

**MARGARET DALZELL LOWMAN**  
**Global Arbournaut, Conservation Biologist, Educator/Mentor**  
Sarasota FL citizenship: USA  
CURRICULUM VITAE

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## EDUCATION

2006        Aldo Leopold Leadership Fellowship Program  
2004        Disney Leadership Institute for Biodiversity  
2002        Tuck School of Business, Dartmouth College, Executive Management Certificate  
1983        University of Sydney, Australia. Ph.D. Botany  
1978        University of Aberdeen, Scotland. M.Sc. Ecology  
1976        Williams College, MA. B.A. Biology, cum laude, minor in Environmental Studies

## EMPLOYMENT

2020-21    **Visiting Professor**, National University of Singapore, Geography/Biol Sci/Env Sciences;  
**Adjunct Professor**, Arizona State University School of Sustainability  
2000-on    **Director, TREE Foundation** ([www.treefoundation.org](http://www.treefoundation.org)) that focuses on local and global  
tree research, education, and exploration, with emphasis on women in environment  
2019 – 22    Farrar, Straus & Giroux, Publishers NYC, book author and public speaker  
2014 - 19    **California Academy of Sciences, Lindsay Chair in Botany/Senior Scientist in Plant  
Conservation** with oversight to strategies for global research/collections and  
sustainability leadership; inaugural **Chief of Science and Sustainability**, with oversight  
to ~100 research staff, stewardship of 45+ million collections, budget ~ \$ 7 mil, creating  
sustainable initiatives throughout all research programs, hiring diversity in STEM, and  
**Director of Global Initiatives**, serving as an external science voice for global  
partnerships including Amazon citizen science and Malaysian rain forest bioblitz  
2010 -14    **Director**, Nature Research Center, NC Museum of Natural Sciences (including oversight  
to global initiatives and academic partnerships); and **Research Professor**, College of  
Sciences, NC State University; oversaw construction, staffing and programs for NRC.  
2003 - 14    **Science columnist**, News & Observer, Charlotte Tribune, NC; Herald Tribune, FL  
2003 - 10    **Director of Environmental Initiatives**, and **Professor of Biology and Environmental  
Studies**, New College of Florida and Sarasota County Regional Government Science  
Outreach Partnership, started environmental studies program at NCF  
1999 - 2003 **Chief Executive Officer**, Selby Botanical Gardens, FL and grew budget from \$2 mil  
to \$3.5 mil during my tenure  
1992 - on    **Adjunct Professorships** at Williams College, Univ of Florida, Univ of South  
Florida (Tampa), New College of Florida, Ringling School of Art & Design, FL, Jimma  
University (Ethiopia), Bahir Dar University (Ethiopia), San Francisco State University  
1992 - 99    **Director of Research & Conservation** and **Jessie Cox Chair in Tropical Botany**,  
Selby Botanical Gardens, FL  
1989 - 92    **Visiting Professor of Biology & Environmental Studies**, Williams College, MA  
1983 - 89    **Co-manager**, Ruby Hills Pastoral Company, Walcha NSW Australia  
1978 - 89    **Lecturer in Adult Education, Botany and Zoology**, University of New England,  
Sydney University Australia

## ACADEMIC FELLOWSHIPS

- 2019 -20 Visiting Professor, National University of Singapore
- 2018-on Research Professor, Universiti Sains Malaysia, Penang
- 2018 Fellow, Rachel Carson Center, Ludwig Maximilian University, Munich Germany
- 1983 - 87 Australian Research Council Postdoctoral Fellowship
- 1983 Sydney University, Australian Museum Award for postgraduate research
- 1979 - 83 Sydney University Fellowship
- 1976 - 77 Duke University Fellowship
- 1976 Williams College, Dwight Botanical Prize
- 1974 Williams College, Geology Summer Field Camp Scholarship
- 1972 - 76 Williams College, Dean's List

## PROFESSIONAL HONORS

- 2019-on Science Advisor, Earthwatch Institute; Explorer and Travel Expert, National Geographic
- 2019 External Assessor for biology major programs, Universiti Sains Malaysia
- 2019 Faculty mentor at Oxford University summer conservation student workshops
- 2019 **Appointed to Board of Advisors for Scientific American**
- 2018 San Francisco Business Times "Woman of Influence" (3rd time); member of National Science Foundation Advisory Comm for Environmental Research & Education.
- 2018 Fellow at Rachel Carson Center, University of Munich, Germany
- 2017-on Appointed Research Professor at Universiti Sains Malaysia, Penang
- 2016-20 Member of National Science Foundation Advisory Committee for International Science and Engineering; visiting professor at Bahir Dar University, Ethiopia
- 2015 Elected Fellow of California Academy of Sciences
- 2015 Honorary Doctorate in Science & commencement speaker, Elmira College
- 2014 Honorary Doctorate in Science & commencement speaker, Wilson College
- 2014 **Roy Chapman Andrews Distinguished Explorer Award**
- 2014 Selected as one of San Francisco's "50 Distinguished Women Business Leaders"
- 2014 Invited keynote speaker, EO Wilson Biodiversity Symposium, Alabama; bestowed title of "Her Highness" by EO Wilson (as Sylvia Earle is "Her Deepness")
- 2013 Rolex Foundation juror to select youth award finalists
- 2013 **Fulbright Senior Specialist Scholar to Ethiopia**
- 2012 Rolex invited Forum speaker at Rolex Awards Ceremony, New Delhi India
- 2012 Appalachian State University, commencement speaker
- 2012 Invited to serve on White House Women and the Environment Summit
- 2011 **Fulbright Senior Specialist Scholar to India**
- 2010 Research Fellow, Environmental Change Institute, Oxford University, UK
- 2010 Dictor-Martin Civic Award, Year of Biodiversity Leadership, Sarasota
- 2009 ACE (Achievements in Canopy Ecology) international award, Bangalore, India
- 2009 Selected as Florida Trend Business Magazine "Icon" for February 2009
- 2009 Tampa FL Women's history month honoree for "conservation of the planet"
- 2008 - 13 **Fulbright Board Senior Specialist Scholar status**
- 2008 - on Elected to Earthwatch Board of Directors
- 2008 Elected Fellow of Wings WorldQuest, honoring women in exploration
- 2007 - 09 Science Advisor for Climate Change to Florida CFO, Alex Sink
- 2007 - 09 Elected Vice President for Research and Education, The Explorers Club
- 2007 Florida Society of Botanical Artists - Gaia Award for Excellence
- 2007 Appointed to NEON Education Tiger Team (National Ecological Observatory Network)

