

Fall 2019 Faculty Highlights

Geography and Environmental Systems (GES)

University of Maryland Baltimore County

Presentations

Erle Ellis gave an invited seminar at the Center for the Advanced Study of Human Paleobiology at George Washington University, entitled “Evolving the Human Niche: Foragers, Farmers and Globalized Societies.” Nov 13, 2019.

David Lansing and Ph.D. student *Jaime Barrett** gave an invited presentation at *Cornell University's* College of Veterinary Medicine entitled "Contrasting Perspective on Prudent Use of Antibiotics in Agriculture." Dec 6, 2019.

Alan Yeakley gave an invited seminar at *Oregon State University* entitled “Plant community responses to hydrologic changes in Pacific Northwest urban and coastal ecosystems.” Nov 13, 2019.

Ashanté Reese presented her new book entitled “Black Food Geographies” to a packed house at *Red Emma's* in Baltimore. Sept 26, 2019.



Grants and Awards

Dawn Biehler, Maggie Holland: Hrabowski Innovation Fund Seed Award entitled “Climate Change and Society: Global Change in the Context of Maryland.”

Erle Ellis: Chinese Academy of Sciences President’s International Fellowship Initiative (PIFI) Visiting Scientist for 2020 with the Institute of Geographic Sciences and Natural Resources Research (IGSNRR).

Chris Swan: CAHSS Research Fellowship for 2020-2021 entitled “The Ecology of Leaf Litter Breakdown in Freshwater Ecosystems.”

Invitations

Erle Ellis was invited as a keynote speaker in the workshop “Implementing Bold Global Conservation Targets” at the IUCN World Conservation Congress, Marseille, France, Jun 14, 2020.

Ashante’ Reese was invited to join as a panelist at *A Seat at the Table*, a social justice-oriented participatory program at the *National Museum of African American History and Culture*. Mar 19, 2020.

Publications

(student advisees shown in *italics*)

Ellis, EC 2019. Nature as Designer: Emancipating Nonhuman Ecologies in an Increasingly Human World. Pages 60-71 in F. Steiner, R. Weller, K. M'Closkey, and B. Fleming, editors. *Design with Nature Now*. Lincoln Institute of Land Policy in association with the University of Pennsylvania School of Design and The McHarg Center, Cambridge, MA.

Fagan ME, Reid JL, **Holland MB**, *Drew JG**, and R. Zahawi. *In press*. How feasible are global forest restoration commitments? *Conservation Letters*. <https://doi.org/10.1111/conl.12700>

Mahmoudi D, Lubitow A, and Christensen MA. 2019. Reproducing spatial inequality? The sustainability fix and barriers to urban mobility in Portland, Oregon. *Urban Geography* <http://doi:10.1080/02723638.2019.1698865>

*Van Appledorn M**, **Baker ME**, **Miller AJ**. 2019. Empirical evaluation of 2D unsteady hydraulic models for applications in floodplain forest ecology. *Physical Geography* <https://doi.org/10.1080/02723646.2019.1676186>.

*Johnson AC**, **Yeakley JA**. 2019. Microsites and climate zones: seedling regeneration in the alpine treeline ecotone worldwide. *Forests* 10, 864 <https://doi.org/10.3390/f10100864>

Valencia Y, Rodriguez-Sylva I, Lucero JA. *In press*. University Vs. The state of exception: The Challenges of Human Rights Research and the Colonial Roots of State Care. *NACLA*.

Received: 21 October 2019 | Revised: 13 December 2019 | Accepted: 18 December 2019
DOI: 10.1111/conl.12700



Conservation Letters Open Access WILEY
A Journal of the Society for Conservation Biology

LETTER

How feasible are global forest restoration commitments?

Matthew E. Fagan¹ | **J. Leighton Reid**² | **Margaret B. Holland**¹ |
Justin G. Drew¹ | **Rakan A. Zahawi**³

¹Department of Geography and Environmental Systems, University of Maryland, Baltimore County, Baltimore, Maryland

²School of Plant and Environmental Sciences, Virginia Tech, Blacksburg, Virginia

³Lyon Arboretum, University of Hawai'i at Mānoa, Honolulu, Hawaii

Correspondence

Matthew E. Fagan, Department of Geography and Environmental Systems, University of Maryland, Baltimore County, 1000 Hilltop Circle, Baltimore, MD 21250.
Email: mfagan@umbc.edu

Abstract

Numerous countries have made voluntary commitments to conduct forest landscape restoration over millions of hectares of degraded land in the coming decade. We consider the relative likelihood these countries will achieve their restoration commitments. Across countries, the area committed to restoration increased with existing forest and plantation area, but was inversely related to development status, with less developed countries pledging more area. Restoration commitments are generally large (median: 2 million hectares) and will be challenging to meet without the wholesale transformation of food production systems. Indeed, one third of countries committed >10% of their land area to restoration (maximum: 81%). Furthermore, high rates of land cover change may reverse gains: a quarter of countries experienced recent deforestation and agricultural expansion that exceeded their restoration commitment area. The limited progress reported by countries, and the sheer scale of commitments, raises serious questions about long-term success, especially absent necessary monitoring and management plans.

KEYWORDS

biodiversity conservation, Bonn Challenge, carbon storage, deforestation, forest landscape restoration, longevity, persistence, REDD+, reforestation, sustainable development

Note: this newsletter presents just a sample of the work of GES faculty during Fall 2019; please see <https://ges.umbc.edu/> for more!