# Caitlin McDonough MacKenzie

#### ecology, climate change, conservation & alpine communities

#### Education

**Boston University** PhD, Biology

2017 Climate Change, Species Loss, and Spring Phenology in and

Around Acadia National Park, Maine

Advisor: Richard Primack

University of MS, Field Naturalist & Ecological Planning Program

**Vermont** Collaboration at High Elevations: Monitoring Alpine Plant Phenology

2010 in the White Mountains with Citizen Scientists

Advisor: Jeffrey Hughes

Harvard University BA, Environmental Science & Public Policy

2006 Senior Thesis Advisor: David Foster

#### **Professional Appointments**

**Colby College** Visiting Assistant Professor 2020-2022 Environmental Studies

**University of Maine** David H. Smith Conservation Fellow

2017-2020 Postdoctoral Fellow

Climate Change Institute

**Emerson College** 2014- Affiliated Faculty

2017, 2019 Institute for Liberal Arts & Interdisciplinary Studies

#### **Publications**

- Ellwood, Elizabeth R., Amanda S. Gallinat, Caitlin McDonough MacKenzie, Tara Miller, Abraham J. Miller-Rushing, Caroline Polgar, and Richard B. Primack. 2022. Plant and bird phenology and plant occurrence from 1851 to 2020 (non-continuous) in Thoreau's Concord, Massachusetts. *Ecology*. https://doi.org/10.1002/ecy.3646
- 2. Nelson, Sarah, **Caitlin McDonough MacKenzie**, Toni Lyn Morelli, Jay Wason, Bryan Wentzell, Rachel Hovel, Glenn Hodgkins, Abe Miller-Rushing, David Miller, Steve Tatko, Amanda Cross, and Mike Pounch. 2022. Climate change in the mountains of Maine and the Northeast. *Northeastern Naturalist*. 28 (Special Issue 11):ii-xi. https://doi.org/10.1656/045.028.s1111
- 3. Liu, Yan, Caitlin McDonough MacKenzie, Richard B. Primack, Michael J. Hill, Xiaoyang Zhang,