- 2007 **Mendel Medal for achievement in science & spirit, Villanova University**
- 2006 - on Advisory Board, Plants with Purpose (links deforestation to poverty & finds solutions)
- 2006 - 12 Elected Vice President for Education & Human Resources, Ecological Society of America (and re-elected)
- 2006 Aldo Leopold Leadership Fellow
- 2006 **Lowell Thomas Medal for Biodiversity Exploration, The Explorers Club**
- 2006 Nominated for Weizmann Women and Science Award
- 2005 - 11 Elected to the Board of Directors, The Explorers Club (and re-elected)
- 2005 - 08 **NEON senior design team** (co-wrote \$350 mil grant for ecological observatories)
- 2004 **Chief Scientist, The Jason Project** in Science Education w/Bob Ballard - Panama: Rain Forests at the Crossroads
- 2003 Disney Leadership Institute for Biodiversity (with World Wildlife Fund)
- 2003 Woman in Power Award, National Council of Jewish Women (NCJW)
- 2003 Certificate of Honor, Sarasota County Commission on the Status of Women
- 2003 **Asteroid (10739) Lowman** named by Carolyn Shoemaker, US Dept. of Interior
- 2002 Kilby Laureate medalist, honored for pioneering rainforest canopy science
- 2002 **Ecological Society of America, Eugene P Odum Award for Excellence in Ecology Education**
- 2001 - 04 Elected by Williams College alumni as Board of Trustees Tyng Administrator
- 2001 Florida Gubernatorial appointment to Board of Directors, New College of Florida
- 2001 AABGA Award for Program Excellence for creating two elevated canopy walkways, one at Selby Gardens and one at Myakka State Park
- 2000 Girls, Inc. Visionary Award for Public Science & Education Outreach
- 2000 **Williams College Bicentennial Medal for achievements in tropical botany**
- 2000 Phi Delta Gamma Educators' Award for book, Life in the Treetops
- 1999 Margaret Douglas Medal from National Garden Club of America for Conservation Education
- 1999 **Chief Scientist, The Jason Project** in Science Education w/Bob Ballard - Amazon, Peru
- 1999 Board of Scientific Advisors, Amazon Center for Education & Environmental Research
- 1998 Selection to Leadership Florida, Class XVI
- 1997 Elected Fellow of The Explorers Club
- 1995 - on Board of Scientific Advisors, Intl. Center for Tropical Biology, University of Missouri
- 1994 **Chief Scientist, The Jason Project in Science Education w/Bob Ballard - Belize**
- 1994 Girl's Incorporated "She Knows Where She's Going" Award for mentoring girls in science
- 1993 Pew Scholar nominee in Conservation Biology
- 1992 - 99 Selby Gardens, appointed to The Jessie B. Cox Endowed Chair in Tropical Botany
- 1991 - 98 Education Board, Massachusetts Tropical Conservatory
- 1990 - 95 Board of Science Advisors, Earthwatch

#### **ADMINISTRATIVE and EDITORIAL ACTIVITIES**

- 2019 Co-Editor, volume on Malaysian Biodiversity Survey, Penang Hill – USM Press.
- 2017 Leader of Malaysia Bio-Blitz, funding and organizing 117 scientists to survey a UNESCO world heritage rain forest site in Penang (65% women participants, first whole-forest survey including canopy and forest floor, first local-n-global collaborations for each taxon and over 1400 findings)
- 2014 - 16 Chair of 3 summits, California Academy of Sciences: Forest Summit, Eye on the Environment: Drones for Conservation, and Women in Science – fund-raising, program development, and student engagement

- 2014 - 16 Inaugural Chief of Science and Sustainability, California Academy of Sciences (duties included: increase staff diversity, create salary equity, update financial reporting, inspire teamwork, integrate research with other divisions, add sustainability to all research portfolios, and serve as editor California Academy of Sciences Proceedings)
- 2016 Committee for 7<sup>th</sup> International Canopy Conference, London UK
- 2013 Co-editor, Treetops at Risk, edited volume from the 2009 Canopy Conference, India
- 2012 Co-chair (with Demetria Mondragon), 6<sup>th</sup> Intl. Canopy Conference, Oaxaca Mexico
- 2012 National Science Foundation, PIRE (Programs for International Research and Education) review panel
- 2011 National Science Foundation, Macrobiology review panel
- 2011 Chair, Teen Advisory Board for NC Museum of Natural Sciences
- 2010 - 14 Founding Director, Nature Research Center, wing of NC Museum of Natural Sciences (fund-raise, oversee construction, and set up innovative programs for NC Museum, including Academic partnerships from NC system for each museum laboratory)
- 2010 Chair, Informal Science Education panel (NSF); review panel, NSF Synthesis Centers
- 2009 Chair, Science Committee, The Explorers Club
- 2009 Co-chair (with Kamal Bawa), 5th International Canopy Conference, India
- 2007 - 09 Vice President for Research and Education, The Explorers Club
- 2006 - 12 Vice President Education & Diversity, Ecological Society of America (2 elected terms)
- 2005 - 09 Director of New College/Sarasota County government science partnership
- 2003 - 10 Inaugural Director of Environmental Initiatives, New College of Florida
- 2001 - 10 Founder of Science and Environment Council, Sarasota County (& Chair 2001-2003)
- 1998 - 2000 Finance Committee, Leadership Florida
- 1998 Co-chair (with Francis Hallé, France), 2<sup>nd</sup> International Canopy Conference: Global Perspectives (with participants from 35 countries)
- 1995 - 98 Tropical studies initiative committee, European Science Foundation (ESF)
- 1994 Co-chair (with Francis Hallé, France), 1<sup>st</sup> International Canopy Conference (with participants from 28 countries)
- 1993 - 09 Association for Tropical Biology & Conservation, Secretary-Treasurer
- 1992 - 99 Editor for *Selbyana* (botanical journal)
- 1989 - 92 Williams College, Center for Environmental Studies Faculty Committee
- 1987 - 89 Association for Tropical Biology, elected Councilor
- 1979 - 80 Sydney University, student representative to Board of Biological Sciences
- 1977 - 78 Duke University, Advisory Committee to Dean
- 1977 - 78 Duke University, Faculty Search Committee

Reviewer including *Science*, *Oecologia*, *Biotropica*, *Austral Ecology*, *National Science Foundation*, *Selbyana*, *Phytologia*, *Ecological Monographs*, *Journal of Ecology*, *European Science Foundation*, *Austrian Science Foundation*, *Earthwatch*, *Biological Journal of the Linnean Society*, *Smithsonian Institution*, *Journal of Tropical Ecology*, *National Geographic*, *Conservation Biology*, *African Journal of Agriculture, Ecology, Frontiers in Ecology and the Environment*, *Universiti Sains Malaysia*, and many academic book publishers.

