

Lorena M. Benitez

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EDUCATION

PhD in Atmospheric and Environmental Sciences

2022- Present

Satellite Data in Environmental Science Centre for Doctoral Training (SENSE CDT)

School of Geosciences,

University of Edinburgh, Edinburgh, UK

Master of Environmental Science

2020

Yale School of the Environment,

Yale University, New Haven, CT

Bachelor of Arts in Integrative Biology

2017

Harvard University, Cambridge, MA

Publications

Benitez, L., Muchawona, A., Bowers, S., Chinofunga, A., Nyamugadza, E., Gotore, T., & Ryan, C.M. (In prep). Mapping the vegetation of Zimbabwe and assessing its composition, diversity, and carbon stocks.

Benitez, L., Parr, C.L., Sankaran, M., & Ryan, C.M. (In Review). Fragmentation in patchy ecosystems: call for functional not structural definitions. *Trends in Ecology and Evolution*.

Gotore, T., Muchawona, A., Ryan, C.M., **Benitez, L.**, Gumbo, S.C., Godlee, J.L., Mograbi, P., Murepa, R., Mutete, P., Nyamugadza, E., Tembani M.C., Archibald, S.(In Review). Tree-tree competition as a major constraint on growth in the teak woodlands of Zimbabwe. *Biotropica*.

Davies, R., Ryan, C.M., Harrison, R.C., Dexter, K., Ahrends, A., **Benitez, L.**, ... Edwards, D. (2023). Precipitation gradients drive high turnover in the world's largest savanna woodland. *Ecography*, e06720.

Benitez, L., Kilian, J. W., Wittemyer, G., Hughey, L. F., Fleming, C. H., Leimgruber, P., ... & Stabach, J. A. (2022). Precipitation, vegetation productivity, and human impacts control home range size of elephants in dryland systems in northern Namibia. *Ecology and Evolution*, 12(9), e9288.

Benitez, L., & Queenborough, S. A. (2021). Fruit trees drive small-scale movement of elephants in Kibale National Park, Uganda. *Biotropica*, 53(6), 1620-1630.

Benitez, L. (2020) Using protected area shape to model the impact of hunting and access on the survival of an economically valuable species. *Tropical Resources Bulletin*, 39.

Jones, K. E., **Benitez, L.**, Angielczyk, K. D., & Pierce, S. E. (2018). Adaptation and constraint in the evolution of the mammalian backbone. *BMC Evolutionary Biology*, 18(1), 172.

Awards and Fellowships

NSF Graduate Research Fellowship- Honorable Mention

2020

Best Master's Presentation, Yale Forestry & Environmental Studies Research Conference

2020

Leadership Scholarship (\$50,000), Yale School of Forestry and Environmental Studies

2018-2020

George Peabody Gardner Fellowship (\$24,000), Harvard University

2017

Job & Research Experience

School of Geosciences, University of Edinburgh, Edinburgh, UK

A Socio-Ecological Observatory for Southern African Woodlands ([SEOSAW](#)) Project Officer

2021- 2023

Resolving the current and future carbon dynamics of the dry tropics ([SECO](#)) Project Officer

2021-2022

Smithsonian Conservation Biology Institute, Front Royal, VA

Movement of Life Intern

2020-2021

Save the Elephants, Nairobi, Kenya

Remote volunteer

2020

Rare and Endangered Species Trust (REST), Outjo, Namibia

Researcher and Primary Animal Caretaker

2017-2018

Koobi Fora Field School, Lake Turkana, Kenya

Undergraduate Researcher; NSF Fellowship Recipient

2016

Professional Service

International Union for the Conservation of Nature (IUCN) World Conservation Congress, Marseille, France

Head of Delegation for the Yale Tropical Resources Institute, 2021

Graduate Assistant to the IUCN World Commission on Protected Areas Beyond the Aichi Targets Task Force, 2021

Ad Hoc Reviewer: International Journal of Biodiversity & Conservation, Ecology & Society, Environment and Natural Resources Journal, Biodiversitas Journal of Biological Diversity

International Society of Tropical Foresters Conference (ISTF), New Haven, CT

Content Director, 2020; Poster Coordinator, 2019

Presentations

Invited

2022 Benitez, L. **Elephant-landscape interactions across scales: Case studies from Uganda and Namibia**, CREAM Futures, Ecological and Forestry Applications Research Centre (CREAF), Autonomous University of Barcelona, Barcelona, Spain.

