Curriculum Vitae of Beatrice Margareta Bock

Department of Biological Sciences; Center for Adaptable Western Landscapes

Northern Arizona University (NAU), Flagstaff, AZ 86011

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Former name: Beatrice Rodewald Bmb646@nau.edu | +1(954)756-5388

Education

Ph.D. Biology, Northern Arizona University, Flagstaff, AZ

Expected Spring 2026

Advisors: Dr. Kitty Gehring and Dr. Nancy Johnson

Committee: Dr. Jason Hoeksema, Dr. Nick McKay

Research interests: Fungal ecology, plant-fungal symbioses, conservation ecology

GPA: 4.0

B.A. Earth and Environmental Sciences, Vanderbilt University, Nashville, TN

May 2020

Cum laude, Highest Honors, GPA: 3.8 & Major GPA: 3.9

Advisor: Dr. Simon Darroch

Honors Thesis: Long-term changes in unionid community in Kentucky Lake: Implications for understanding the effects of impoundment on river systems

Experience

Teaching Assistant, Northern Arizona University, Flagstaff, AZ

Mycology, Supervisor: Dr. Kitty Gehring

Aug - Dec 2023; Aug - Dec 2022

Research Assistant, Northern Arizona University, Flagstaff, AZ

Biological Sciences & Center for Adaptable Western Landscapes Supervisors: Dr. Kitty Gehring and Dr. Nancy Johnson

Dec 2023- Present; Dec 2022 – Aug 2023 & Dec 2021 – Aug 2022

Guest Lecturer, Northern Arizona University, Flagstaff, AZ

Nov 2022; Fall 2023

Mycology

Teaching Assistant, Northern Arizona University, Flagstaff, AZ

Aug - Dec 2021

Fall 2018

Introduction to Cell Biology

Research Assistant, Vanderbilt University, Nashville, TN

Jan 2019 – May 2020 & Aug 2017 – May 2018

Department of Earth & Environmental Sciences, Supervisors: Dr. Simon Darroch & Dr. Michelle Casey

Dr. Michelle Casey

Student Teaching Assistant, Vanderbilt University, Nashville, TN

Introductory Oceanography, Supervisor: Dr. Steven Goodbred

May 2018 – Aug 2018

Research Assistant, Stanford University, Palo Alto, CA
Department of Geological Sciences, Supervisor: Dr. Erik Sperling

Bird Ringing Assistant, Kvismaren Fågelstation, Närke, Sweden

May 2017 – Juy 2017

Publications

- Bock, B., & Markovchick, L. (2023). Considering Soil Biota and Symbioses in Forest Management and Ecosystem Restoration. *Forests*, 14(6), 1236. https://doi.org/10.3390/f14061236
- Bock, B.M., Darroch, S. A. F., & Casey, M. (2023). Long-term changes in unionid community in Kentucky Lake: Implications for understanding the effects of impoundment on river systems. *Journal of Freshwater Ecology, 38*(1), 2203712. https://doi.org/10.1080/02705060.2023.2203712
- Sperling, E. A., Melchin, M. J., Fraser, T., Stockey, R. G., Farrell, U. C., Bhajan, L., Brunoir, T. N., Cole, D. B., Gill, B. C., Lenz, A., Loydell, D. K., Malinowski, J., Miller, A. J., Plaza-Torres, S., **Bock, B.**, Rooney, A. D., Tecklenburg, S. A., Vogel, J. M., Planavsky, N. J., & Strauss, J. V. (2021). A long-term record of early to mid-Paleozoic marine redox change. *Science Advances*, 7(28), eabf4382. https://doi.org/10.1126/sciadv.abf4382
- Smith, E.F., Nelson, L. L., Darroch, S.A., Hodgin, E.B., Husson, J., Mehra, A.K., **Rodewald, B.**, Schiffbauer, J., Selly, T., Strange, M., Tarhan, L.G. "Ediacaran-Cambrian Stratigraphy of the Great Basin, Southwest USA; Mt. Dunfee, Montgomery Hills, Nopah Range, and Kingston Range; April 26th May 2nd, 2018," 2018.

Presentations

- Oral Presentation, "Common fungal networks: Exploring the "Dark Web," **Bock, Beatrice**; Hoeksema, J., Gehring, C.A., Johnson, N.C. 12th International Conference on Mycorrhizae, Manchester, United Kingdom, August 2024.
- Poster Presentation, "Common fungal networks: Exploring the "Dark Web," **Bock, Beatrice**; Hoeksema, J., Gehring, C.A., Johnson, N.C. 12th International Conference on Mycorrhizae, Manchester, United Kingdom, August 2024.