## **BUSINESS EXPERIENCE**

- 2020-on Founded MISSION GREEN to build canopy walkways in the highest biodiversity forests
- 2000-on Co-founder and CEO, TREE Foundation, including fund-raising, mission of tree research education and exploration, active local, national and global.
- 2014 - 16 Chief of Science & Sustainability, California Academy of Sciences, with ~\$7 mil annual budget and ~ \$14 mil grants for research, exploration, collections, and staff, including:

- Re-structured Institute for Biodiversity Science and Sustainability,
  - Created leadership team including new Director of Collections and CFO
  - Revised annual reviews to include peer-reviews,
  - Established revised and more efficient financial reporting,
  - Sought operational practices that led to increased effectiveness of research
  - Increased gender equity in both payroll and hiring practices
  - Infused “sustainability” into the culture of research activities
  - Created first Director of Collections position to oversee 46 mil collections
- 2010 - 13 Director, Nature Research Center, NC Museum of Natural Sciences, a \$65 million science research and education technology wing of the state museum. Oversaw construction, assisted with fund-raising, created programs, and hired a new team of scientists who combined cutting-edge research with innovative science communication. Science staff received \$11.7 million in grants during our first year and was the most visited public destination in North Carolina!
- 2008 Sustainability consultant to Tommy Hilfiger Foundation
- 2008 Chair, Mission/Vision committee, The Explorers Club (1<sup>st</sup> mission revision after 101 years)
- 2000 - on Founder & Executive Director, TREE Foundation, a 501(c)(3) organization dedicated to tree research, exploration, and education (<http://treefoundation.org>)
- 1999 - 2003 CEO of Marie Selby Botanical Gardens, Sarasota, day-to-day operations of botanical garden including strategic planning, programs, fundraising and staffing, with highlights:
- Budget up 25% over 4 years; membership up 46%
  - Budget deficit (of prior administration) moved into the black
  - Implemented ongoing training and professional development for staff
  - Initiated global partnerships including Sister Garden relationships w/ Jardín Botánico Lankester, Cartago Costa Rica; Fundación Jardín Botánico de Orinoco, Ciudad Bolívar Venezuela and Cienfuegos Botanical Garden, Cuba
  - Completed renovations to historic Mansion; new perimeter delineation; new events pavilion; additional parking spaces (all under-budget); property acquisitions to expand Gardens
  - Named one of America’s Top Ten Botanical Gardens in 2003
  - Donor levels and annual appeals up over four-fold; first half-million-dollar gifts in the history of the Gardens; raised \$2.2 million for Capital Campaign, most by direct solicitation; over 900 volunteers/yr. whose hours represented > \$1.5 million value-added
  - Opened Center for Canopy Ecology; expanded research department to include gesneriads, canopy ecology and conservation; living collections expanded by 102%
- 1994 - 2010 Treasurer, Association for Tropical Biology: created annual budgets, initiated computerized accounting and set up the Society’s first endowment
- 1992 - on Co-founder, Canopy Construction Associates, a company that constructs canopy walkways for research and education institutions worldwide; continued consultant on selection of canopy walkway sites from a biodiversity perspective ([www.canopyconstruction.com](http://www.canopyconstruction.com))
- 1992 - 99 Director of Stark Research Center, Selby Gardens: oversaw administration, budget, grants, data collection, public relations, conferences, and outreach for eight staff and twenty-one volunteers; raised > \$ 2 million for botanical research
- 1983 - 90 Managed family agricultural operation, “Ruby Hills” merino fine wool sheep and Poll Hereford stud cattle operation in outback Australia: budgeting, oversight to genetics and breeding, agricultural products, record-keeping, maintenance of extensive property,

- shearing operations, bed-and-breakfast, and other aspects of a weather-related, market-driven business
- 1981 - 89 Administered Earthwatch field expeditions in Australia, including budgets, purchasing, travel logistics, data analyses, and publications
- 1977 - 78 Environmental Protection Agency, air pollution regulation division, Research Triangle
- 1972 - 76 Assistant, Payroll Office, Williams College (to fund college education)
- 1967 - 75 Science camp counselor and teacher, Burgundy Center for Wildlife Studies, WV

## TEACHING EXPERIENCE

- 2020-2 Adjunct Professor, Elmira College “Sustainable Fashion” course for Tommy Hilfiger Fashion Business Institute
- 2018 on Numerous Zoom lectures to middle schools about rain forest canopies and conservation
- 2017 Re-instituted Jason Learning program, leading a team of teachers/students in Malaysia
- 2017 Celebrated 23<sup>st</sup> summer of teaching citizen science field expedition on “tropical canopy ecology” in Amazonian Peru
- 2011 - 14 **Professor of Science, North Carolina State University** including citizen-science courses in tropical ecology; science communication training
- 2010-on Mentor for underserved girls at Meg Lowman Treetops Camp, rural NY each summer
- 2004 - 10 Director of Environmental Initiatives, New College of Florida
- 2004 - 07 Leader of New College Foundation natural history trips to Amazon, Galapagos, and Belize for fund-raising
- 2004 Florida Science Teachers Association - leader of Panama rain forest workshop
- 2003 - 10 **Professor of Biology and Environmental Studies, New College of Florida:** Plant Ecology (Intro. and Advanced), Communities and Ecosystems, Environmental Issues senior tutorial, The Role of Women in Natural History, Science Outreach in Local Schools (SOS), Conservation Biology, The Ecology of Extreme Environments, Climate Change, Canopy Ecology, Science Education, Tropical Ecology; field courses to Antarctica, Belize, Galapagos, and Amazon
- 1998 - 2002 Instructor for Williams College Alumni expeditions to Australia and Peru
- 1994-03 Distance learning with Jason Project (virtual expeditions to Belize, Panama, Amazon) that reached millions of middle school students and their teachers
- 1994 University of South Florida, Biology Department Adjunct - Conservation Biology
- 1993 - 96 New College of Florida, Biology & Environmental Studies Department Adjunct - Conservation Biology, Environmental Botany, and Plant Ecology
- 1992 - on Numerous lectures for schools, civic clubs, and institutions (addressed over 5 million students and citizens in year 2000 alone, in part with distance learning)
- 1992 University of Minnesota - Conservation Biology (field course, Lake Itasca)
- 1989 - 92 **Williams College, Visiting Professor of Biology and Environmental Studies** -Tropical Rainforests: Politics, Economics, Biology; Communities and Ecosystems; Environmental Studies 101; International Environmental Policy (senior tutorial); Conservation Biology; Women as Natural History Writers (tutorial)
- 1986 Williams College, Biology Department - Australian Ecosystems, field course in Australia
- 1983 - 87 University of New England, Australia, Botany Dept. - Agronomy, General Biology
- 1981 - 89 Earthwatch, Principal Investigator, 10 field research expeditions in Australia
- 1979 - 82 Sydney University, Lecturer, Adult Education Department - Plant Taxonomy, Plant Ecology, Beginning and Advanced sections
- 1979 - 82 Sydney University, Teaching Assistantships - Plant Physiology, Plant Ecology, Plant & Animal Biology, Botanical Methods, and Natural Resources Ecology

1975 - 76 Williams College, Teaching Assistantships - Field Botany, Environmental Biology, Advanced Plant Ecology

### TEACHING OUTREACH & INNOVATIVE EDUCATION

2022 “Centerfold” for National Geographic’s 2023 Kids Almanac, focused on trees

2020-on Virtual “meet-a-scientist” programs during COVID-19 pandemic (>100/year)

2019 Invited participant National Geographic Explorers festival, rain forest think tank, and plant conference

2019 Documentary film, A Woman who Climbs Trees, as a woman in field biology

2018-20 Led Williams College alumni trips to Nepal/Bhutan, Amazon and Costa Rica

Numerous skypes with K-12 classrooms and school assemblies about rain forests, well over 5,000 youth annually by hosting ~ 25+ broadcasts

