

Alexandra Lalor (she/her)

## Curriculum Vitae

2221 East 6<sup>th</sup> Street, Tucson, AZ 85719, USA

allielalor@gmail.com | (408) 220-5214

### Research Interests

Fire ecology, fire history, dendroecology

### Education

|                        |   |
|------------------------|---|
| January 2021 – Present | <b>University of Arizona</b> , Tucson, GPA 4.0<br>MS Natural Resources Studies<br>Thesis: <i>Hotter Droughts: Seedling Responses to Heatwaves and Drought in Post-Fire Recovery</i>                       |
| August 2013 – May 2017 | <b>University of California</b> , Berkeley, GPA 3.8<br>B.S. Honors Environmental Science Major<br>Thesis: <i>Multi-Scale Analysis of Grazing Impacts on Biodiversity at Point Reyes National Seashore</i> |

### Test Scores

#### Graduate Record Examinations (GRE)

- Verbal: 163
- Quantitative: 159
- Analytical Writing: 4.5

### Research Experience

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|-------------------------|---|
| January 2021 – Present  | <b>Hotter Droughts: Seedling Responses to Heatwaves and Drought in Post-Fire Recovery</b><br><i>Master's Thesis</i> <ul style="list-style-type: none"><li>• Experimental study to test tree seedling vulnerability to combined effects of droughts and heatwaves</li></ul>  |
| January 2016 – May 2017 | <b>Multi-Scale Analysis of Grazing Impacts on Biodiversity at Point Reyes National Seashore</b><br><i>Senior Thesis</i> <ul style="list-style-type: none"><li>• Identifying plant species richness using transects and plot sampling methods</li><li>• Analysis of vegetation change over time using Geographic Information Systems</li><li>• Extensive historical research of ranching management techniques</li></ul> |

### Teaching Experience

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| January 2022 – May 2022 | <b>RNR321 Ecological Surveys and Sampling</b> , University of Arizona<br><i>Teaching Assistant, 10 hours/week</i> |
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## Professional Experience

- May 2021 – November 2021      **Grand Canyon National Park**, North Rim AZ  
*Assistant Lead Fire Effects Monitor, GS-6*
- Monitoring the effectiveness of prescribed fire treatments using long-term forest plots
  - Collecting forest data such as plot photos, tree growth, shrub abundance, plant species composition, fuel loading, and seedling counts
  - Plant identification of grasses, forbs, trees, and shrubs
  - Wildland firefighting and prescribed burn operations
  - Crew leadership and program management
- May 2020 – November 2020      **Grand Canyon National Park**, North Rim AZ  
*Fire Effects Monitor, GS-5*
- Monitoring the effectiveness of prescribed fire treatments using long-term forest plots
  - Collecting forest data such as plot photos, tree growth, shrub abundance, plant species composition, fuel loading, and seedling counts
  - Plant identification of grasses, forbs, trees, and shrubs
  - Wildland firefighting and prescribed burn operations
- May 2019 – October 2019      **North Cascades National Park**, Marblemount WA  
*Fire Effects Monitor and Fire Dispatcher, GS-3*
- Collecting forest data such as plot photos, tree growth, shrub abundance, plant species composition, fuel loading, and seedling counts
  - Curation of tree cores and verifying fire scars using dendrochronology
  - Wildland firefighting and pile burn experience
  - Communications center radio dispatching
- September 2018 – December 2018      **Luquillo Long-Term Ecological Research Program**, El Yunque Puerto Rico  
*Tropical Field Research Intern*
- Measuring forest characteristics such as canopy photos, fern surveys, litter processing, and coarse wood debris surveys
- May 2017 – May 2018      **US Geological Survey**, Santa Fe NM  
*Dendrochronology Research Intern*
- Reconstructing fire history in New Mexico using dendrochronology, fire scars, tree growth response, and cross dating methods to date fire events over the past 900 years