- Zhuosen Wang, and Crystal B. Schaaf. 2021. Using remote sensing to monitor the spring phenology of Acadia National Park across elevational gradients. *Ecosphere*. 12, no. 12: e03888. https://doi.org/10.1002/ecs2.3888
- 4. Anderson, Sean C., Paul R Elsen, Brent B Hughes, Rebecca K Tonietto, Molly C Bletz, David A Gill, Meredith A Holgerson, Sara E Kuebbing, **Caitlin McDonough MacKenzie**, Mariah H Meek, Diogo Veríssimo. 2021. Trends in ecology and conservation over eight decades. *Frontiers in Ecology and the Environment*. https://doi.org/10.1002/fee.2320
- 5. Nocco, Mallika A., Bonnie M. McGill, **Caitlin McDonough MacKenzie**, Rebecca K. Tonietto, Joan Dudney, Molly C. Bletz, Talia Young, and Sara E. Kuebbing. 2021. Mentorship, equity, and research productivity: lessons from a pandemic. *Biological Conservation*. 255 (2021): 108966. https://doi.org/10.1016/j.biocon.2021.108966
- 6. **McDonough MacKenzie, Caitlin**, Tony Chang, Mallika A. Nocco, Rebecca S. Barak, Molly C. Bletz, Sara E. Kuebbing, and Michael Dombeck. 2020. Recurrent neural network reveals overwhelming sentiment against 2017 review of US monuments from humans and bots. *Conservation Letters*. 13(6), p.e12747 https://doi.org/10.1111/conl.12747
- 7. Burgio Kevin R, Caitlin McDonough MacKenzie, Stephanie B Borrelle, SK Morgan Ernest, Jacquelyn L Gill, Kurt E Ingeman, Amy Teffer, and Ethan P White. 2020. Ten Simple Rules for a successful remote postdoc. *PLoS Computational Biology*. 16(5): e1007809. https://doi.org/10.1371/journal.pcbi.1007809
- 8. **McDonough MacKenzie, Caitlin**, Amanda S. Gallinat, and Lucy Zipf. 2020. Low-cost observations and experiments return a high value in plant phenology research. *Applications in Plant Sciences* 8(4): e11338 http://doi:10.1002/aps3.11338
- 9. Berend, Kevin, Kristen Haynes, and **Caitlin McDonough MacKenzie**. 2019. Featured Review: Common garden experiments as a dynamic tool for ecological studies of alpine plants and communities in northeastern North America. *Rhodora*. 121(987): 174-212. https://doi.org/10.3119/18-16 *WINNER OF THE 2020 FERNALD AWARD*
- 10. McDonough MacKenzie, Caitlin, Jason Johnston, Abraham J. Miller-Rushing, William Sheehan, Robert Pinette, and Richard Primack. 2019. Advancing Leaf-Out and Flowering Phenology is Not Matched by Migratory Bird Arrivals Recorded in a Hunting Guide's Journal in Aroostook County, Maine. Northeastern Naturalist. 26(3), 561-579. https://doi.org/10.1656/045.026.0309 COVERED IN THE WASHINGTON POST: HOW A MID-20TH-CENTURY HUNTING GUIDE MAY FILL THE GAPS ON CLIMATE CHANGE IN MAINE
- 11. Heberling, Mason, Caitlin McDonough MacKenzie, Jason Fridley, Susan Kalisz, and Richard Primack. 2019. Phenological mismatch with trees reduces wildflower carbon budgets. *Ecology Letters*. 22(4): 616-623 https://doi.org/10.1111/ele.13224 *WINNER OF THE 2020 MERCER AWARD*
- 12. **McDonough MacKenzie**, Caitlin, Glen Mittelhauser, Abraham J. Miller-Rushing, and Richard B. Primack. 2019. Featured Review: Floristic change in New England and New York: regional patterns of plant species loss and decline. *Rhodora*. 121(985): 1-36. https://doi.org/10.3119/18-04
- 13. **McDonough MacKenzie, Caitlin**, Richard B. Primack, and Abraham J. Miller-Rushing. 2019. Trails-as-transects: phenology monitoring across heterogenous microclimates in Acadia National Park, Maine. *Ecosphere*. https://doi.org/10.1002/ecs2.2626
- 14. **McDonough MacKenzie**, Caitlin, Richard Primack, and Abraham Miller-Rushing. 2018. Local environment, not local adaptation, drives leaf-out phenology in common gardens along an elevational

gradient in Acadia National Park, Maine. *American Journal of Botany*. 105(6): 986–995. https://doi.org/10.1002/ajb2.1108

15. **McDonough MacKenzie, Caitlin**, Georgia Murray, Richard Primack, and Doug Weihrauch. 2017. Lessons from Citizen Science: Assessing volunteer-collected plant phenology data with Mountain Watch. *Biological Conservation*. 208: 121-126. http://dx.doi.org/10.1016/j.biocon.2016.07.027

#### **Published Reports & Commentaries**

- 1. **McDonough MacKenzie**, **Caitlin**, Rebecca Barak, Skylar Bayer, Molly Bletz, Mark Brunson, Joan Dudney, Orou Gaoue, Jacquelyn Gill, April Harris, Sara Kuebbing, Bonnie McGill, Mallika Nocco, Rebecca Tonietto, Megan Vahsen, and Elizabeth Waring. 2020. Plant Love Stories: Share your story and grow a movement. *Bulletin of the Ecological Society of America*. 101(2), p.e01663. https://doi.org/10.1002/bes2.1663
- 2. **McDonough MacKenzie, Caitlin**, Sara Kuebbing, Rebecca S. Barak, Molly Bletz, Joan Dudney, Bonnie M. McGill, Mallika A. Nocco, Talia Young, Rebecca K. Tonietto. 2019. We do not want to "cure plant blindness" we want to grow plant love. *Plants People Planet*. https://doi.org/10.1002/ppp3.10062

