

EDUCATION

University of Texas at Austin (Austin, TX)

PhD Candidate, Department of Geography and the Environment, August 2016 - To Date

-Focusing on Biogeography and Land Change Science, GPA 3.97

-Working towards the Portfolio in Applied Statistical Modeling

University of Michigan School of Natural Resources and Environment (Ann Arbor, MI)

Master of Science, Natural Resources and Environment

-Conservation Ecology and Behavior, Education and Communication, GPA 3.66, May 2015

-Spatial Analysis Certification, Geographic Information Systems (GIS), August 2015

-Focus on Conservation Biology, Ecological Restoration, and Terrestrial Ecology

Pontifical Catholic University of Ecuador (PUCE) (Quito, Ecuador)

Bachelor of Science, School of Exact and Natural Sciences

-Biology, May 2011

-Focus on Forest Dynamics and Ecophysiology of Andean forests

RESEARCH EXPERIENCE

Consortium for the Sustainable Development of the Andean Ecoregion, (Quito, Ecuador)

Specialist of Andean Forests (May 2016 - To Date)

-Designed and performed statistical analysis for ecological restoration project based in Peru funded by the Global Environment Facility.

-Produced manuscript for submission to peer-review journal.

Sitka Conservation Society, Student Research Consultant (Sitka, AK) (January 2014-April 2015)

-Produced an Integrated Resource Management Plan for Kruzof Island as part of an interdisciplinary team of eight people.

-Evaluated the development of restoration projects carried out by the US Forest Service.

-Created a monitoring plan to accurately document the effects of future restoration projects that will be taking place on Shelikof Creek.

Amazon Conservation Association (ACA), Student Research Consultant (Washington, D.C.) (September 2014-December 2014)

-Developed a multi-criterion decision-making model in ArcGIS for land use allocation in four departments of the Peruvian Amazon that had undergone deforestation from 1990 to 2012.

-Determined suitable areas for palm oil plantation placement versus suitable areas for restoration efforts in the selected deforested areas.

Pontifical Catholic University of Ecuador, Student Researcher (Quito, Ecuador) (August 2008-May 2011)

-Developed the research project "*Radial tree growth, leaf exchange and decomposition of three species of Polylepis (ROSACEAE) in two sites of the Ecuadorian Andes.*"

-Authored successful research proposal resulting in \$15,000 of funds offered by the Pontifical Catholic University of Ecuador.

WORK EXPERIENCE

University of Texas at Austin, Graduate Student Instructor (Austin, TX) (August 2016 - To Date)

-Discussion leader for laboratories or discussion sections for the following courses: Introduction to Human Geography; Environmental Geographic Information Systems; Field Techniques;

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Landscapes of Mexico and Caribbean America; South America: Nature, Society and Sustainability (study abroad course in Ecuador); Advanced GIS (Fall 2018 and currently).

Consortium for the Sustainable Development of the Andean Ecoregion, Specialist of Andean Forests (Quito, Ecuador) (September 2015-April 2016)

-Developed and implemented methodology for project concerning migration of upper treeline due to climate variability using seed traps and seedling recruitment with undergraduate thesis student.

Amazon Conservation Association, Science Research Intern (Washington, D.C.) (June 2014-August 2014)

-Revised and managed the submission of monthly reports and other reports of ACA-directed science projects produced by the science coordinators of ACA's three biological stations in Peru.
-Conducted research for various ongoing projects including environmental impact assessment violations in Ecuador and monitored deforestation alerts using Landsat imagery in Peru.
-Collaborated in the development of an ICAA-USAID research grant proposal resulting in \$150,000 for funding to develop a project to monitor deforestation using satellite imagery.

Natural Areas Preservation Program, Student Consultant (Ann Arbor, MI) (January 2014-April 2015)

-Developed a restoration model for the Weatherbee Woods Preserve in Superior Township for an area dominated by invasive species.

Consortium for the Sustainable Development of the Andean Ecoregion, (Quito, Ecuador) Support Specialist (December 2010-June 2012)

-Created an inventory of flora for the Pichincha Volcanic Complex for the Global Observation Initiative in Alpine Environments (GLORIA) to monitor climate change effects over time.

Botanist Consultant (August 2011-December 2011)

-Developed vegetation surveys for the creation of the Vegetation Map of Ecuador by the Ecuadorian Department of the Environment.

-Managed the budget for the field surveys and coordinated the team's logistics in the field.

