

MOLLY R. ROSKE

Executive Director
Fundación Cordillera Tropical
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EDUCATION

Yale University, School of Forestry & Environmental Studies, New Haven, Connecticut
Master of Forest Science 2014

College of St. Benedict | St. John's University, Saint Joseph, Minnesota
B.A. Environmental Studies and Spanish 2008

PROFESSIONAL EXPERIENCE

[Fundación Cordillera Tropical](#), Cuenca, Ecuador Jan 2017-present
Executive Director

- Develop and oversee completion of direct conservation projects, research and monitoring, capacity-building trainings for professionals, and regional environmental education programs
- Direct all fundraising, budget and grant oversight, and donor-relations activities with international donors and Ecuadorian public-sector funders
- Legally represent the Foundation before governmental and academic institutions, donor agencies, and in interinstitutional negotiations and collaborative spaces

Department of Forest & Rangeland Stewardship, Colorado State University, Fort Collins, Colorado
Research Associate Jan-Dec 2016

- National Coordinator of the Adaptive Silviculture for Climate Change (ASCC) study, a collaborative network of research sites to provide scientific insight on and tangible demonstrations of climate change adaptation in forest management across distinct U.S. forest types
- Develop and carry out climate change adaptation trainings, workshops, vulnerability assessments and other outreach activities translating latest science and best practice for forest and natural resource managers ([including online](#))
- Perform project and budget management duties on awarded grants and sponsored projects, and contribute to and edit manuscripts for publication resulting from funded research

[Cloquet Forestry Center](#), University of Minnesota, Cloquet, Minnesota June 2014-Dec 2015
Research Fellow / Scientist

- Lead logistics planning and assist delivery of two-week National Advanced Silviculture Program (NASP) courses, for advanced state and federal land manager (silviculturist) certification
- Coordinate with partner scientists to advance the development, implementation and communication of the Adaptive Silviculture for Climate Change (ASCC) study, a collaborative research project across the U.S.
- Synthesize and communicate information on forest ecosystems' ecology and management with regard to climate impacts and vulnerabilities, through development of web and print materials

Yale School Forests | Ashton Silviculture Lab, New Haven, Connecticut Aug 2012-May 2014
Research Coordination Assistant

- Designed and implemented research on stream flow fluxes associated with forest operations at Yale-Myers Forest; constructed database for long-term watershed research and monitoring
- Wrote bimonthly [Research Reports](#) highlighting research underway in the School Forests and interpreting findings for area professionals/practitioners
- Provided maintenance to School Forests webpage and managed outreach database

Smithsonian Tropical Research Institute, Panama

May-Aug 2013

Graduate Researcher / Intern

- Conducted individualized master's research including social analysis with cattle ranchers, remote-sensing analysis and field data collection investigating impacts of riparian forest buffers on stream geomorphology & health in a ranching region of Panama's dry tropics
- Established and tested a stream assessment protocol for this region, adapted from North American geomorphic assessment protocols
- Wrote a streamside forest buffer assessment handbook for landowners (predominantly cattle ranchers) in Panama's Azuero peninsula, in collaboration with the Environmental Leadership and Training Institute

Environmental Leadership and Training Initiative, New Haven, Connecticut

Sept 2012-Aug 2013

Training Program Assistant

- Developed online training course module for 30 international environmental professionals on implementing ecosystem monitoring protocols for adaptive management
- Provided ongoing web publication of searchable article summaries to improve coverage of the latest work in tropical reforestation and ecological restoration as related to water resource issues

U.S. Peace Corps, Totonicapán, Guatemala

Jan 2009-Feb 2012

Coordinator for Rainforest Alliance | Indigenous Council partnership – 2011-2012

- Negotiated Rainforest Alliance's partnership with the Indigenous Communal Mayors' Council of Totonicapán to provide support for management of 21,000 ha of communal forest
- Implemented \$5,000 USAID / Rainforest Alliance Inc. funding as culturally-appropriate reforestation activities, freshwater spring maintenance/rehabilitation, and climate change mitigation/adaptation trainings
- Adapted Rainforest Alliance's climate- and forest-focused environmental education materials for publication in Guatemala, and established teacher trainings in 5 rural forest-dependent communities
- Facilitated field data collection for CARE | Guatemala's Verified Carbon Standard (VCS) regional communal forestland inventories and household surveys
- Served as a Peace Corps | Guatemala delegate to the Minister of Education's Advisory Board on Natural Disaster Preparedness and Climate Change Education for a one-year term
- Participated in regional multisector Climate Change Roundtable for two years advocating for climate vulnerability research, mitigation/adaptation strategies, private-sector involvement and policy change

Sustainable Community Tourism/Environmental Education Facilitator – 2009-2011

- Developed and delivered interactive forest-ecosystem education programs for children with counterpart agency "El Aprisco" Park and Nature Trail, and trained staff on appropriate participatory pedagogy
- Provided trainings for coworkers, area teachers, community leaders and other Peace Corps volunteers on environmental education, climate change and trash management
- Taught middle-school environmental science; led student case study of local household water use

