# **EMILY M. BOOTH**

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# **EDUCATION**

| 2011-present | Ph.D. Plant Biology, University of Texas at Austin, Austin, TX.                 |
|--------------|---|
|              | Advisor: Dr. Norma Fowler.  |
| 2011         | M.S. Plant Biology and Conservation, Northwestern University, Evanston, IL, and |
|              | Chicago Botanic Garden, Glencoe, IL. Advisor: Dr. Krissa Skogen.                |
| 2005         | B.A. Psychology, Oberlin College, Oberlin, OH.                                  |

#### **HONORS AND AWARDS**

| 2012      | Phi Kappa Phi  |
|-----------|--|
| 2011      | Integrative Biology Recruitment Fellowship: \$27,000 + Tuition               |
| 2009      | Northwestern University and Chicago Botanic Garden Shaw Fellowship: \$25,000 |
| 2007      | Two AmeriCorps Education Awards: <i>Total</i> , \$3,613                      |
| 2001-2005 | Oberlin College Merit-Based Scholarship: \$24,000/yr                         |

### **GRANT SUPPORT**

| 2013-2015 | Texas Parks and Wildlife Department. 'Factors determining plant community recovery trajectories in Bastrop State Park, Texas' (PI: N. L. Fowler): |
|-----------|---|
|           | Total, \$75,669   |
| 2013      | Plant Biology Graduate Student Research Support: \$843  |
| 2013      | Plant Biology Graduate Student Travel Support: \$800  |
| 2012      | Association for Fire Ecology Travel, Research, and Educational Experience (TREE)  |
|           | Grant: \$400  |
| 2012      | Native Plant Society of Texas, Ann Miller Gonzalez Graduate Research Grant.   |
|           | 'Effects of wildfire severity and post-wildfire management on tree  |
|           | regeneration in the Lost Pines region of Texas': \$2,000  |
| 2010      | Plant Biology and Conservation Travel Grant: \$460  |

### **INVITED PRESENTATIONS**

- Booth, E. M. and N. L. Fowler. **2013**. Post-wildfire plant community regeneration in the Lost Pines. Oral presentation, Native Plant Society of Texas, Williamson County Chapter, Georgetown, TX.
- Booth, E. M., and N. L. Fowler. **2012.** Effects of pre-wildfire prescribed burns, wildfire intensity, and post-wildfire management on plant regeneration in the Lost Pines of Texas. Published abstract and oral presentation, 'Fire Trek' Special Session, 5<sup>th</sup> International Fire Congress. Portland, OR.
- Booth, E. M., and N. L. Fowler. **2012**. Effects of wildfire severity and post-wildfire management on tree regeneration in the Lost Pines region of Texas. Poster presentation, Native Plant Society of Texas Annual Symposium, Kerrville, TX.

## **CONTRIBUTED PRESENTATIONS**

Booth, E. M. and N. L. Fowler. **2014**. Understanding post-wildfire vegetation trajectories in pine-oak woodlands. Poster presentation, Large Wildland Fires Conference, Missoula, MT. Booth, E. M., N. L. Fowler, and E. Keith. **2013**. Effects of management actions and wildfire

- severity on post-wildfire vegetation recovery in the Lost Pines of Texas. Oral presentation, Ecological Society of America Annual Meeting, Minneapolis, MN.
- Booth, E. M., and K. Skogen. **2011**. Potential effects of Climate Change on *Penstemon palmeri* (Plantaginaceae) in Zion National Park, Utah, U.S.A. Poster presentation, Ecological Society of America Annual Meeting, Austin, TX.

## **TEACHING**

| 2014-2015   | Invited guest lecturer, Field Seminar in Environmental Science and Sustainability.  Lectured undergraduates on fire ecology; helped organize and lead trips to recently burned sites to teach students field methods and apply knowledge from lecture. |
|-------------|--|
| 2014        | Teaching assistantship, Introduction to Biology I. First year biology course for biology majors introducing cellular and molecular biology. University of Texas at Austin, Austin, TX. Led discussion sections, graded exams and assignments.          |
| 2013        | Teaching assistantship, Introduction to Biology II. First year biology course for biology majors covering genetics, evolution, physiology, and ecology. University of Texas at Austin, Austin, TX. Led discussion sections, graded exams.              |
| 2012        | Teaching assistantship, Ecology. Upper-division course for biology majors. Helped develop exercises, led discussion sections, graded exams and assignments. University of Texas at Austin, Austin, TX.   |
| 2010 - 2011 | Teaching assistantship, Ethnobotany. Lower-division course for biology non-majors.   |

## RESEARCH ASSISTANTSHIPS AND INTERNSHIPS

| 2013-2015 | Graduate research assistantship. In support of dissertation research. University of  |
|-----------|--|
|           | Texas at Austin, Austin, TX, and Bastrop State Park, Bastrop, TX.                    |
| 2010-2011 | Graduate research assistantship. Pollinator observations, vegetation surveys, insect |
|           | collections, data entry and validation. Chicago Botanic Garden, Glencoe, IL.         |
| 2007      | Student Conservation Association, Fire Effects Monitoring and Inventory Protocol     |
|           | (FIREMON) Crew Member. Extensive vegetation and fuel surveys.                        |
|           | Durango, CO.   |
| 2007      | Student Conservation Association, Natural Resources Intern. Tree surveys and         |
|           | mapping, invasive species control, volunteer coordination. Mammoth Cave              |
|           | National Park, KY.   |

Proctored and graded exams. Northwestern University, Evanston, IL.

## **SERVICE AND OUTREACH**

| 2013         | Co-organizer of Science Under the Stars, a public lecture series. Austin, TX.    |
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| 2013         | Supervised a Research Experience for Undergraduates (REU) intern. Taught         |
|              | experimental design, field work skills, basic data analyses, and poster          |
|              | design. Austin, TX.  |
| 2012-present | Co-Founder and President, Central Texas Student Association for Fire Ecology     |
|              | (SAFE). Organize journal clubs, field trips, and public outreach events;         |
|              | connect fire ecology students throughout Central Texas. Austin, TX.              |
| 2012         | Member, Master Planting Science Team, an online program that connects scientists |
|              | with grade school students to develop class experiments.                         |
|              | PlantingScience.org  |
|              |  |

## **MEDIA COVERAGE**

| 2014 | Interview for the University of Texas at Austin College of Natural Sciences, |
|------|--|
|      | available here: https://cns.utexas.edu/news/portrait-of-a-fire-ecologist     |
| 2014 | Interviewed by Amanda Perofsky for They Blinded Me With Science on KVRX,     |
|      | University of Texas at Austin student radio                                  |

## PROFESSIONAL SKILLS AND CERTIFICATIONS

Software and computer languages: SAS, R, Python, SigmaPlot, ArcGIS, ERDAS IMAGINE, GPS, FFI, HTML/CSS, some Unix

Field skills: plant identification and collection, insect collection, experimental design, vegetation and fuel survey methods (including FIREMON)

NWCG certifications: RT-130 (2014), S-130, S-190, L-180, I-100 Languages: English (fluent), French (fluent), Spanish (beginner)

## PROFESSIONAL AFFILIATIONS

Ecological Society of America, Association for Fire Ecology, Botanical Society of America, International Association for Vegetation Science