

# Lydia Bailey

Contact: LydiaNBailey@gmail.com, +1 (205) 835-0685

Find me online at: LydiaBaileyEcology@weebly.com

---

**Research Focus:** Applied ecology, soil organisms, arid land restoration

## Education

---

### Northern Arizona University

PhD Student, Forestry

Flagstaff, AZ

2017-Present

Dissertation: *The use of biological soil organisms in arid land restoration*

Dissertation Committee: Drs. **Matthew Bowker**, **Anita Antoninka**, Margaret Moore, Seth Munson

### Whitman College

BA, Environmental Studies-Biology

Walla Walla, WA

2010-2014

Thesis: *Limited utility of functional trait data in post-restoration community dynamics*

## Mentorship & Outreach

---

### Louis Stokes Alliance for Minority Participation

Graduate Student Mentor, Spring 2018-Present

### Hooper Undergraduate Research Award, Mentor

**Casey Hensen.** *Advancing cultivation of the endangered Las Vegas Bearpoppy (*Arctomecon californica*) using biological soil crusts.* 2019-2020.

**Landon Sawaya.** *Restoration of Endemic Gypsophiles in the Mojave Desert using Soil Communities and Nurse Plants.* 2018-2019

### Research Experience for Undergraduates, Mentor

**Jenni Hedin.** *Bulk Culturing Biocrusts for the Pre-Restoration of Utility- Scale Solar Arrays in the Mojave Desert.* Summer 2018

### Doris Duke Conservation Scholars Program, Northern Arizona University

Invited Speaker, 2018

## Media Features

*Monuments Exhibition* - Nick Adams, Checko Salgado. Sahara West Library Las Vegas, NV: Friends of Gold Butte, Friends of Basin & Range. 2018

*“Gold Butte: Nevada’s National Monument stuck between a rock and a hard place”* - Nick Adams. Etched Magazine. 2018

## **Professional Presentations**

---

**Bailey, L.**, Antoninka, A., Bowker, M.A. 2020. *Biocrust based restoration in Washington Sagebrush Communities*. Washington Native Plant Society, virtual

Hensen, C., Antoninka, A, **Bailey, L.** 2020. *Exploring the novel use of soil biota to germinate the Las Vegas bear poppy*. Northern Arizona University Undergraduate Research Symposium, Flagstaff, AZ

**Bailey, L.**, Antoninka, A., Bowker, M.A. 2019. *Effects of herbicide on Mojave Desert biological soil crusts*. 15th Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region, Flagstaff, AZ

**Bailey, L.**, Antoninka, A., Bowker, M.A. 2019. *Effects of herbicide on Mojave Desert biological soil crusts*. 4<sup>th</sup> International Workshop of Biocrusts in North Stradbroke Island, Australia

**Bailey, L.**, Antoninka, A., Bowker, M.A. 2019. *Advances in cultivating the endangered Las Vegas Bearpoppy (*Arctomecon californica*)*. Botany Society of America in Tucson, AZ

Sawaya, L., Antoninka, A., **Bailey, L.**, Bowker, MA. 2019. *Restoration of endemic gypsophiles in the Mojave Desert using soil communities and nurse plants*. Botany, Tucson, AZ

Bowker, M.A., Antoninka, A., Doherty, K. Durham, R., Tucker, C., **Bailey, L.**, Grover, H., Young, K., Reed, S. 2018. *Restoring biocrusts: a general strategy and an overview of emerging results*. Society of Ecological Restoration-European Conference, Reykjavik, Iceland.

**Bailey, L.**, Antoninka, A., Bowker, M.A. 2018. *Using soil organisms in Mojave Desert Restoration*. Society for Ecological Restoration, Southwest Chapter Conference, Flagstaff, AZ

**Bailey, L.**, Antoninka, A., Bowker, M.A. 2018. *Using soil organisms in Mojave Desert restoration*, Arizona-Nevada Academy of Science, Las Vegas, NV

## **Scholarships & Awards**

---

2019 - Wally Covington Student Travel Award, Northern Arizona University, \$750

2013 - Art Rempel Scholarship for Natural History, Blue Mountain Audubon Society,  
\$1000

## **Work History**

---

**Idaho Research Coordinator** Great Basin Institute: Ecological Monitoring Program  
Idaho Falls, ID | March-August 2017

**Crew Lead** Great Basin Institute: Assessment Inventory and Monitoring Program  
Vale, OR | April-October 2016  
Susanville, CA | April -October 2015

**Field Research Assistant** Joshua Tree pollination and genetics. PI: Dr. Chris Smith  
Tikaboo Valley, NV: March 2016 & March-April 2015

**Biological Science Technician** National Park Service  
Rocky Mountain National Park, CO | May-September 2014

**Resource Management Technician** Ash Meadows National Wildlife Refuge  
Pahrump, NV | June-August 2013

**Field Biology Intern** The Nature Conservancy, Zumwalt Prairie  
Enterprise, OR | June-August 2012

**Greenhouse Manager** Whitman College  
Walla Walla, WA | August 2013-May 2014