

**Sudan Alma Kariuki**  
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## **EDUCATION**

Cornell University- Doctor of Philosophy (Expected 2024)  
Ecology and Evolutionary Biology

University of Arizona- Master of Science (2018)  
SNRE: Ecology, Management, and Restoration of Rangelands  
Thesis: Soil microbial activity is stabilized by mesquite in recreational campsites

Beloit College - Bachelor of Science (2016)  
Environmental Biology- Departmental Honors  
Thesis: Traditional Maasai pastoralism improves long-term rangeland ecology in Kenya

## **HONORS AND AWARDS**

Cornell University College of Agriculture and Life Sciences Graduate Teaching Award (2023)  
Fulbright-Hays Doctoral Dissertation Research Abroad Fellowship (2021)  
Cornell University Graduate Conference Grant \$140 (2020)  
Cornell University Mellon Grant \$1000 (2020)  
Cornell University Atkinson Center Sustainable Biodiversity Fund \$6800 (2020)  
Cornell University Einaudi Center Travel Grant \$1150/\$1200 (2019/2020)  
SUNY McNair Fellowship \$30,000/2 years (2018)  
E. Ray Cowden Scholarship: \$800 (2017)  
Agriculture and Life Sciences Graduate Tuition Scholarship: \$31,124/2 years (2016)  
Harry Wayne Springfield Student Endowment: \$15,500/2 years (2016)  
Graduate Access Fellowship: \$4,000 (2016)  
Ronald E. McNair Scholar (2014)  
General Motors Equal Opportunity Scholarship: \$1034/2 years (2014)  
Eaton Scholarship: \$10,000/4 years (2012)  
Charles Winter Wood Scholarship: \$10,000/4 years (2012)

## **RESEARCH INTERESTS**

Plant-soil Interactions  
Biogeochemistry  
Natural Resource Management

## **ORAL PRESENTATIONS**

“A case study of informal recreational impacts in the desert” December 2018.  
Ecology and Evolutionary Biology Annual Symposium. Cornell University. Ithaca, NY.

“How does recreational camping affect cover mediated soil microbial activity?” September 2017.  
National Association of Black Geoscientists Meeting. Georgia State University, Atlanta, GA.

“Exploring the effects of phosphorus runoff on aquatic plant growth.” August 2014.  
National McNair Conference. University of California at Berkeley, Berkeley, CA.

### **POSTER PRESENTATIONS**

“Biogeochemical indicators of soil health shift along deforestation gradients in dry tropical forests.” August 2023. Ecological Society of America. Portland, OR.

“How does recreational camping affect cover mediated soil microbial activity?” October 2017.  
Research Insights in Semiarid Ecosystems Symposium. University of Arizona. Tucson, AZ.

“How does recreational camping affect cover mediated soil microbial activity in a semi-arid rangeland?” June 2017. Soil Ecology Society Meeting. Fort Collins, CO.

“How does Maasai pastoralism affect rangeland restoration in Kenya?” September 2015.  
Biology Capstone Poster Session. Beloit College, Beloit, WI.

### **PUBLICATIONS**

Kariuki, S.; Gallery, R.E.; Sparks, J. P.; Gimblett, R.H.; and M. McClaran. 2020. *Soil microbial activity is resistant to recreational camping disturbance in a Prosopis dominated semiarid savanna*. Journal of Applied Soil Ecology.

### **TEACHING INTERESTS**

Plant Biology  
General Ecology  
Soil Science  
Academic Writing

### **TEACHING EXPERIENCE**

January 2023-present: Investigative Biology Lab Graduate Teaching Assistant  
Cornell University. Ithaca, NY

May 2023-June 2023: Introduction to Ecology Graduate Teaching Assistant  
Cornell University. Ithaca, NY

August 2021-May 2022: Introduction to Ecology Graduate Teaching Assistant  
Cornell University. Ithaca, NY

August 2019-May 2020: Investigative Biology Lab Graduate Teaching Assistant  
Cornell University. Ithaca, NY

August 2015-May 2016: Wisconsin Alliance for Minority Participation [in STEM] Mentor  
Beloit College. Beloit, WI

September 2013-December 2013: Upward Bound Senior Mentor  
Beloit College. Beloit, WI

August 2013- December 2013: Botany Teaching Assistant  
Beloit College. Beloit, WI

### **WORK EXPERIENCE**

April 2023-present: Big Red Barn Graduate Student Center Wellness Fellow  
Cornell University, Ithaca, NY

August 2018-April 2022: English Language Support Office [Graduate] Peer Writing tutor  
Cornell University, Ithaca, NY

October 2017-May 2018: Southwest Climate Science Center Communications GA  
University of Arizona. Tucson, AZ

June 2016-July 2016: Ronald E. McNair Graduate Summer Fellow  
Beloit College. Beloit, WI

August 2015-May 2016: Ronald E. McNair Student Office Assistant  
Beloit College. Beloit, WI

January 2014-December 2014: Residential Assistant  
Beloit College. Beloit, WI

August 2013-December 2013: Writing Center Tutor  
Beloit College. Beloit, WI

June 2013-August 2013: Education Intern  
Urban Ecology Center. Milwaukee, WI

### **SERVICE**

January 2021-present: Webmaster for Black Ecologists Section  
Ecological Society of America. Washington, DC.

September 2020: Graduate Reviewer/Workshop Facilitator at Diversity Preview Weekend  
Cornell University. Ithaca, NY

September 2019-May 2020: Graduate Students Mentoring Undergraduates (GSMU) Mentor  
Cornell University. Ithaca, NY

November 2018-present: Kiswahili Conversation Hour Coordinator  
Cornell University. Ithaca, NY

September 2018-March 2019: Diversity Preview Weekend Social Media Coordinator

Cornell University. Ithaca, NY

February 2017: Hidden Figures Empowerment Luncheon Student Coordinator  
University of Arizona. Tucson, AZ

April 2014: Girls and Women in Science (GWIS) Conference Lab Coordinator  
Beloit College. Beloit, WI

February 2014-March 2014: "Girls Who Rock" Mentor and Volunteer  
Cunningham Elementary School. Beloit, WI

November 2013: Family Discovery Night Geology Volunteer  
Beloit College. Beloit, WI

August 2013-December 2013: Black Students United Campus Relations Coordinator  
Beloit College. Beloit, WI

### **AWARD REVIEW PANELS**

Atkinson Center Sustainable Biodiversity Fund (2021)  
Cornell University Orenstein Fund (2019-2022)

### **ORGANIZATIONS**

Golden Key International Honor Society member (September 2017-present)  
National Association of Black Geoscientists member (July 2017-present)  
Soil Ecology Society member (June 2017-present)  
American Association for the Advancement of Science member (January 2017-present)  
Ecological Society of America member (August 2015-present)

### **CERTIFICATES AND SPECIAL SKILLS**

IsoCamp: Stable Isotope Biogeochemistry and Ecology (June 2019)  
SIRFER Lab. University of Utah. Salt Lake City, UT

Building Mentoring Skills for an Academic Career Certificate (January-May 2019)  
Cornell University. Ithaca, NY

### **REFERENCES**

Jed Sparks, PhD  
Professor of Ecology  
Cornell University  
(607)-254-4270  
[jps66@cornell.edu](mailto:jps66@cornell.edu)

Mark Sarvary, PhD  
Director of Investigative Biology Teaching Labs  
Cornell University  
(607)-255-2031  
[mas245@cornell.edu](mailto:mas245@cornell.edu)