2018 National Geographic Explorer, Assessing church forests, Ethiopia as critical reservoirs of herpetofaunal diversity

2017 **Jason Learning** expedition to Malaysia to study rain forest biodiversity, Penang

2016 Keynote for Jason Learning, a revival of original Jason Expeditions Washington DC

2014 **TEDx** Livermore, CA invited speaker: “How to Raise a Girl Scientist”

2014 Various innovative outreach activities: featured in Google Hangout, blog for Huffington Post, Scientific American Forum, numerous distance learning “meet-a-scientist” to middle schools in ~ 10 states (who study my canopy research as statewide Science Next Generation Standards), CBS news interview on canopy access for mobility-limited; ~202,000,000 social media hits during 2014

2014 Featured in **National Geographic TV** show, How to Climb a Tree (host: David Rees)

2012 - 13 Created virtual “meet-the-scientist” programs in NC Museum of Natural Sciences’ Daily Planet technology theater; hosted EO Wilson & others in “global town halls”; gave > 100 public talks to communicate and inspire fundraising for Museum’s Nature Research Center; trained new staff to develop visual lab programs/grants/communication

2012 Featured by National Geographic as their “real-life Lorax”; called “Einstein of the treetops” by Wall Street Journal

2012 Invited delegate to the **White House Summit on Women and the Environment**

2010 Co-chair, National Summit in Ecology Education entitled: Environmental Education for a Sustainable World in Washington DC

2010 Featured in Popular Science Magazine college issue: Top Ten Cool College Labs

2010 Featured in Oprah Magazine: Women Taking Risks

2010 Funded and hosted Rapid Response Training for Invasive Pythons in SW Florida

2009 Press (& Florida cabinet) delegate to UNFCCC (climate change meetings, Copenhagen)

2009 Florida Trend Magazine - Icon for February issue (audience mainly business leaders)

2008 - on **Meg Lowman Treetops Camp** - science mentor to at-risk teenage girls, annual camp

2008 Funded and hosted Invasive Reptile workshop for state of Florida

2008 PASI - National Science Foundation graduate workshop, taught canopy ecology in Peru

2008 Pierian Academy, faculty for adult ecology education

2007 Featured in National Geographic Explorer, Natural History, and Smithsonian magazines for canopy exploration

2007 “No Child Left Indoors” proclamation to city and county of Sarasota; charter for Ecological Society of America and other environmental groups

2006 - on Website: [www.canopymeg.com](http://www.canopymeg.com) (~2 million hits per year)

2006 Feature article, Smithsonian Magazine

2005 - 15 **Science columnist *Nature’s Secrets***: North Carolina’s News & Observer and Charlotte Tribune, Sarasota Herald Tribune newspaper



- 2004 - 10 Tutored New College of Florida students in environmental outreach: leading hikes in local parks and creating hands-on science activities in local middle schools; 53 students participated and earned County Environmental Education Award in 2006
- 2004 Jason XV Project for youth education in the rain forests of Panama (over 50 broadcasts for schools and museums during January 2004, 3 million students) and co-authored curricula
- 2002 HGTV host for two botanical shows
- 2001 New York Times/National Geographic Profile TV Series
- 1999 Jason X Project in Science Education, Chief Scientist - international K-12 science education in forest canopies of Amazonian Peru
- 1999 Scientist featured in National Geographic TV special, *Heroes of the High Frontier*
- 1995 - 2010 Led Educators' Workshops for teachers about tropical ecology in Peruvian Amazon
- 1994 **Jason V Project, Chief Scientist** - international K-12 science education program with satellite linkage between classrooms and scientist at field sites; completed 61 live classes from the rain forest canopy of Belize; wrote curriculum with National Science Teachers Association
- 1993 Produced **Reading Rainbow** feature film about trees w/ Lavar Burton (of Star Trek), a national series to educate K-9 about science and reading
- 1991 Initiated first K-6 program for Williams College students to work with elementary classes to produce games that demonstrated environmental principles
- 1980 - on Lectures to numerous education groups including alumni societies, college students, high schools, and elementary classes each year
- 1979 - 83 Sydney University, Adult Education - proposed and designed two new biology courses, and taught all lectures and labs
- 1977 Massachusetts Audubon Society, Merck Forest, Vermont
- 1968 - 76 Taught science at one of America's first summer field science programs (Burgundy Wildlife Camp) and co-wrote curriculum from that program for the Department of Health, Education, and Welfare

### BOOK ACCOLADES

- 2022 The Arbonaut published in Australia, United Kingdom, Germany and paperback
- 2021 The Arbonaut - a memoir, Farrar Straus and Giroux with great reviews
- 2000-2019 Books translated into Korean, German, Chinese, Amharic, and Taiwanese
- 2006 Natural History magazine, Endnotes featured **It's A Jungle Up There**; numerous NPR Radio interviews and newspaper features; Smithsonian Magazine "centerfold"
- 2002 Asteroid Lowman near Jupiter named by Carolyn Shoemaker in honor of my book
- 2000 NY Public Library "**Books Every Teenager Should Read**" Award
- 2000 **Life in the Treetops** nominated for the Rachel Carson Book Prize, The John Burroughs Medal, The New York Book Award for the Best Debut of 1999, the 1998-2000 Educator's Award, PEN/Martha Albrand Award for the Art of the Memoir, Christopher Award, Phi Beta Kappa Award in Science
- 1999 Cover review on Sunday NY Times Book Review for **Life in the Treetops**

### RESEARCH EXPERIENCE & GRANTS

- 2021- Fund-raising \$10 million for Mission Green to build 10 canopy walkways and conserve 10 genetic libraries in endangered global forests
- 2017 Flagstaff Holdings and Habitat Foundation, \$100,000 to fund IBSS biodiversity expedition in Penang; and second grant for Jason Learning virtual education from



Spurlino Foundation, \$50,000 to accompany scientific expedition, Penang.

2017 NSF-REU travel supplement for grant #1359367 (\$14,568).

2017 IMLS (with U. CA – Santa Cruz) Developing and disseminating a genomic toolkit for the museum community (\$490,799)

2017-20 NSF advisory committees – OISE (international science & engineering); ERE (environmental research and education)

2016 National Geographic Herpetological Biodiversity in Ethiopia Church Forest Walls (\$26,000)

2016 Lakeside scholarships to host: Dr. Sinu Pallaty (India) and Dr. Alemayehu Wassie Eshete (Ethiopia) and Tizezew Sisay (Ethiopia) to study and collaborate at Academy

2015 Southwest Forest Service annual collaborative (\$50,000/yr)

2015 - 19 REU NSF grant – Undergraduate research in the cultural, economic, and ecological significance of church forests in South Gondar, Ethiopia (w/Colby College, \$406,038).

2015 - 19 NSF REU - Wheelchairs and Waterbears: 3D Access to survey forest canopy biodiversity, with special emphasis on inspiring mobility-limited students to seek careers in field biology (w/Baker University \$189,251).

