

EMILY M. BOOTH

Department of Integrative Biology
University of Texas at Austin
1 University Station, Mail Code A6720
Austin, TX 78712

embooth@utexas.edu
phone: 512-471-4546

EDUCATION

- 2011-present Ph.D. Plant Biology, University of Texas at Austin, Austin, TX.
Advisor: Dr. Norma Fowler. Expected graduation date, May 2017.
- 2015 Graduate Portfolio Program in Applied Statistical Modeling, Department of Statistics and Data Sciences, University of Texas at Austin, Austin, TX.
- 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

- 2015 Student Employee Excellence Certification, University of Texas at Austin
- 2012 Phi Kappa Phi
- 2011 Integrative Biology Recruitment Fellowship, University of Texas at Austin: \$27,000 + Tuition
- 2009 Shaw Fellowship, Northwestern University and Chicago Botanic Garden: \$25,000
- 2007 Two AmeriCorps Education Awards: *Total*, \$3,613
- 2001-2005 Oberlin College Merit-Based Scholarship: \$24,000/yr

GRANT SUPPORT

- 2013-2015 Texas Parks and Wildlife Department. 'Factors determining post-wildfire plant community recovery trajectories in Bastrop State Park, Texas', PI: Dr. Norma Fowler. *Total*: \$93,786
- 2013 University of Texas at Austin Plant Biology Graduate Student Research Support: \$843
- 2013 University of Texas at Austin 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 Northwestern University Plant Biology and Conservation Travel Grant: \$460

PUBLICATIONS

- Booth, E. M., and Fowler, N. L. **2015**. Understanding post-wildfire vegetation trajectories in pine-oak woodlands. In: R. E. Keane, Jolly, M., Parsons, R., Riley, K. 2015. Proceedings of the large wildland fires conference, May 19-23, 2014, Missoula, MT. Proc. RMRS-P-73. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 345p.
- Booth, E. M. **2013**. Post-wildfire plant regeneration in Bastrop State Park. Native Plant Society of Texas News. 31(1):12.

INVITED PRESENTATIONS

- Booth, E. M., and N. L. Fowler. **2015**. The function of fire in pine-oak woodlands. *Oral presentation*, Native Plant Society of Texas Annual Symposium, Austin, TX.
- 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. *Oral presentation*, 'Fire Trek' Special Session, 5th International Fire Congress of the Association for Fire Ecology, 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. **2015**. Post-Wildfire Legacy Effects in Pine-Oak Woodlands. *Poster presentation*, 6th International Congress of the Association of Fire Ecology, San Antonio, TX.
- Booth, E. M. and N. L. Fowler. **2015**. Effects of soil, light availability, and burn severity on post-wildfire recruitment of dominant woody species in a pine-oak woodland. *Poster presentation*, Ecological Society of America Centennial Meeting, Baltimore, MD.
- 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 N. L. Fowler. **2013**. Post-wildfire plant regeneration in the Lost Pines of Texas. *Oral presentation*, University of Texas at Austin Integrative Biology Graduate Student Symposium, Austin, TX.
- 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

- | | |
|-------------|--|
| 2016 | Teaching assistantship, Field Seminar in Environmental Science and Sustainability. Lectured, led field trips, organized field trip logistics, mentored independent research projects, graded lab reports. University of Texas at Austin. |
| 2014-2015 | Invited guest lecturer, Field Seminar in Environmental Science and Sustainability. Lectured on fire ecology, organized and led field trips to recently burned sites to teach field methods. University of Texas at Austin. |
| 2014 | Teaching assistantship, Introduction to Biology I. Led discussion sections, graded exams and assignments. University of Texas at Austin. |
| 2013 | Mentored a Research Experience for Undergraduates (REU) intern. Taught experimental design, field work skills, data analysis, and poster design. University of Texas at Austin. |
| 2013 | Teaching assistantship, Introduction to Biology II. Led discussion sections, graded exams. University of Texas at Austin. |
| 2012 | Teaching assistantship, Ecology. Helped develop exercises, led discussion sections, graded exams and assignments. University of Texas at Austin. |
| 2010 – 2011 | Teaching assistantship, Ethnobotany. Proctored and graded exams. Northwestern University. |

RESEARCH ASSISTANTSHIPS AND INTERNSHIPS

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

SERVICE AND OUTREACH

- 2016 Presented a talk, 'Plants on Fire!', at Science Under the Stars, a public outreach series. Austin, TX.
- 2016 GISCorps volunteer
- 2011-2015 Student volunteer at meetings of the Ecological Society of America.
- 2012-2015 Student volunteer at meetings of the Association for Fire Ecology.
- 2014 Volunteer wildland firefighter on prescribed burns at Ladybird Johnson Wildflower Center. Austin, TX.
- 2013 Co-organizer of Science Under the Stars, a public outreach series. Austin, TX.
- 2012-2015 Co-founder and President, Central Texas Student Association for Fire Ecology (SAFE). Organize journal clubs, field trips, and public outreach events; connect fire science students throughout Central Texas. Austin, TX.
- 2012 Member, Master Planting Science Team, PlantingScience.org. Online program that connects scientists with grade school students to develop class experiments.

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 Interview for They Blinded Me With Science on KVRX, University of Texas at Austin student radio

PROFESSIONAL SKILLS AND CERTIFICATIONS

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

Field skills: plant identification and collection, insect collection, vegetation and fuel survey methods (including Fire Monitoring Handbook/FIREMON protocols)

National Wildfire Coordinating Group certifications:

S-290 (2016, course taken unofficially), Intermediate Wildland Fire Behavior

RX-310 (2015), Introduction to Fire Effects

RT-130 (2014), Annual Fireline Safety Refresher Training

S-130/S-190 (2013), Firefighter Training & Introduction to Wildland Fire Behavior

L-180 (2013), Human Factors in the Wildland Fire Service

I-100 (2013), Introduction to Incident Command System

Languages: English (fluent), French (fluent)

PROFESSIONAL AFFILIATIONS

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