- Poster Presentation, "Common fungal networks: Exploring the "Dark Web," **Bock, Beatrice**; Hoeksema, J., Gehring, C.A., Johnson, N.C. Northern Arizona University Graduate Student Government Poster Symposium, Spring 2024.
- Oral Presentation, "2024 Updates on Common Non-Mycorrhizal Network Experiment," **Bock, Beatrice,** Gehring, C.A., Johnson, N.C. 2024 Sorghum-AMF Annual Meeting. February 2024.
- Poster Presentation, "Common Non-Mycorrhizal Networks: Exploring the "Dark Web," **Bock, Beatrice,** Gehring, C.A., Johnson, N.C. 2023 Gordon Research Conference: Mechanisms of Social Communication in all Kingdoms. August 14, 2023.
- Oral Presentation, "Common Non-Mycorrhizal Networks: Exploring the "Dark Web," **Bock, Beatrice,** Gehring, C.A., Johnson, N.C. 2023 Mycological Society of America Annual Meeting: Elevating Mycology. August 1, 2023.
- Oral Presentation, "Common Non-Mycorrhizal Networks: Exploring the "Dark Web," **Bock, Beatrice,** Gehring, C.A., Johnson, N.C. Hawkesbury Institute for the Environment research symposium: Biological invasions, ecosystems, and global change. May 2023.
- Poster Presentation, "Non-mycorrhizal networks: Exploring the "Dark Web," **Bock, Beatrice**; Gehring, C.A., Johnson, N.C. Center for Adaptable Western Landscapes Poster Symposium, March 2023.
- Oral Presentation, "Exploring common non-mycorrhizal network relationships between plants and fungi," **Bock, Beatrice**; Gehring, C.A., Johnson, N.C. Northern Arizona University Three Minute Research Project Competition, March 2023.
- Poster Presentation, "Systems Analysis of the Beneficial Associations of Sorghum with Arbuscular Mycorrhizal Fungi Studied with Genetics, Genomics, Imaging, and Microbiomics," Bennetzen, J.L., Brailey-Jones, P., Pendergast, T., Zhang, S., **Bock, B.**, [...], Johnson, N.C. 2023 Department of Energy Genomic Science Program Biological Systems Science Division Conference, March 2023.
- Oral Presentation, "Sorghum Fungal Endophytes: December 2022 Updates," **Bock, Beatrice**; Gehring, C.A., Johnson, N.C. 2022 Annual Meeting of the AMF-Sorghum Systems Biology Project, 2022.
- Poster Presentation, "Non-mycorrhizal networks: Exploring the "Dark Web," **Bock, Beatrice**; Gehring, C.A., Johnson, N.C. Northern Arizona University Graduate Student Government Poster Symposium, 2022.
- Oral Presentation, "Using Bivalve Death Assemblages as an Indicator for Stressed River Ecosystems," **Rodewald, Beatrice**; Casey, Michelle; and Darroch, Simon A.F. Geological Society of America Annual Conference, 2019. https://gsa.confex.com/gsa/2019AM/webprogram/Paper337730.html
- Poster Presentation, "The Black Shale Record of the Ordovician Radiation: New Insights into Redox Change from the Road River Group of Yukon, Canada," Rodewald, Beatrice; [...] & Sperling, Erik A. Geological Society of America Annual Conference, 2018. https://gsa.confex.com/gsa/2018AM/meetingapp.cgi/Paper/319386
- Poster Presentation, "Quantifying Trace Fossils on Ediacaran-Cambrian Samples from Death Valley," **Rodewald, Beatrice**; [...]; and Smith, E.F. Southeastern Geological Society of America Annual Conference, 2018. https://gsa.confex.com/gsa/2018SE/webprogram/Paper312985.html

Scholarships/Distinctions/Funding

Presidential Fellow, Northern Arizona University, Flagstaff, AZ	Fall 2021 – Present
Award value: \$120,000	Tun 2021 Tresent
Functional Ecology Prize Winner	August 2024
Best posters at the 12 th International Conference on Mycorrhizae in United Kingdom. Award amount: \$100	
Arizona Mushroom Society Award	Summer 2024
Funding towards covering invited speaker expenses at MSA conference 2024. Award value: \$500	
MSA-funded Symposium	Summer 2024
MSA-awarded funding to cover invited speaker expenses to symposium at the MSA Conference 2024.	
Award amount: \$5,000	
New Phytologist Foundation Innovation Grant	Summer 2024
Funding to cover invited speaker expenses to MSA Conference 2024. Award value: \$2,500	
Student Awardee at 2024 EMSL Summer School: 1000 Fungal Proteins: Gene to Structure Determination	July 2024
Graduate Student Government Travel Award, Northern Arizona University, Flagstaff, AZ Award amount: \$500	Spring 2024
Finalist – Sweden-America Foundation Fellowship	Spring 2024
Support for Graduate Students (SGS) Award, Northern Arizona University, Flagstaff, AZ Funding towards student-led research projects. Award value: \$2,675.	2023 – 2024
Fellow, Hawkesbury Institute for the Environment, Western Sydney University, Sydney, AUS NSF-sponsored graduate course in co-invasion biology (https://coinvasions.olemiss.edu/) Mentors: Drs. Jason Hoeksema, Steven Brewer, Carla D'Antonio, Nicole Hynson, Rytas Vilgalys	May 2023
ARCS Scholar Achievement Rewards for College Scientists. Award value: \$8,500.	2023 – 2024
• • • • • • • • • • • • • • • • • • • •	2022
James Rominger Scholarship	2022

