-day STEM institute
- Mentored underrepresented students in navigating academic life and career opportunities