# Teaching & Mentoring

### **Colby College**

Visiting Assistant Professor

Courses 2021-2022

BI 271 Intro to Ecology Lecture: 45 students

BI 271 Intro to Ecology Lab: 16 students

ES 297 Knitting & Reading the Forested Landscape: 12 students

ES 327 Conservation Paleobiology: 13 students

ES 120 Ecology & Natural History in Maine: Thoreau to Carson, a writing-intensive

freshmen class: 12 students

#### Courses 2020-2021

BI 271 Intro to Ecology Lecture: 45 students

BI 271 Intro to Ecology Lab: 16 students

ES 338 Forest Ecology: 9 students

ES 398 Conservation Paleobiology: 6 students

Teaching & Learning at Colby Fellowship

#### Honors Thesis Committee Member

Grace Neumiller Class of 2021, Environmental Studies

Title: Contrasting Patterns of Nutrient Limitation in the Littoral and Pelagic

Zones of Mesotrophic Maine Lakes

Tarvn Waite Class of 2021, Environmental Studies

Title: Storm Characteristics Affect Biogeochemical Responses Differently Across

Lentic and Lotic Areas in a Large River

**Grace Horne** Class of 2021, Biology

Title: Reduced performance of ash-specialist caterpillars on non-native, cultivated Oleaceous plants

#### **University of Maine**

Instructor of Record

#### Graduate Committee Member

**Andrea Tirrell** M.S. student defending Fall 2022, Ecology and Environmental Science Master's Thesis: A Sky Island Perspective: New England Alpine Plant Distributions and Adaptations Under Climate Change

Undergraduate Capstone Advisor

Maddie Eberly Class of 2021, Forestry

Title: Conservation Paleoecology

Madison Syer Class of 2020, Parks, Recreation and Tourism

Title: Paleobiological Perspectives on Subalpine Vegetation in Acadia National Park

Cas Carroll Class of 2019, Ecology and Environmental Science

Title: Conservation Paleobiology at Sargent Mountain Pond: Macrofossil Analysis of

Holocene Treeline Position in Acadia National Park

Honors Thesis Committee Member

Marie Ring Class of 2018, Biology

Title: Examining Avian Diversity in Acadia National Park Through Time

#### **Emerson College**

Affiliated Faculty

Fall 2019

SC 223 Climate Change: 1 Section, 34 students

Spring 2016 & 2017

SC 292 New England Forests: 2 Sections, 70 students

Spring 2014 & Fall 2014

SC 223 Climate Change: 2 Sections, 61 students SC 223 Climate Change: 1 Section, 25 students

## **Boston University**

**Teaching Assistant** 

Fall 2011 & 2012

BI 107 Biology 1 Lab Instructor: 2 Sections, 32 students

#### **University of Vermont**

**Teaching Assistant** 

Spring 2010 & 2009

NR 140 Applied Environmental Statistics, Lab Instructor

Fall 2009

NR 205 Ecosystem Management: Integrating Science, Society & Policy, Discussion

Section Leader

Fall 2008

NR 001 Natural History and Field Ecology, Field Lab Instructor

#### **Grants & Funding**

<b>Second Century</b>	Conservation Paleobiolog	gy and Traditional Ecological

Knowledge of Subalpine Plant Communities in Acadia National Stewardship Fellowship

2019-2020 Park.

PΙ

TOTAL BUDGET: \$20,000

David H. Smith Conservation Challenges for Tundra Refugia under Climate Change:

**Conservation Research Postdoctoral Fellowship** 

A Paleoecological Perspective on Subalpine and Alpine Vegetation in

Maine.