Award value: \$300	
Dr. Leathers Graduate Student Scholarship, Arizona Mushroom Society Award value: \$1,000	2022
McMinn Scholar, Vanderbilt University Fully funded tuition and independent research. Award value: ~\$128,000	2018 – 2020
Dean's Undergraduate Advisory Board Member, Vanderbilt University	2018 – 2020
President of Wilderness Skills Course 101, Vanderbilt University	Fall 2019 – Spring 2020
·	2016 – 2020
National Merit Scholar, Vanderbilt University Award value: \$8,000	2016 – 2020
Dean's List, Vanderbilt University	2016 – 2020
President of Geology Club, Vanderbilt University	2018 – 2019
Vaughan Scholar, Vanderbilt University Provided funds for summer research at Vanderbilt University. Award value: \$1,450	2018
Alberstadt-Reesman-Stearns Field Studies Scholar	2018
Funded a 3-week field course in the Colorado Plateau	
McLamore Foundation Scholar	2016
Volunteer Service/Outreach	
Founder and Organizer of "Aloha Shirt Mondays", NAU. Increased attendance to NAU Biology Department	Spring 2024-Present
seminars.	
Functional Ecology Blog Author: "Beatrice Bock: Becoming a scientist wasn't a mistake, just a happy little	Sep 25, 2024
accident." https://functionalecologists.com/2024/09/25/beatrice-bock-becoming-a-scientist-wasnt-a-	
mistake-just-a-happy-little-accident/ Science on Tap Speaker: Mysterious Mushrooms and Fungal Friends: The story of how plants interact with	San 12 2024
each other through fungi. Science presentation to the public at Mother Road Brewing Company, Flagstaff,	Sep 12, 2024
AZ.	
Organizer of Symposium at MSA 2024 Conference: "Expanding common mycorrhizal networks: novel	June 2024
analyses, methodological advances, conceptual developments, and the future of network research".	
Obtained funding to cover all expenses for all invited speakers. Toronto, Canada Invasive Species Education at Kinsey Elementary. Led a discussion and activity to teach 50 fifth-grade	May 2024
students about local invasive species.	IVIAY 2024
Citation Management Software Workshop Leader, NAU	Fall 2023
Conference Session Moderator, Soil Fungi and Nutrient Cycling, Mycological Society of America Annual	Summer 2023
Conference, Flagstaff, AZ	
New Phytologist Manuscript Reviewer Applied Soil Ecology Manuscript Reviewer	Jan 2023 Dec 2022
Co-organizer and Moderator of Special Session, "Considering host-microbial interactions in ecosystem	Summer 2022
restoration" at the 16th Biennial Conference of Science & Management on the Colorado Plateau &	
Southwest Region, Flagstaff, AZ	
Member, NAU Biology Graduate Student Association	Fall 2021 - Present
Skills & Certifications	
R & RStudio	
GitHub	
MATLAB Attack of Office C. the	
Microsoft Office Suite Adobe Creative Cloud Suite (e.g. Photoshop, Illustrator)	
Plant identification and dichotomous key use	
Professional Societies	
Swedish Mycological Association	2023 - Present
	2023 - Present
Mycological Society of America	
Arizona Mushroom Society	2022 - Present

Award value: \$500

Relevant Graduate Coursework

Statistical Methods I & II Mycology Grant Writing Visualizing Scientific Results Concepts in Ecology Stable Isotope Ecology Earth and Environmental Data Analysis Integrated Forest Health Microbial Network seminar

Other

Citizenship: USA and Sweden

Professional References

Catherine (Kitty) Gehring, PhD | Regent's Professor of Biological Sciences

Northern Arizona University | 928-523-9138 | Catherine.Gehring@nau.edu | Flagstaff, AZ

 $\textbf{Nancy Collins Johnson, PhD} \mid \textit{Regent's Professor of Earth Sciences and Environmental Sustainability}$

Northern Arizona University | 928-523-6473 | Nancy.Johnson@nau.edu | Flagstaff, AZ

Jason Hoeksema, PhD | Professor of Biology

University of Mississippi | (662) 915-1275 | hoeksema@olemiss.edu | University, MS

Simon A.F. Darroch, PhD | Assistant Professor of Earth and Environmental Sciences Vanderbilt University | 615-875-8432 | simon.a.darroch@vanderbilt.edu | Nashville, TN

Michelle Casey, PhD | Assistant Professor of Biological Sciences

Towson University | 763-229-3126 | mcasey@towson.edu | Towson, MD

Erik A. Sperling, PhD | Associate Professor of Geological Sciences Stanford University | 650-267-0058 | esper@stanford.edu | Stanford, CA Commented [BB1]: Update?