2013 Picker Foundation grant to survey church forests of Ethiopia (w/Colgate U., \$148,000)

2013 Forest Service, biodiversity research and outreach in North Carolina (\$105,000)

2013 - 17 NSF MSP grant - Students Discover: Improving middle school STEM outcomes through scaling citizen science projects. (Co-PI for \$4,286,777.00 with NCSU and NC public schools)

2013 North Carolina university partnerships for Museum (~ \$430,000 per year)

2012 - 14 National Science Foundation RUI grant: Insect Biodiversity in Temperate Forest Canopies - Using canopy research to inspire the physically challenged to engage in careers in science (\$149,000, pilot)

2012 Forest Service partnership for biodiversity lab (\$130,000); Dunn lab partnership for Biodiversity Lab (\$90,000) and for Genomics Lab (~ \$150,000)

2011 Global town halls at NRC with Rolex Young Laureates, Rolex Corporation (\$25,000)

2010 National Geographic CI73-09 – Can Church Forests Conserve Insect Biodiversity in Ethiopia? (\$24,000)

2010 Ecology Education Summit (\$50,000 NSF; \$25,000 additional sponsors)

2010 Forest conservation and outreach (\$15,000 Spurlino Foundation; \$10,000 TRIAD)

2009 5<sup>th</sup> International Canopy Conference, Forest Canopies: conservation, climate change and sustainable use. (Indo-US Science & Technology Forum #99-2008 \$12,000 w/T Ganesh and Soubadra Devy)

2009 Church forests of Ethiopia, Spurlino Fdn (\$15,000 for religion & science workshop)

2009 Forest canopies – US-India Workshop: articulate and disseminate research priorities on forest canopies, Bangalore October 2009 w/K. Bawa (NSF \$31,000)

2009 Treehouses and canopy walkways - Ecology education in SW Florida (Triad \$10,000)

2008 Sarasota County - Invasive species ecology and ecology education (\$50,000)

2007 Economic Development Corporation, website development for regional government biological field station project (\$5,000)

2007 Canopy Ecology - regional and international (Triad \$25,000)

2006 National Science Foundation, informal science education, rain forest exhibit (\$75,000)

2006 Student Outreach in Science (SOS) - Environmental education grant (Community Foundation, \$11,000 grant co-written with NCF students)

2005 - 07 Canopy Ecology - Regional and international (Triad \$35,000)

2005 Economic Development Corporation - Field station green design (\$5,000)

2004 - 07 Sarasota County, environmental services to regional government (\$200,000)

2004 Jason X Project for Education, ACEER, Peru (~\$25,000)

2003 Aaron Foundation - Canopy ecology - Public programs (\$10,000)

2003 Herbivory protocols using canopy cranes - Global Canopy Program (\$26,178)

2002 Triad Foundation - Canopy ecology - Research and outreach (\$30,000)

2002 The Venice Foundation - Botanical collections (\$200,000)

2002 Phase I - Capital Campaign private donor acquisitions (\$1.3 mil)

2002 Selby Foundation - Memorial for botanical philanthropist, Marie Selby (\$75,000)

2001 Bank of America education grant for children's garden exhibits (\$25,000)

2000 State of Florida - Division of Historical Resources - Botanical Collections Security (\$1.5 mil)

1999 - 2003 National Science Foundation, links between the canopy and the forest floor (\$419,976) plus student participation: Ecological Circuitry Collaboratory (\$59,932)

1999 Selby Foundation - Matching grant for botanical improvements (\$500,000)

1998 - 2001 Long-term studies of trees in tropical and subtropical forests, worked with Joseph Connell and Ian Noble, National Science Foundation (\$250,000)

1998 - 99 Phytotelm plants of the Choco and their associated insect fauna, National Geographic Society (\$20,000)

1998 Forest Canopies 1998: Global Perspectives - National Science Foundation (\$20,000); United Nations Environmental Program (\$20,000)

1997 Epiphyte diversity in intact versus fragmented rain forests of Cameroon, Africa, National Geographic Society (\$19,800)

1996 Canopy ecology and ecotourism in Western Samoa, Seacology Foundation (\$10,000)

1994 Forest Canopy Conference: Forest Canopies: Ecology, Biodiversity, and Conservation, NSF (\$20,000); World Wildlife Fund (\$5,000)

1993 - 98 Long-term studies of trees in tropical and subtropical forests, with Joseph Connell and Ian Noble (NSF \$250,000)

1993 - 94 Jason V Project - Biodiversity in the rain forest canopies of Belize (~\$75,000)

1993 Smithsonian Visiting Scientist Fellowship to STRI, Panama (\$1,100)

1991 Herbivory in the rainforest canopies of Cameroon - Operation Canopée Expedition, Elf-Serepco (\$7,500)

1990 Canopy walkway construction, Hopkins Forest, Massachusetts, Miller Fund - Williams College (\$2,500) and Bronfman Science Fund (\$3,000)

1989 Mycorrhizal associations and survivorship of rain forest seedlings, UNE Faculty Grant for innovative projects (\$6,600)

1985 Effects of insect damage to root systems of eucalypts, Earthwatch (\$27,000)

1983 - 90 Eucalypt regeneration in dieback regions - Forestry Commission, Australian Research Grants Commission, Ruby Hills Pastoral Company (\$20,000)

1983 - 86 Postdoctoral research on herbivory and insect epidemics in Australian forests - Australian Research Grants Committee (\$122,600)

1982 - 88 Insect abundance and distribution in Australian rainforest canopies - Earthwatch (\$312,000)

1979 - 83 Miscellaneous marine research, including coral cay vegetation surveys, intertidal barnacle settlement, and photosynthesis on One Tree Island, Heron Island research labs, Great Barrier Reef and Cape Banks intertidal region, Sydney Australia

1976 Bronfman grant to reorganize herbarium for Williams College

1975 U.S. National Science Foundation REU student grant, investigating wood productivity of birch as energy source for New England towns (forest biomass surveys, computer regression models)

1974 Co-authored high school curriculum in environmental education for high schools  
(Department of Health, Education, and Welfare)

## **PUBLICATIONS**

### **Books:**

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### **National Leadership Reports:**

Aldo Leopold Leadership Program. 2019. Environmental leadership case studies. Chapter on Ethiopian church forests and bottom-up conservation (subm).

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NEON Tiger Team. 2008. Education Plan. <http://neoninc.org/documents/EdTigerTeamReport>  
NEON ISEP. 2006. National Ecological Observatory Network, Integrated Science and Education Plan. National NEON Design Committee, **MD Lowman** - co-chair education group, contributed to ISEP plan and writing: <http://www.neoninc.org/documents/ISEP>

Sarasota County Environmental Initiatives, FL. 2004-2009. Series of quarterly reports over 5 years to document environmental programs: invasive reptiles, science education outreach, development of Land Institute, conservation action plans, and other activities.

**Lowman MD.** 1974. Some Aspects of the Fabric of Life. US Department of Health, Education, and Welfare, 204 pp.

### **THESES:**

**Lowman MD.** 1982. Leaf Growth Dynamics and Herbivory in Australian Rain Forest Canopies. Ph.D. Thesis. Sydney University (Supervisors: Peter Myerscough and Joseph Connell).