2017-2019 PI with Mentors Jacquelyn Gill (University of Maine) & Abe Miller-

> Rushing (Acadia National Park) TOTAL BUDGET: \$150,000

**Schoodic Research** Patterns of Species Loss and Spring Phenology in Acadia National

**Fellowship** Park, Maine.

2016 ΡI

TOTAL BUDGET: \$2,500

**NSF-DEB Doctoral** Plant Ecology in a Changing Climate: Patterns of Species Loss and

Spring Phenology in Acadia National Park, Maine. **Dissertation Improvement** Grant (DDIG) 1501266 Co-PI with Richard Primack (Boston University)

2015-2017 TOTAL BUDGET: \$12,818 Waterman Fund Grant 2015 Ridges in a Warming Climate: Monitoring Plant Phenology in Acadia

National Park.

PΙ

TOTAL BUDGET: \$1,800

National Park Service Cooperative Agreement Identify Species Vulnerable to Climate Change at Acadia National

Park.

PΙ

2013-2014

Graduate Student & Grant Co-author under PI Richard Primack

(Boston University)

**TOTAL BUDGET: \$189,000** 

**George Melendez Wright** 

Climate Change Fellowship Reconstructing past plant phenology in Acadia National Park: tracking climate change through herbarium specimens, written

records, and historic photographs.

2011

TOTAL BUDGET: \$12,000

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# Awards & Honors

2022	Young Alumni Award, Bancroft High School
2020	George Mercer Award, Ecological Society of America
	Merritt Fernald Award, New England Botanical Society
2017	Best Talk, Acadia Science Symposium, College of the Atlantic
	Best Talk, BU Biology Grad Student Association Research Symposium
2016	PLOS Ecology ESA Annual Meeting Reporting Fellow
2014	Boston University Women's Guild Scholarship
	Graduate Student Research Award, New England Botanical Society
2013	Graduate Student Policy Award, Ecological Society of America
	Science Café runner up, Ecological Society of America
2012	Bechtel Grant Travel Award, Schoodic Institute
	Phenology 2012 Travel Scholarship

2010 Graduate Student Research Award for Outstanding Scholarship, Rubenstein School

of Natural Resources, University of Vermont

2006 Cum Laude, Honors Thesis, Harvard University

#### **Presentations**

#### **Invited Talks**

2022 Bancroft High School, Worcester, MA

Babson College, webinar

Gulf of Maine Research Institute Findings from the Field Community Series on

Phenology and Climate Change, webinar for middle school students

Merryspring Nature Center, webinar

Baxter State Park Research Committee Meeting, webinar

California Polytechnic State University, webinar

College of the Holy Cross, webinar

Mount Desert Island Science Café Online

SUNY Oswego's Rice Creek Field Station's Arbor Day Web Conference

North Carolina Botanical Garden webinar

Tower Hill Botanic Garden webinar

Mount Desert Island Historical Society webinar

Maine Mountain Collaborative webinar Saint Anselm College, Manchester, NH

Colby College, Waterville, ME

Climate Change Institute Lecture Series, University of Maine, Orono, ME

New England Botanical Club, Harvard University, Cambridge MA

Pint of Science, Trident Booksellers, Boston, MA

College of the Atlantic, Human Ecology Forum, Bar Harbor, ME New England Botanical Club, Harvard University, Cambridge, MA