## Professional Involvements

- August 2021 – May 2022      **University Climate Change Coalition (UC3)**, Tucson AZ  
*Fellow*
- Selected fellow of UC3, tasked with working with the Sky Island Alliance to review ongoing threats to springs and waterways across Arizona borderlands regions
- March 2020 – May 2021      **Student Environmental Resource Center**, Berkeley CA  
*Alumni Committee Member*
- Selected member of the SERC Alumni Committee, tasked with increasing avenues for alumni to engage with SERC programs

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| Jan 2019 –<br>May 2021                 | <b><u>Student Environmental Resource Center</u></b> , Berkeley CA<br><i>Mentor</i> <ul style="list-style-type: none"> <li>• Mentor of undergraduate Berkeley students</li> <li>• <b>Past mentees:</b> Emma Centeno (Fall 2020 – Spring 2021), Mykaela Barnes (Fall 2019 – Spring 2020), Peyton White (Fall 2019 - Spring 2020), Skye Michel (Spring 2019)</li> </ul> |
| January –<br>April '16, '17, '18, '19  | <b><u>Zero Waste Youth USA</u></b> , San Francisco CA<br><i>Committee Member</i> <ul style="list-style-type: none"> <li>• Recruiting speakers and volunteers for the Zero Waste Youth Convergence as a part of the planning committee</li> <li>• Selected participant and speaker for international Zero Waste Youth meeting in Brazil, October 2017</li> </ul>      |
| February –<br>April '14, '15, '16, '17 | <b><u>Earth Week Planning Committee</u></b> , Berkeley CA<br><i>Committee Member</i> <ul style="list-style-type: none"> <li>• Organizing campus-wide events during Earth Week</li> <li>• Coordinating with sustainability and environmentally related groups on campus</li> </ul>  |
| September 2013 –<br>May 2017           | <b><u>Berkeley Student Food Collective</u></b> , Berkeley CA<br><i>Cashier, storefront worker, food prep worker, and committee member</i> <ul style="list-style-type: none"> <li>• Basic store management at a food co-op, including cashiering, restocking products, opening and closing the storefront, cleaning, and organizing shifts</li> </ul>                 |

## Volunteer Experience

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|-------------------------------|--|
| November 2020 –<br>March 2021 | <b><u>Walnut Canyon National Monument</u></b> , Flagstaff AZ<br><i>Natural Resources Volunteer, 32 hours/week</i> <ul style="list-style-type: none"> <li>• Assisting with Walnut Canyon's large tree protection plan to document large-diameter ponderosa pines for climate change comparison</li> </ul> |
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## Grants

|                             |   |          |
|-----------------------------|---|----------|
| April 2022                  | <b><u>Graduate Professional Student Council Travel Grant</u></b> , University of Arizona<br><ul style="list-style-type: none"> <li>• Grant to attend the 2022 North American Dendroecological Conference</li> </ul> | \$2,000  |
| January 2016 –<br>May 2017  | <b><u>Expanding Zero Waste in the Residence Halls</u></b> , Berkeley CA<br><ul style="list-style-type: none"> <li>• Grant to furnish the residence halls with compost and recycling bins</li> </ul>                 | \$12,000 |
| January 2015 –<br>June 2016 | <b><u>Bulk Bins at Cal Dining</u></b> , Berkeley CA<br><ul style="list-style-type: none"> <li>• Grant to establish bulk bins in retail locations across UC Berkeley</li> </ul>                                      | \$6,000  |

## Scholarships

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|-----------|---|---------|
| 2022      | <b><u>Roots for Resilience Scholarship</u></b> , University of Arizona      | \$7,000 |
| 2021, '22 | <b><u>Natural Resources Tuition Scholarship</u></b> , University of Arizona | \$5,621 |
| 2022      | <b><u>Alma L. Wilson Memorial Scholarship</u></b> , University of Arizona   | \$1,162 |
| 2021      | <b><u>Clifford W. Carstens Scholarship</u></b> , University of Arizona      | \$1,020 |

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| 2021 | <b>Hope I. Jones Scholarship</b> , University of Arizona | \$812 |
| 2021 | <b>Joe K. Fannin Scholarship</b> , University of Arizona | \$442 |