**Lowman MD.** 1978. Phenology and Productivity of *Betula pendula* and *B. pubescens* in Scotland. Master's Thesis. Aberdeen University (Supervisor: Peter Ashton).

**Lowman MD.** 1976. Phenological Phenomena and Growth Studies for 16 Northern Hardwoods. Honors Thesis. Williams College (Supervisor: Henry Art).

### **SCIENTIFIC PUBLICATIONS**

Caviglia-Harris, J., K. E. Hodges, B. Helmuth, E. M. Bennett, K. Galvin, M. Krebs, K. Lips, **M. Lowman**, L. A. Schulte, and E. A. G. Schuur. 2021. The six dimensions of collective leadership that advance sustainability objectives: rethinking what it means to be an academic leader. *Ecology and Society* 26(3):9.

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### **INVITED, KEYNOTE AND CONFERENCE LECTURES (LIST IS NOT INCLUSIVE)**

(Average one talk per week on topics of rain forests, canopies, and girls in science)

#### **2020-2025**

- 2022- National Geographic Explorers Fest, keynote speaker
- 2022 – Missouri Botanical Garden evening lecture
- 2022- Terrescience podcast, Sirius XM truck-driver radio show, and over 50 other interviews
- 2022 – Lecture at Ranamafauna National Park, Madagascar
- 2022 – Numerous book talks about The Arbonaut, including Virginia Festival of Books and Arizona State University
- 2022 – Hosted Ginger Zee for Good Morning America TV in the canopy
- 2022 – Architecture School of Catalonia, Barcelona Spain

#### **2015 – 2020**

- 2019 – The Money Tree – Williams College in Costa Rica
- 2019 – Three fund-raising talks for Earthwatch Institute about forest research
- 2019 – Over 100 virtual talks to K-12 classrooms around the country
- 2019 – Keynote, International Treehouse Conference, Oregon
- 2019 – Keynote opening, Vermont Institute of Nature Studies new canopy walkway
- 2019 – National Geographic, 90<sup>th</sup> birthday tribute to EO Wilson
- 2019 – Quarryhill Botanical Garden, fundraiser for education, Glen Ellen CA
- 2019 – Conservation Solutions for Tropical Rain Forests – Williams College in the Amazon
- 2019 – Fund for Women Keynote speaker, Corning Glass Corporation, NY
- 2019 – Neue hohen erkletteren – wie das baumklettern forschung in baumkronen inspiriert hat, Tree Care Conference keynote, Augsburg Germany
- 2019 – Methoden der baumkronen-forschung im wald, Tree Care Conference Augsburg Germany
- 2018 – Google Sci-Foo camp, Lightning talk about Ethiopian church forests, Mountain View CA

- 2018 – Aldo Leopold Leadership workshop, University of Minnesota, MN
- 2018 – Muskoka Environmental Summit, Canada
- 2017 – Campuswide lectures at Butler University, Berea College, Univ. South Florida
- 2017 – Conservation Foundation annual lecture; Sequoia Zoo fund-raising lecture
- 2016 – Women in Science Summit co-chair, keynote speaker, moderator, California Academy
- 2016 – Holden Arboretum OH – Arbor Day distinguished lecture and launch of new walkway
- 2016 – Elon College NC – Visiting Scholar series
- 2016 – Penang Hill, Malaysia – Canopy walkways – exploring the 8<sup>th</sup> continent
- 2015 – Bhutan National Park Service – Canopy walkways for conservation and education
- 2015 – Elmira College invited commencement address
- 2015 Google Sci Foo Camp CA – Saving the forests of Ethiopia, one church at a time

**2010 - 2015**

- 2014 University of Chicago, 21<sup>st</sup> Century Scientists lecture series: Out on a Limb – challenges of women in science
- 2014 Diversity Lunch, Ecological Society of America: Game changers and innovation in Ecology
- 2014 Life in the treetops - Beloit High School, MI (~ 1000 students)
- 2014 It's a Jungle Up There - Challenges in global forest conservation, Roy Chapman Andrews Distinguished Explorer Award acceptance speech
- 2014 Keynote Opening speech, Science Online National Conference, Wheelchairs and Waterbears: inspiring underserved students in science, Raleigh NC
- 2014 Plant-insect interactions in forest canopies, EO Wilson Honorary Symposium
- 2014 Out on a Limb - Challenges of a woman in science, Wilson College commencement
- 2013 International Congress of Ecology (INTECOL) invited speaker - How religion and science can work together for integrated conservation solutions, London UK
- 2013 Biotechnology Center, Research Triangle Park, Summit introduction and moderator
- 2013 Students as catalysts for large landscape conservation, Colby College, ME - Keynote
- 2013 Shattuck-St. Mary's School, MN - Life in the Treetops - Challenges of jungle exploration
- 2013 Women in Science and Engineering (WISE) 10<sup>th</sup> anniversary, North Carolina State University - Out on a Limb - Challenges of a woman in science
- 2013 TEDx at NC School of Science and Mathematics - How I climb trees to save forests
- 2013 Salon lecture - Life in the Treetops - Challenges of tropical forest conservation
- 2012 Rolex Awards ceremony, New Delhi India - Life as an Arbournaut - Mentoring young Indian leaders
- 2012 St. Mary's College in the Woods, Indiana - Life in the Treetops: Challenges of women in science
- 2012 Jimma University, Ethiopia - New Perspectives for the Future of STEM Education
- 2012 NCREN keynote lecture - STEM Education at the New Nature Research Center: Linking Virtual and Real Nature
- 2012 Numerous research talks in the Daily Planet multi-media theater, Nature Research Center
- 2012 Ecological Society of America, Diversity Lunch: Generation Z
- 2012 University of Texas, Pan American - Challenges of women and minorities in science
- 2012 National Science Foundation K-12 keynote speaker, annual meeting, Washington DC - Out on a Limb - Linking Real and Virtual Nature for Generation Z
- 2012 SCOPE, NC State University, Raleigh - Annual keynote speaker
- 2012 Chapel Hill Audubon Society - Life in the Treetops - The birds and the bees of the canopy
- 2012 Science Café, Raleigh NC - I Speak for the Trees...

