

NSF BIOGRAPHICAL SKETCH

NAME: Leggett, Zakiya

POSITION TITLE & INSTITUTION: Assistant Professor, North Carolina State University

(a) PROFESSIONAL PREPARATION

INSTITUTION	LOCATION	MAJOR / AREA OF STUDY	DEGREE (if applicable)	YEAR YYYY
Tuskegee University	Tuskegee, AL	Natural Resources	BS	1999
Duke University	Durham, NC	Forestry	MF	2000
North Carolina State University	Raleigh, NC	Forest Soils	PHD	2004

(b) APPOINTMENTS

2016 - present Assistant Professor, North Carolina State University, Raleigh, NC
2015 - 2016 Principal Advisor/Owner, Sustainable Innovative Solutions, LLC, Raleigh, NC
2004 - 2014 Sustainability Scientist, Weyerhaeuser Company, Vanceboro, NC
2000 - 2004 Graduate Research Assistant, North Carolina State University, Raleigh, NC
1998 - 2000 Research Assistant, Duke University School of the Environment, Durham, NC
1999 - 1999 Soil Science Student Trainee, USDA Forest Service SRS, Pineville, LA

(c) PRODUCTS

Products Most Closely Related to the Proposed Project

1. Riley NG, Goller CC, Leggett ZH, Lewis DM, Ciccone K, Dunn RR. Catalyzing rapid discovery of gold-precipitating bacterial lineages with university students. PeerJ. 2020;8:e8925. PubMed PMID: [32322441](#); PubMed Central PMCID: [PMC7164421](#).
2. Cacho JF, Youssef MA, Shi W, Chescheir GM, Skaggs RW, Tian S, Leggett ZH, Sucre EB, Nettles JE, Arellano C. Impacts on soil nitrogen availability of converting managed pine plantation into switchgrass monoculture for bioenergy. Sci Total Environ. 2019 Mar 1;654:1326-1336. PubMed PMID: [30841405](#).
3. Strickland MS, Leggett ZH, Sucre EB, Bradford MA. Biofuel intercropping effects on soil carbon and microbial activity. Ecol Appl. 2015 Jan;25(1):140-50. PubMed PMID: [26255363](#).
4. Sealey B, Beasley D, Halsey S, Schell C, Leggett Z, Yitbarek S, Harris N. Human Dimensions: Raising Black Excellence by Elevating Black Ecologists Through Collaboration, Celebration, and Promotion. The Bulletin of the Ecological Society of America. 2020; 101(4):e01765. Available from: <https://doi.org/10.1002/bes2.1765> issn: 0012-9623
5. Cacho J, Youssef M, Shi W, Chescheir G, Skaggs R, Tian S, Leggett Z, Sucre E, Nettles J, Arellano C. Impacts of forest-based bioenergy feedstock production on soil nitrogen cycling. Forest Ecology and Management. 2018 July 01; 419-420:227-239. Available from: <http://www.sciencedirect.com/science/article/pii/S0378112717320340> issn: 0378-1127

Other Significant Products, Whether or Not Related to the Proposed Project

1. Minick K, Strahm B, Fox T, Sucre E, Leggett Z. Microbial nitrogen cycling response to forest-

- based bioenergy production. *Ecological Applications*. 2015; 25(8):2366-2381. issn: 1939-5582
2. Albaugh J, Albaugh T, Heiderman R, Leggett Z, Stape J, King K, O'Neill K, King J. Evaluating changes in switchgrass physiology, biomass, and light-use efficiency under artificial shade to estimate yields if intercropped with *Pinus taeda* L. *Agroforestry systems*. 2014; 88(3):489-503. issn: 0167-4366
 3. Dimov L, Howard K, Leggett Z, Sucre E, Weninegar L. Removal of organic matter from the forest floor in loblolly pine plantations increased ground-layer richness and diversity 16 years after treatment. *Forest Science*. 2015; 61(3):554-558. issn: 0015-749X
 4. Mack J, Hatten J, Sucre E, Roberts S, Leggett Z, Dewey J. The effect of organic matter manipulations on site productivity, soil nutrients, and soil carbon on a southern loblolly pine plantation. *Forest Ecology and Management*. 2014; 326:25-35. issn: 0378-1127
 5. Minick K, Strahm B, Fox T, Sucre E, Leggett Z, Zerpa J. Switchgrass intercropping reduces soil inorganic nitrogen in a young loblolly pine plantation located in coastal North Carolina. *Forest Ecology and Management*. 2014; 319:161-168. issn: 0378-1127

(d) SYNERGISTIC ACTIVITIES

1. Currently serve as Doris Duke Conservation Scholar Program campus director - The Doris Duke Conservation Scholars Program (DDCSP) provides training, mentorship and internships for students interested in environmental issues and cultural diversity - <https://go.ncsu.edu/dorisduke>
2. Lead PI on National Needs Fellowship (NNF) from USDA NIFA to improve diversity in forestry - <https://go.ncsu.edu/nnf-ncsu>
3. Program Director for The Scholars for Conservation Leadership Program which is a career and leadership development program that aims to expand opportunities for students from underrepresented minority groups in the land conservation field - <https://go.ncsu.edu/sclp>