### Honors and Awards

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|---------------------|---|
| 2020, '21           | <b>Outstanding Performance Award</b> , Grand Canyon National Park               |
| May 2017            | <b>Honors B.S. in Environmental Science</b> , University of California Berkeley |
| May 2016            | <b>Spot Award</b> , Cal Dining Sustainability Team, Berkeley CA                 |
| 2014, '15, '16, '17 | <b>Dean's Honors</b> , University of California Berkeley                        |

### Speaker Invitations

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| April 2021 | <b>SERC Springside Alumni Chat</b><br>SERC Virtual Earth Week event, zoom presentation, college students<br>University of California, Berkeley CA. April 22 2021. |
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### Conferences Attended

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| November 2021 | <b>9th International Fire Ecology and Management Congress</b> , Tucson, AZ<br>Association for Fire Ecology |
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### Workshops and Presentations

|               |   |
|---------------|---|
| April 2021    | <b>Climate Resilience and Adaptation Lightning Talks</b> , Tucson, AZ<br><i>Hotter Droughts: Seedling Responses to Heatwaves and Drought in Post-Fire Recovery</i>                              |
| March 2018    | <b>Zero Waste Youth USA convergence</b> , San Francisco, CA<br><i>Lessons Learned from Zero Waste Youth Brazil</i>  |
| March 2018    | <b>Northern California Recycling Association Recycling Update conference</b> , San Francisco, CA<br><i>Lessons Learned from Zero Waste Youth Brazil</i>   |
| October 2017  | <b>Zero Waste Youth International convergence</b> , Brazil<br><i>Zero Waste Youth USA – Florianópolis, Brazil</i><br><i>Food Waste at University of California Berkeley – Joinville, Brazil</i> |
| May 2017      | <b>Honors Environmental Science Thesis Presentation and Poster Session</b> , Berkeley, CA<br><i>Multi-Scale Analysis of Grazing Impacts on Biodiversity at Point Reyes National Seashore</i>    |
| November 2016 | <b>Powershift convergence</b> , Berkeley, CA<br><i>Deconstructing Zero Waste Privilege</i>  |
| March 2016    | <b>Zero Waste Youth USA convergence</b> , San Francisco, CA<br><i>Food Waste Reduction at Cal Dining</i>  |

### Languages

Intermediate Spanish

## Red Card Qualifications

FFT2 (Qualified) Wildland Firefighter – National Wildfire Coordinating Group (NWCG)  
REAF (Qualified) Fireline Resource Advisor – NWCG  
FAL3 (Trainee) Basic Faller – NWCG  
FEMO (Trainee) Fire Effects Monitor – NWCG  
SRT2 (Trainee) Search and Rescue Type 2 – NWCG  
HECM (Trainee) Helicopter Crew Member – NWCG

## Skills

R programming  
Wood working with heavy power tools (chainsaws, bandsaws, hand saws, belt sanders, etc.)  
Clean driving record, experienced in automatic and manual drive

## References

### **Dr. Donald Falk**

Professor  
520-626-7201  
University of Arizona, ENR2 Building N-224, Tucson, AZ 85721  
dafalk@arizona.edu  
Faculty Advisor for graduate position

### **Dr. David Breshears**

Regents Professor  
520-621-7259  
University of Arizona, ENR2 Building N-227, Tucson, AZ 85721  
daveb@arizona.edu  
Faculty Advisor for graduate position

### **Li Brannfors**

Lead Fire Effects Monitor  
928-606-5439 (cell); 928-638-7063 (work)  
1 Admin Loop, North Rim, AZ 86052  
li\_brannfors@nps.gov  
Supervisor for Grand Canyon fire effects position

### **Matthew Engbring**

Fire Ecologist  
928-607-4335 (cell); 928-707-0304 (work)  
1 Admin Loop, North Rim, AZ 86052  
matthew\_engbring@nps.gov  
Supervisor for Grand Canyon fire effects position