- 2012 Institute for Emerging Issues, annual meeting - Back to our Roots - Eating Healthy and Getting Children Outdoors
- 2012 Appalachian State University, Boone NC - Commencement speaker
- 2011 Princeton Alumni Association - STEM Education in America, from K through Gray
- 2011 Southeast Climate Science Center Workshop - Presentation, Climate Change Education - The NRC as a tool for researchers' broader impacts
- 2011 ScienceOnline Conference, Durham NC - Life in the Treetops - Challenges of scientists communicating to the public - Keynote lecture
- 2011 Martin Luther King Day presentation, Bethlehem Church, Durham NC - Saving the forests of Ethiopia, one church at a time
- 2011 Science Café, Tir Na Nog restaurant, Raleigh NC - Rain Forests - Going, going gone?
- 2011 Ashoka Trust for Research on Ecology and the Environment (ATREE), Bangalore India- UN International Year of the Forest - Inspiring New Stakeholders for Forest Conservation
- 2011 Earthwatch HSBC Bank field expedition, Bannerghatta National Park - A blueprint for a clean-energy future - Climate change, economics, and conservation
- 2011 Fulbright senior specialist scholar lecture series, India - Thiruvananthapuram, Kerala state, Department of Forestry headquarters, UN Year of the Forest - Inspiring New Stakeholders for Forest Conservation
- 2011 Fulbright Foundation Day, CPR Environmental Center, Forestry Department, Chennai India - Life in the Treetops - Forest Canopies Promote Conservation, Economics, and Education
- 2011 Fulbright forest lecture series, Guwahati, state of Assam India, Cotton College - United Nations International Year of the Forest: Inspiring New Stakeholders to Reverse Deforestation
- 2011 Lecture at Nimal Prava Bordoloi Girls Hostel, Handique Girls College, Latacil, Guwahati, Assam India - It's a Jungle Up There - Challenges of Women in Field Biology
- 2011 NCSU Department of Biology, Plant-Insect Interactions in Tropical Rain Forest Canopies
- 2011 NCSU Entomology Department, Plant-Insect Relationships in Forest Canopies - the Herbivory Perspective
- 2011 Nature Research Center - STEM Education in the 21<sup>st</sup> Century - Presentation for Deans of Extension, Engagement, and Economic Development, NCSU
- 2011 NCSU Veterinary School, annual lunch - Life in the Treetops - Challenges of Women in Field Biology
- 2011 Beta-diversity of human skin bacteria studied with the citizen science approach - Ecological Society of America's annual meeting
- 2010 Wiley Elementary School Science Night - How Many Species Exist on Planet Earth? K-5 science night
- 2010 Earthwatch Institute, Costa Rica - Rainforests 101 and Copenhagen Update
- 2010 Women in Science Forum, Ferrum College - Keynote speaker
- 2010 What will ecology education look like in 2020? - Chair and keynote at Ecological Society of America's annual meeting
- 2010 A blueprint for Florida's clean energy future - How canopy ecology and students contributed to shaping state climate change policy - Ecological Society of America's annual meeting
- 2010 Can scientists inspire local actions for environmental justice? Role and challenges of ESA's education outreach and diversity initiatives - Ecological Society of America's annual meeting



- 2010 Tropical conservation and education outreach, as influenced by Connell's legacy - Ecological Society of America's annual meeting
- 2010 An exploration of modeling the spread of the Burmese python, *Python mourois* - Ecological Society of America's annual meeting
- 2010 Virtual versus real ecology education - Ecological Society of America
- 2010 Education and Diversity - Vice President's Report, Ecological Society of America
- 2010 The View from Down-Under - Advances in ecology and education outreach through the legacy of Joe Connell - Invited paper at Ecological Society of America
- 2010 Diversity Lunch, Chair and Moderator - Ecological Society of America
- 2010 SOS: Student Outreach in Science - Engaging undergraduates to mentor high school students - Invited paper at Ecological Society of America
- 2010 Conservation of the church forests of Ethiopia - Updates on field research for expedition team, Bahir Dar Forestry department, Ethiopia
- 2010 Bugfest lecture series: 1. Stalking bugs by hot air balloon  
2. Bugs R Us - Research on insects in forest canopies
- 2010 Museum Advisory Board, Life in the Treetops - Flying high with the NRC
- 2010 Public phase committee, Life in the Treetops - Meet the new NRC director
- 2010 Friends of Museum Board meeting - It's a Jungle Up There - Challenges in science education
- 2010 Millions of beetles - Biodiversity and climate change at a crossroads? - Church talk in Chapel Hill NC
- 2010 Opening welcome talk, Sustainable Education Summit; invited talk on Virtual Versus Real Environmental Education (with Rob Stevenson, U. Mass)
- 2010 Summary and next steps for STEM education, Sustainable Education Summit
- 2010 It's a Jungle Up There - Challenges of women in science, Career Series, NCSU postdocs and graduate student career forum
- 2010 Rolex organized session, Geneva Switzerland - It's a Jungle Up There - Mentoring session for students from emerging countries
- 2010 Brimley Ball, keynote talk for fundraiser, Museum
- 2010 Lecture on The World, Tropical Rain Forests 101 - Exploration and research of global forests
- 2010 Lecture on The World, It's a Jungle Up There - Challenges of tropical forest conservation
- 2010 Out on a Limb - Canopy research as a tool for advancing conservation, lecture to NESCENT at Duke University, and mentoring lunch with graduate students
- 2010 Plant-Insect Interactions in Forest Canopies, seminar for Natural Resources Department NCSU

## **2005 - 2009**

- Connery Conservation Lecture, Tulane University, New Orleans LA - Invited keynote
- John Moran Distinguished Lecturer Series, Senior Academy, Sarasota FL - Invited
- Convocation lecture for Earth Day, Carleton College, MN - Invited keynote
- Environmental Panel for Earth Week, Princeton University, NJ - Invited
- Keep Sarasota Beautiful, FL - Invited keynote
- Fourth International Canopy Conference, Germany - Invited
- Seeing the Big Picture Symposium, Economic Development Corporation - Invited
- Science Festival, Flagstaff Arizona 2005 - Invited keynote
- Rutgers University, Ecology and Evolution seminar series - Invited
- Explorers Club, Naples chapter - Invited
- University of Nebraska, Earth Day 2006 - Invited

Jewish Women's Association donors' conference - Invited  
 Northern Trust Bank Golden Anchor clients - Invited keynote  
 Florida House Earth Day - Invited  
 Ecological Society of America, Memphis TN  
 Southern Utah University - Invited keynote  
 Presidential Dinner, The Explorers Club - Invited keynote  
 Lowell Thomas annual dinner, The Explorers Club 2006 - Invited honoree  
 SACNAS (Society of Chicanos and Native American Scientists), Tampa FL - Invited  
 Westover Academy, CT - Invited keynote  
 International Sustainable Construction Conference 2006 - Invited keynote  
 Frequent natural history lectures for community walks and local civic groups  
 Harvard-Yale-Princeton Club luncheon - Invited  
 SEEDS (Sustainable Ecology Education for Diverse Students) at Jasper Ridge  
 Biological Field Station, CA - Invited  
 Rachel Carson's birthday anniversary 2007, Chatham College, PA - Invited  
 ATBC Asian Chapter Inaugural Meeting, India - Invited keynote  
 Woods Hole Oceanographic Institution Gender & Equity Invited Speaker 2007 - Invited  
 Kutztown State University, PA "Take your daughter to work day" - Invited keynote  
 Villanova University, PA, Mendel Medal recipient 2007 - Invited lecture  
 Burgundy Country Day School, VA, Sevaeride Forum on Environmental Education - Invited  
 keynote  
 Florida Cabinet, "Climate Change Summit" 2007 - Invited keynote panel  
 Association for Tropical Biology and Conservation, Morelia MX 2007  
 Ecological Society of America, San Jose CA 2007  
 Elizabethtown College, PA - Invited keynote  
 Concord College, WV - Invited keynote  
 The Explorers Club, South Florida Chapter - Invited keynote  
 Utah Environmental Education Society, Moab UT - Invited keynote  
 MIT/Cornell Alumni - Keynote  
 Republican Club of Sarasota County - Invited keynote  
 American Association of University Women - Invited  
 Thiel College, Earth Week consortium 2008 - Invited keynote  
 PASI-NSF sponsored Tropical Ecology Collaboratory, Lima PE  
 Pine View High School - 2008 Earth Day assembly for grades 2-12  
 Florida Secretary's Association annual meeting, University of Florida 2008  
 University of Washington - Urban Horticulture, School of Forestry  
 Ecological Society of America (ESA) 2009 - Contributions of canopy research to public  
 education and understanding of ecosystem services  
 ESA 2008 - Session co-chair "No Child Left Indoors": An Action Plan for Future Involvement  
 by ESA Members  
 ESA 2008 - It's a jungle up there: Juggling academic life with book authorship  
 ESA 2008 - Science outreach for students: Connecting outreach and ecology  
 ESA 2008 - Using undergraduates to create an energy audit for local green business  
 ESA 2008 - Applications of treecodes to modeling herbivory in forest canopies  
 ESA/SER 2007 - It's a jungle up there: Writing for technical versus public audiences  
 ESA/SER 2007 - It's a jungle up there: Integrating canopy research with education outreach for  
 kids  
 ESA/SER 2007 - Modeling herbivory in forest canopies  
 ESA/SER 2007 - Out on a limb - Forest canopies