2018 Worcester Garden Club at Broad Meadow Brook Mass Audubon Sanctuary

Merryspring Nature Center, Camden, ME

Signs of the Seasons, UMaine Cooperative Extension webinar

Acadia National Park, Bar Harbor, ME

Baxter State Park Research Committee Meeting, Augusta ME

2017	School of Biology and Ecology, University of Maine, Orono, ME Harvard University School of Design (at Acadia National Park), Mount Desert Island, ME Signs of the Seasons, UMaine Cooperative Extension webinar	
2016	at Summer Adventure, MDI Historical Society, Bar Harbor, ME ss Audubon Wachusett Meadow Lecture Series, Princeton, MA lege of the Atlantic, Bar Harbor, ME	
2015	Ellsworth Garden Club, Ellsworth, ME	
2014	Coffee & Conversations Series, College of the Atlantic, Bar Harbor, ME	
2013	Community Lecture Series, Eagle Hill Institute, Steuben, ME Colby College (at Schoodic Institute), Winter Harbor, ME	
2011	Josselyn Botanical Society Meeting at Schoodic Institute, Winter Harbor, ME	
Symposia		
2021	Early Career Fellows and Mercer Award Symposium, Ecological Society of America (virtual)	
2020	Virtual Symposium on Climate Change in Maine's Mountains	
2019	Inclusion is an Imperative in U.S. National Parks Inspire Session, Ecological Society of America, Louisville, KY Dynamics and Demography of Alpine Islands Colloquia, Botany 2019, Botanical Society of America annual conference, Tucson, AZ	
2015	Northeast Alpine Stewardship Gathering, Millinocket, ME	
2010	New England Regional Phenology Network Meeting, Durham, NH	

# **Contributed Talks**

2021 Botany 2021 (virtual)

2020	Ecological Society of America (virtual)	
	North American Congress for Conservation Biology (virtual)	
	Botany 2020 (virtual)	
2019	Ecological Society of America, Louisville, KY	
2018	North American Congress for Conservation Biology, Toronto, Ontario	
	Borns Symposium, Climate Change Institute, University of Maine, Orono, ME Northeast Natural History Conference, Burlington, VT	
2017	Acadia Science Symposium, College of the Atlantic, Bar Harbor, ME	
	BU Biology Grad Student Association Research Symposium, Boston, MA	
2016	New England Regional Phenology Network Meeting, Crawford Notch, NH	
2015	Ecological Society of America, Baltimore, MD	
2014	American Society of Naturalists Meeting, Pacific Grove, CA	
2012	Phenology 2012, University of Wisconsin-Milwaukee, WI	
	National Park Service Climate Change Webinar Series	
2010	Ecological Society of America, Pittsburgh, PA (last minute stand-in for Doug Weihrauch)	
2009	Graduate Research Symposium, University of Vermont, Burlington, VT	
Posters		
2018	Northeast Alpine Stewardship Gathering, Fairlee, VT	
2016	Ecological Society of America, Fort Lauderdale, FL	
2015	Acadia Science Symposium, Winter Harbor, ME	
	Northeast Natural History Conference, Springfield, MA	
	Boston University Graduate Research Symposium, Boston, MA	

2014	14 Acadia Science Symposium, Winter Harbor, ME	
	Rescheduled 2013 Acadia Science Symposium, Winter Harbor, ME (held in April 2014 due to October 2013 government shutdown)	
	Northeast Natural History Conference, Springfield, MA	
2013	Ecological Society of America, Minneapolis, MN	
2012	Acadia Science Symposium, Winter Harbor, ME	
	Ecological Society of America, Portland, OR	
	Public Participation in Scientific Research Workshop, Portland, OR	
2010	Ecological Society of America, Pittsburgh, PA	

#### Science Communication

P	lant	Love	<b>Stories</b>
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www.plantlovestories.com Co-founder **Organizer** Plant Love Stories Inspire Session at the Ecological Society of America annual meeting in Louisville, KY, August 2019

2018-

**Co-Lead Author** We do not want to "cure plant blindness" we want to grow plant love. 2019. Letter to the Editor in *Plants People Planet*. <a href="https://doi.org/10.1002/ppp3.10062">https://doi.org/10.1002/ppp3.10062</a>

**Speaker** SUNY Oswego's Rice Creek Field Station Arbor Day Web Conference, April 2021

**Speaker** Plant Love Stories live story-telling event in conjunction with the North American Congress for Conservation Biology in Toronto, July 2018

https://www.plantlovestories.com/post/low-elevation-alpine-love-live

Contributor Low Elevation Alpine Love, February 28, 2018 <a href="https://www.plantlovestories.com/post/low-elevation-alpine-love">https://www.plantlovestories.com/post/low-elevation-alpine-love</a>

PLoS Ecology Blog Community Editor 2017-2019 **Blogger** Reporting on recent scientific research in conservation, plant ecology, and climate change through interviews, book reviews, and new research summaries.