Pontifical Catholic University of Ecuador (Quito, Ecuador)

Editor (November 2011-June 2012)

-Edited 146 species descriptions for the following publication: Romoleroux, K., Tandalla, D. C., Erler, R., & Navarrete, H. (2016). *Plantas vasculares de los bosques de Polylepis en los páramos de Oyacachi*. Pontificia Universidad Católica del Ecuador.

Assistant Curator (January 2008-December 2010)

-Trained and supervised volunteers and training fellows for the QCA (Quito, *Católica*) Herbarium.
-Organized and classified plant samples in the herbarium according to updated global botanical databases.

CONFERENCES AND PRESENTATIONS

Invited Speaker (November 7, 2018): Guest lecture in Landscape Ecology course taught by Dr. Molly Polk titled: "*The art and science of ecological restoration.*"

Invited Speaker (June 21, 2018): Guest lecture in the course South America: Nature, Society and Sustainability taught by Dr. Gregory Knapp titled: "*Indigeneity and environmentalism: The quest for autonomy.*"

35th Conference of Latin Americanist Geographers (May 20-22, 2018): Paper presentation titled: "*Ecological restoration for sustaining alpaca pastoralism in the Andean highlands.*"

2018 Annual Meeting of the American Association of Geographers (April 10-14, 2018): Paper presentation titled: "*Dynamics of Polylepis forests in the Ecuadorian Andes.*"

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7th World Conference on Ecological Restoration, Foz do Iguassu, Brazil (August 27- September 1, 2017): Paper presentation titled: “*Evaluation of peatland restoration methods as a means for sustaining alpaca pastoralism in the Peruvian highlands.*”

32nd Ecuadorian National Biology Conference, Loja, Ecuador (November 20-22, 2008): Poster titled: “*Dynamics of Polylepis forests in two sites of the Ecuadorian Andes.*”

PUBLICATIONS

Duchicela, S., Cuesta, F., Pinto, E., Gosling, W., Young, K. 2019. Indicators for assessing tropical alpine rehabilitation practices. *Ecosphere* 10(2): e02595. 10.1002/ecs2.2595.

Duchicela, S., Romoleroux, K. (in progress). Climatic factors affecting radial and apical growth of *Polylepis* species.

Duchicela, S., Cuesta, F., Pinto, E. (in progress). Effects of interacting anthropogenic stressors on páramo ecosystems in the Ecuadorian Andes.

FELLOWSHIPS AND AWARDS

University of Texas- Austin, Graduate Continuing Fellowship: September 2019-August 2020

University of Texas-Austin, Graduate Continuing Bruton Fellowship: September 2018

University of Texas-Austin, International Office, Global Research Fellowship: December 2017

Conference of Latin Americanist Geographers, Student Field Study Award: April 2017

Robert E. Veselka Endowed Fellowship for Graduate Research Travel: May-August 2017

Ecuadorian Ministry of Higher Education, Science, Technology and Innovation's (SENESCYT)

Excellency Scholarship for Postgraduate Studies: September 2013-May 2015

Herbarium Training Fellowship: September 2006-January 2008

GRANTS

The National Geographic Society-Early Career Grant: January 2019 (\$10,000) for “*Ecological restoration practices in high Andean ecosystems: Evaluating vegetation dynamics and land-use transitions.*”

SERVICE, OUTREACH AND LEADERSHIP POSITIONS

5th International Conference of Ecology and Conservation of *Polylepis* forests, (Quito, Ecuador).

-*Publication Committee (2019)*

Graduate Association of Geography and the Environment-University of Texas-Austin (GAGE), (Austin, TX).

-*Vice-president (September 2018-present)*

-*Historian (September 2017-May 2018)*

SKILLS, PROFESSIONAL SOCIETY MEMBERSHIPS AND VOLUNTEER WORK

Computer Skills: Microsoft Office (Word, Excel, PowerPoint), SPSS, SAS, R, Adobe Software, ArcGIS, ERDAS Imagine, Python Programming Language.

Language Skills: Spanish (native), English (native), French (listening and reading: novice)

Professional Society Memberships: Ecological Society of America (since 2018), American Association of Geographers (since 2016), Society of Ecological Restoration (since 2018).

Volunteer Work: coordinated tourism promotional packages to Ecuador with Tsaitami Travel (2013); translated educational material from English to Spanish for Rainforest Alliance in New York (2009).