Murie Science and Learning Center, Denali National Park and Preserve, Alaska

May-Sept 2008

Science Educator and Field Naturalist

- Developed and delivered participatory science seminars and field walks for Park visitors, interpreting central Alaska's major biological and earth science research to public interactive short courses
- Guided multi-day backcountry topics-courses with lead Park Service scientists, for visiting teachers and professionals

GRANTS, SCHOLARSHIPS & FUNDED PROJECTS

- Collaboration Program in Natural Resources, Cohort IV: University of Wyoming Ruckleshaus Institute on the Environment. 2016. (Year-long 6-session course with Collaboration-Negotiation capstone project.)
- *Land Use Change, Forest Fragmentation and Riparian Ecosystem Health in the Dry Tropics of Panama*, 2013. [Tropical Resources Institute Fellowship](#), Tinker Fellowship for Latin American Studies, Carpenter-Sperry Award for Graduate Research. \$8,000.
- *Sensibilización Ambiental y Reforestación: Recursos Naturales de los 48 Cantones de Totonicapán*, 2011. U.S. Agency for International Development (USAID), \$200,000 (collaborator).

PUBLICATIONS, PRESENTATIONS, & TEACHING

Presentations & Conferences

- *Congreso Ecuatoriano de Restauración de Paisajes II*, Scientific and Planning Committees, October 2018
- *Planificación y Prácticas en Adaptación al Cambio Climático para Áreas Protegidas*. 26th International Course in Protected Areas Management. Center for Protected Areas Management, Colorado State University, Fort Collins, CO, July 2016. Invited workshop facilitator, full day.
- *Climate Change Adaptation Options for Managers: the Resistance, Resilience, and Transition Framework*. Invited webinar for USDA Climate Hubs Climate Adaptation Online course, Forestry module (June 2016)
- *Society of American Foresters 2015 Convention*, Presenter (Baton Rouge, LA, Nov 2015)
- *IUFRO Forest Change 2014 Conference*, Presenter (IUFRO Forest Resources Inventory & Monitoring Unit, Freising, Germany, April 2014)
- *Society of American Foresters 2013 Convention*, Presenter, 3rd Place Student Presentation (Charleston, SC, Oct 2013)
- *International Society of Tropical Forestry*, Planning committee (New Haven, CT, Jan 2013 and 2014)
- *National Conference on Science, Policy and Environment*, delegate on behalf of Peace Corps | Guatemala and Rainforest Alliance | Guatemala (Washington DC, Jan 2012)
- *North American Association for Environmental Education Convention*, Presenter (Wichita, KS, Oct 2008)
- *4th World Environmental Education Congress*, Scientific Planning Committee and co-presenter (Durban, South Africa, July 2007)

Publications

- Roske, M.R., C.A. Schloegel, and D. Houkal. Restauración participativa mediante programas de reforestación silvopastoril y ribereña: estudio de caso de las microcuencas Mazar y Dudas de los Andes surorientales del Ecuador. In *Recuperando el bosque: experiencias de restauración forestal en los Andes Húmedos*, Bustamante Ponce, T. and J.I. Zalles, eds. 2018. FLACSO-AbyaYala. (Manuscript in prep.)
- Nagel, L.M., B.J. Palik, M.A. Battaglia, A.W. D'Amato, J.M. Guldin, C.W. Swanston, M.K. Janowiak, M.P. Powers, L.A. Joyce, C.I. Millar, D.L. Peterson, L.M. Ganio, C.K. Kirschbaum, M.R. Roske. 2017. Adaptive silviculture for climate change: a national experiment in manager-scientist partnerships to apply an adaptation framework. *Journal of Forestry* xx:xx (published online ahead of print). <https://doi.org/10.5849/jof.16-039>
- Roske, M.R., L.A. Joyce, L.M. Nagel, and L.K. Peterson. The Rio Grande National Forest Climate Change Plan Revision Workshop: designing a science-management collaborative process to address 2012 Planning Rule climate change concerns at the Forest Plan scale. USDA Forest Service, Rocky Mountain Research Station, Research Note Series (in review).
- Roske, M.R. and M.S. Ashton. Stream and riparian forest conditions within pasturelands of a dry tropical forest region of Panama (in prep).

Teaching Activities

- Forest Adaptation Planning & Practices: Online Course. Lead instructor. Northern Institute of Applied Climate Science (USDA Forest Service), University of Minnesota, and Colorado State

University, Jan-Feb 2016.

- National Advanced Silviculture Program (NASP) for the USDA Forest Service, Ecological Systems Module. Co-coordinator 2014 and 2015.
- National Advanced Silviculture Program (NASP) for the USDA Forest Service, Lake States Silviculture Module. Coordinator, Instructor “Adaptive Management & Climate Change” section, 2015.
- Observing the Earth from Space: Remote Sensing of the Environment I. Teaching Fellow. Yale University, spring semester 2014.

SKILLS & QUALIFICATIONS

- Graduate-level work in forest ecology, silviculture, hydrology, geomorphology, ecosystem services, geospatial analysis, remote sensing, research design, statistics
- Software applications: ArcGIS, ENVI Remote Sensing, R Statistical Analysis, Matlab, Adobe CS6 suite, Microsoft Office suite
- Spanish written and oral fluency