The complete collection of my PLoS writing (49 posts): <a href="http://www.cmmackenzie.com/ecology">http://www.cmmackenzie.com/ecology</a>

TEDx Talk

2017

"Botanizing with my 19th Century Girlfriend" TEDx Piscataqua River, Portsmouth, NH

https://www.youtube.com/watch?v=02JG9hpitHk&t=112s

#### **Outreach in Acadia National Park**

#### **Partner Scientist with Park Interpreters**

iSwoop 2017-2020 Interpreters and Scientists Working On Our Parks (iSWOOP), a National Science Foundation-funded model to build visitors' understanding of science at National Parks

Writing

**Bangor Daily News** 

2017

McDonough MacKenzie, Caitlin. National Parks Belong to All Americans. They Should Remain Accessible to All. Op-ed in the

Bangor Daily News. December 19, 2017.

http://bangordailynews.com/2017/12/19/opinion/contributors/national-parks-belong-to-americans-they-should-remain-accessible-to-all/

The Magazine of the Mount Desert Island Historical Society

2015

McDonough MacKenzie, Caitlin. 2015. The Changing Flora of Mount Desert Island. *Chebacco, the Magazine of the Mount Desert* 

Island Historical Society. 16: 126-138.

Friends of Acadia

Journal 2012 McDonough MacKenzie, Caitlin. 2012. Two Weeks: Tracking the Spring Bloom in Acadia. *Friends of Acadia Journal*. 17.2: 9-11.

#### **Museum Co-Curator**

**Somesville Museum** 

2016

"Before Acadia: Adventure & Discovery" at the Mount Desert Island Historical Society Somesville Museum, Somesville, ME

Naturalist's Notebook

2014

"Botanizing in Acadia" at the Naturalist's Notebook in Northeast

Harbor, ME

#### Service

Flora Conservanda: New England Plant Conservation Program (NEPCoP) Plants & Climate Migration Subcommittee

Member

2022

#### **Tower Hill Botanic Garden**

Boylston, MA 2020-2021

# Strategic Planning Committee Member

#### David H. Smith Fellowship

2020

20th Anniversary Organizing Committee Member

#### **Cambridge Urban Forest Master Plan Task**

**Force** 

Cambridge, MA 2018-2019

Task Force Member

**Plants of Baxter State Park** 

2012-2015

Field Assistant, Photographer Mittelhauser, Glen, Jensen Bissell, Don Cameron, Alison C. Dibble, Arthur Haines, Jean Hoekwater, Marilee Lovit, and Aaron Megquier. *Plants of Baxter State Park*. Orono, Maine:

University of Maine Press. 2016. 477 pages.

**Manuscript Reviewer** 

Biological Conservation, Global Change Biology,
Northeastern Naturalist, Ecosystems, Basic and Applied
Ecology, International Journal of Plant Science, Ecology
Letters, New Phytologist, Conservation Science and
Practice, Frontiers in Ecology and the Environment,
Rhodora, Current Biology, PLoS One, Quaternary
Research, Ecological Monographs, Ecosphere, Plant
Biology, Ecological Solutions and Evidence, Agricultural

and Forest Meteorology

#### Society Membership & Leadership

**New England Botanical** 

**Society** 

Council Member (2020-)

Graduate Student Award Committee Chair (2020-) Diversity, Equity & Inclusion Committee Member

(2021-)

Mission Statement Committee Member (2019-2020)