2022 Benitez, L. **Elephants, Trails, and Fruit Trees: A Case Study from Kibale National Park, Uganda**, Behaviour, Physiology and Ecology Seminar Series (BEPSS), Bangor University, Virtual.

Contributed

2023 Benitez, L. & Ryan, C. M. Gaps in Fragmentation: Existing literature on habitat fragmentation ignores social impacts and savanna ecosystems. *Lighting Talk*. **Forests & Livelihoods: Assessment, Research, and Engagement (FLARE) Network Annual Meeting**, Nairobi, Kenya.

2023 Benitez, L., Muchawona, A., Bowers, S., Chinofunga, A., Nyamugadza, E., Gotore, T., & Ryan, C. M. Mapping the vegetation of Zimbabwe and assessing its composition, diversity, and carbon stocks. *Flash Talk*. **Savanna Science Network Meeting**, Kruger, South Africa.

2021 Benitez, L., Kilian, W., Wittemyer, G., Hughey, L.F., Fleming, C.H., Leimgruber, P., and Stabach, J.A. Environmental and anthropogenic factors predict elephant home range size across Namibia. *Contributed Talk*. **Ecological Society of America Conference**, Virtual.

2020 Benitez, L.M. Fruit Trees Influence Elephant Movement in East African Forests. *Flash Talk*. **Yale Forestry & Environmental Studies Research Conference**, New Haven, CT.

2020 Benitez, L.M. Resource Acquisition and Path Efficiency of Elephant Trails in Kibale National Park, Uganda. *Flash Talk*. **Tropical Resources Institute Research Symposium**, New Haven, CT.

2020 Benitez, L.M. Reconciling the Role of Elephants in Restoration. *Flash Talk*. **International Society of Tropical Foresters Conference**, New Haven, CT.

2019 Benitez, L.M., Watts, D.P. Determining the Drivers and Efficiency of Elephant Trails in Kibale National Park, Uganda. *Poster*. **The Wildlife Society Conference**, Reno, NV.

2017 Benitez, L.M., Llera, C., Biernat, M., Braun, D.R., Hammond, A.S., Patterson, D.B., Barr, W.A. The Implications of Faunal Abundance for Pleistocene Paleoenvironments in the Turkana Basin, Northern Kenya. *Poster*. **Paleoanthropology Society Conference**, Vancouver, BC.

2017 Benitez, L.M., Jones, K.E., and Pierce, S.E. Vertebral Anatomy and Locomotor Evolution in Mammals: A Geometric Morphometrics Approach. *Poster*. **Society of Integrative and Comparative Biology Conference**, New Orleans, LA.

Workshops and Teaching

Emission Factor from Deforestation Training Workshop, Harare, Zimbabwe 2022
Capacity Building Initiative for Transparency Climate change in Zimbabwe
Instructor

SEOSAW Herbaceous Protocol Training Workshop, Morogoro, Tanzania 2022
Logistics Coordinator

SEOSAW Data Cleaning and Analysis Workshop, Harare, Zimbabwe 2022
Instructor

Course Organizer
Global Conservation Policy and Planning Independent Study, Yale YSE 2020

Teaching Assistant
Ecological and Environmental Analysis, University of Edinburgh 2024
Principles of Ecology and Evolutionary Biology, Yale College 2020
Genetics and Development, Yale College 2019, 2020
Comparative Anatomy of Vertebrates, Yale College 2019