ESA/SER 2007 - The role of frugivorous birds and giant fruit bats as agents for reforestation in south India  
ESA/SER 2007 - Science outreach for students: Initiatives to connect local schools to ecology  
University of Wyoming, convocation address - Invited keynote  
Anniversary of Women's Right to Vote, FL - Invited keynote  
Millersville University, PA - Invited keynote  
Australian Ecological Society, Sydney 2008 - Plenary address  
Senior Friendship Center lecture series  
Baker University, KS 2009 - Invited lecture  
Gustavus Adolphus College - Linnaeus Symposium - Keynote speaker  
University of California, Santa Barbara - Biology Department 2009  
Ecological Society of America - Session chair: What will ecology education look like in 2020?  
Tiger Bay policy forum, Sarasota FL - Clean energy panel  
NSF Division of Undergraduate Education - Invited speaker  
University of Miami - Seminar speaker  
Various church, civic, and citizen groups in Sarasota and throughout Florida

### **2000 - 2004**

Convocation, SUNY Binghamton, New York - Invited keynote  
Singapore Botanical Gardens, Singapore - Invited  
World Orchid Conference, Malaysia - Invited speaker  
World Bromeliad Conference, Florida - Invited speaker  
Women and Science Symposium, University of Wisconsin - Invited keynote  
Delta Kappa Gamma, International Conference, Canada - Invited keynote  
Missouri Botanical Gardens, John Dwyer Lecture, Missouri - Invited keynote  
North Carolina State University, NC - Invited keynote  
Ecological Society of America, diversity luncheon panel, annual meeting, Arizona 2002 - Invited  
Association for Tropical Biology and Conservation, Panama  
Woodrow Wilson School of Public Policy, Princeton University - Invited  
Bowling Green State College, OH - Invited keynote  
University of Michigan - Invited keynote  
Eckerd College, FL - Invited  
Harvard University Club, FL - Invited  
Florida Science Teachers Association, Jacksonville FL - Invited keynote  
Cincinnati Zoo Conservation Lecture Series, OH - Invited keynote  
Sarasota Institute of Lifetime Learning, FL - Invited  
Eckerd College Community Lecture Series, FL - Invited  
Ecological Society of America, Portland OR  
The Global Canopy Debate, Eden Project, UK - Invited keynote  
SE Regional Garden Club of America, Sarasota FL - Invited keynote  
North Carolina State University Conservation Series, Raleigh NC - Invited  
Numerous talks at Rotary, Sertoma, church, school and civic groups, FL

### **1996 - 2000**

Alumni Speaker, Williams College, MA - Invited  
Brazilian Congress of Botany, Brazil - Invited keynote  
Botanical Gardens of Rio de Janeiro, Brazil - Invited  
ATB invited speaker session: Thinking globally and working globally: Ecological insights from inter-regional comparative studies, Providence RI

National Botanical Gardens, Bogor Indonesia - Invited  
Instituto de Ecologia Invited Visiting Scientist Program, Xalapa, Mexico  
Vision Dinner, Marie Selby Botanical Gardens - Invited keynote  
Global Studies 1998 Conference, University of Minnesota - Keynote speaker  
Chair, 2<sup>nd</sup> International Forest Canopies 1998: Global Perspectives, Sarasota FL  
Tropical Rain Forest Canopies Conference, Oxford University - Invited keynote  
Jason X speaker, BOCES, Long Island - Invited keynote  
Gifford Arboretum Distinguished Lecture, Miami FL 1999 - Invited  
Garden Club of America Awardee Dinner, New Jersey 1999 - Invited keynote  
International Rotary Governors Convention, Sarasota FL - Invited

### **1990 - 1995**

The Madeira School, VA - Invited keynote  
Botany Department, University of Hawaii, Manoa  
Museum of Comparative Zoology, Harvard University, MA - Invited  
Biology Department, Carleton College, MN - Invited  
Earthwatch, Center for Field Studies - Annual Conference, Boston  
International Epiphyte Conference, Selby Gardens, FL - Invited  
Pacific Science Congress, HI - Invited  
Audubon Naturalists/Smithsonian Institution, Washington DC - Invited keynote  
Faculty Club, Williams College, MA - Invited  
National Geographic Young Explorer, Washington, DC 1994 - Invited keynote  
Chair, Canopy Symposium, AIBS, Honolulu HI  
World Wildlife Fund, Washington DC - Invited  
Selby Gardens, Board of Trustees, FL  
Chair, 1<sup>st</sup> International Forest Canopy Conference, Sarasota FL  
Geneva Sayre Invited Lecture, Russell Sage Colleges, NY 1995 - Invited keynote  
Tropical Rain Forest Destruction Conference, Cambridge University, UK - Invited  
British Entomological Society, London, UK - Invited  
Professor Lampton Invited Annual Lecture, West Georgia College, GA

### **1980 - 1989**

Royal Botanic Gardens, Sydney NSW Australia - Invited  
CSIRO Division of Plant Industry, Canberra Australia - Invited  
Herbivory Conference, Kosciuszko National Park, VIC Australia - Invited  
Australian Entomological Society Annual Conference, Australia  
CSIRO, Entomology Division, Canberra Australia - Invited  
Biology Department, University of California, Santa Barbara CA  
Lamington National Park, QLD Australia  
Center for Field Studies (Earthwatch), MA - Invited  
CSIRO Rain Forest Research Unit, Atherton, QLD Australia  
Entomology Department, Pennsylvania State University, PA - Invited  
Organization for Tropical Studies (OTS) 25th Silver Jubilee Symposium (Miami FL) and  
workshop at La Selva, Costa Rica - Invited  
Soil Conservation Annual "Trees on Farms" Conference, University of New England, NSW  
Australia - Invited