**Ecological Society of America** 

Paleoecology Section Chair (2019-2020)

Inclusive Ecology Section Executive Board Member

(2017-)

SEEDS Mentor (2016, 2020)

Society for Conservation Biology

**Botanical Society of America** 

Boston University Graduate Women in Science and Engineering Board Member (2014-2015)

#### Organizing For Conference

Symposium on Climate Change in Maine's Mountains October 2020 **Symposium Co-Organizer** 

Session Co-Chair Alpine Habitat and Management

**Co-Editor** Special Issue of *Northeastern Naturalist* on Climate Change in Maine's Mountains (Summer 2021) https://www.eaglehill.us/NENAonline/TOCs/nena-v28-sp11-2021.shtml

**Ecological Society of America Annual Meeting** 

Louisville, KY August 2019 **Inspire Session Organizer** Plant Love Stories

**Workshop Co-Organizer** Including Citizen Science in Your Research - Working with Citizen Science Data, Volunteers, and More

**Workshop Co-Organizer** #MeToo In the Sciences: Your Rights and Options When You're Being Harassed Because Of Your Race, Gender, Religion, Or Disability Status

David H. Smith
Conservation Research
Fellowship Retreat
Schoodic Institute, Winter

Harbor, ME May 2018 **Host Fellow** 

**Organizer And Panel Moderator** Conservation in the Pine Tree State: challenges and success stories of collaborations across communities, agencies, and NGOs

Workshops & Professional Development (\* = invited participant)

# Allen Island Writing Retreat\*

Colby College, Allen Island, ME May 2022, three-day writing retreat with workshops "Sustaining a research pipeline at any point in your career" and "How to find your rhythm after COVID" led by Kelly Clancy.

# TREETIME: Terrestrial Responses To Emerging Environments Through Time, Integrated From Moments To Eons\*

Morton Arboretum, Lisle, IL May 2021 (virtual), two-day research design workshop to kick off writing an NSF Biology Integration Institute (BII) led by Morton Arboretum focused on plant phenology research.

#### **Colby Bowdoin Bates Course Design Experience\***

Colby College, Waterville, ME, January 2021 (virtual), three-day workshop focused on developing transformational learning outcomes, assessing student learning, and pedagogical strategies for building inclusive learning communities.

#### Colby Bowdoin Bates May Institute: Reflecting on our Remote Past\*

Colby College, Waterville, ME, May 2020 (virtual), three-day event fostering connections with colleagues to engage in dialogue, reflection, and planning sessions focused on learning from our pivot to emergency remote teaching this spring.

**Teaching and Learning in the Context of Emerson's Diverse Student Community** Emerson College, Boston, MA, November 2019, two-hour workshop for faculty, staff, and affiliated faculty with Dr. Tuseda Roberts, Emerson's Director for Faculty Development and Diversity.

# Designing Equitable Community-engaged Research Projects\*

Kilauea Military Camp, Volcanoes National Park, HI October 2019, half-day workshop for Smith Fellows with Megan Heyza, Executive Director of the Eastside Improvement Association of Flint and Dr. Rebecca Tonietto, Assistant Professor at the University of Michigan-Flint.

# Diversity, Equity, Inclusion, and Justice Workshop\*

Kilauea Military Camp, Volcanoes National Park, HI October 2019, two-day workshop for Smith Fellows with Anee Korme, The Raben Group.

#### American Institute of Biological Sciences Congressional District Visits

September 2019 meetings: Representative Jared Golden's staff (ME 2nd district) & Representative Katherine Clark's staff (MA 5th district)

# Second Century Stewardship Communications Workshop\*

Schoodic Institute at Acadia National Park, Winter Harbor, Maine, July 2019, two and a half day program for Second Century Stewardship Fellows to develop communication skills by creating and implementing individual communication plans, with workshops on storytelling, improv, and social media, and a panel with local members of the media.

#### **Graduate Teaching Academy\***

University of Maine, Center for Innovative Teaching and Learning, Orono, ME, Spring 2019, semesterlong series of workshops to help graduate students and postdocs develop skills related to undergraduate teaching and transfer those abilities beyond the classroom.

#### Facilitation Training\*

Santa Barbara, CA January 2019, two-day workshop for Smith Fellows with Julian Griggs (Dovetail Consulting).

#### Survey Research Methods: Sampling and Questionnaire Design

North American Congress for Conservation Biology in Toronto, Ontario July 2018, one-day workshop on quantitative survey sampling design and questionnaires, instrument design, and best practices with Dr. Kenneth E. Wallen and Dr. Ashley A. Dayer.

#### Business Management Principles for Conservation Research and NGOs\*

Schoodic Institute, Winter Harbor, ME May 2018, one-day introduction to applying business management principles to conservation science research and NGOs with Dr. Michael Dombeck and Dr. Brett Dickson (Conservation Science Partners).

#### ARGON Augmenting Research Grounded On Neon\*

Utah State University, Logan, UT March 2018, three-day workshop on big data and biogeographical patterns of ecological traits, species abundance distributions, and community composition.

#### **Wilderness First Responder**

Harvard University, Cambridge, MA January 2018, week-long wilderness medicine course. Recertified January 2021. (Previously WFR certified 2003-2006, 2007-2016)

# Media Training Workshop\*

Annapolis, MD January 2018, two-day workshop for Smith Fellows with Tim Ward and Teresa Erickson, Intermedia Communications Training.

# Diversity, Equity, Inclusion, and Justice Workshop\*

Leopold Center, WI October 2017, one-day workshop for Smith Fellows with Whitney Tome, The Raben Group.

# Storytelling Workshop\*

Leopold Center, WI October 2017, three-day workshop for Smith Fellows with Tim Ward and Teresa Erickson, Intermedia Communications Training.

### Field Course Design Workshop

Ecological Society of America meeting, Portland, OR August 2017, one-day workshop and facilitated working session with Dr. Angie Moline, founder of Educate Wild!

#### DCSI Drilling and Coring Summer Institute\*

University of Minnesota, Minneapolis, MN June-July 2017, comprehensive two-week hands-on training course with Dr. Amy Myrbo Research Associate and Director of Outreach, Diversity, and Education at the National Lacustrine Core Facility.

# PACE Paleo And Community Ecology Pace Workshop\*

Schoodic Education & Research Center, Winter Harbor, ME May 2017, week-long NSF-funded workshop with Dr. Jacquelyn Gill & Dr. Jack Williams.

# The Op-ed Project\*

Timberline Lodge, OR, April 2017, one-day workshop for Smith Fellows.

# ComSciCon: The Communicating Science Workshop for Graduate Students\*

Cambridge, MA, June 2015, three-day professional development experience in science communication for graduate students in STEM

#### American Institute of Biological Sciences Congressional District Visits

September 2014 meeting: Representative Katherine Clark's staff (MA 5th district).

#### Biological Ecological Sciences Coalition Congressional Visits Day\*

Washington, DC, April 2013, training in policy engagement & meetings with Massachusetts Congressional Delegation and staffers as a part of the ESA Graduate Student Policy Award

#### Work Experience

### **The Nature Conservancy 2007**

Field Research Assistant Ellsworth Creek, WA

#### Sierra Club 2007

Environmental Policy Intern Chicago, IL

#### **Appalachian Mountain Club** 2003-2006

Hut Naturalist Zealand Falls Hut Summers 2003, 2005, Greenleaf Hut Fall 2006 White Mountains, NH

#### **EcoTarium Museum of Science and Nature 2002**

Summer Staff Worcester, MA

# Singing Eagle Lodge Girls' Summer Camp 2001-

Board Member 2014-2016 Hiking Trip Leader Soccer Counselor Holderness, NH