

Amelia Zuckerwise

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University of Michigan School for Environment and Sustainability
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EDUCATION

- 2021-2026 **University of Michigan**, Ann Arbor, MI
(expected) Ph.D. Candidate in Environment and Sustainability
- 2018-2020 **Yale University**, New Haven, CT
Master of Environmental Science
- 2011-2015 **Stanford University**, Stanford, CA
Bachelor of Science in Biology with Honors in Ecology & Evolution

PUBLICATIONS

Peer-reviewed articles

- Sonawane, C., Leempoel, K., Nova, N., Meyer, J., Hebert, T., **Zuckerwise, A.**, Dirzo, R., & Hadly, E. Mammal community responses to increasing puma activity in a suburban preserve (2026). *Ecology and Evolution*, 16.6, e73775. <https://doi.org/10.1002/ece3.73775>
- Carter, N.H., Berti, E., **Zuckerwise, A.**, & Pradhan, N.M.B. (2024). Energetics-based connectivity mapping reveals new conservation opportunities for the endangered tiger in Nepal. *Animal Conservation*, 27(5), 639-647. <https://doi.org/10.1111/acv.12937>
- Anderson, C., **Zuckerwise, A.**, Wallace, R.B., Ayala, G., Viscarra, M., & Schmitz, O.J. (2024). Small felids coexist in mixed-use landscapes in the Bolivian Amazon. *Animals*, 14, 697. <https://doi.org/10.3390/ani14050697>
- Carter, N.H., **Zuckerwise, A.**, Pradhan, N.M.B., Subedi, N., Lamichhane, B.R., Hengaju, K.D., Acharya, H.B., & Kandel, R.C. (2023). Rapid behavioral responses of endangered tigers to major roads during COVID-19 lockdown. *Global Ecology and Conservation*, 42, e02388. <https://doi.org/10.1016/j.gecco.2023.e02388>

Works in progress

- Zuckerwise, A.**, Pradhan, N.M.B., Subedi, N., Lamichhane, B.R., Hengaju, K.D., Acharya, H.B., Kandel, R.C., & Carter, N.H. Fine-scale hydrology shapes habitat selection of endangered tigers in Himalayan lowlands. *In review at Landscape Ecology*.
- Zuckerwise, A.**, Hagani, J. S., Volski, L., Yu, Y., McInturff, A., Ditmer, M. A., & Carter, N. H. Resilient recovery of large carnivores. *In prep*.
- Zuckerwise, A.**, Fox, N., Sheneman, L., Lu, G., Widdis, W.O., Du, S., & Carter, N.H. Environmental conditions limit AI model detection of wildlife. *In prep*.

Zuckerwise, A., Neupane, P., Pradhan, N.M.B., Subedi, N., Lamichhane, B.R., Hengaju, K.D., Acharya, H.B., Kandel, R.C., & Carter, N.H. Increasing highway traffic impacts future connectivity for endangered tigers in Nepal. *In prep.*

Zuckerwise, A., Bagale, D., Ghimire, D.J., & Carter, N.H. Enhancing social resilience to human-tiger conflict risk. *In prep.*

Other works

Zuckerwise, A. (2020). Indigenous and local knowledge systems in wildlife conservation science. *Tropical Resources*, 39, Tropical Resources Institute, New Haven, CT.

<https://tri.yale.edu/tropical-resources/tropical-resources-vol-39/indigenous-and-local-knowledge-systems-wildlife>

Zuckerwise, A. (2020). Tracking the tigrillo: reframing indigenous knowledge in ocelot conservation. Master's thesis. Yale University School of the Environment, New Haven, CT.

Zuckerwise, A. (2019). Private forests, public good: threats to forest protection laws endanger wildlife. *Yale Environment Review*, New Haven, CT. <https://environment-review.yale.edu/private-forests-public-good-threats-forest-protection-laws-endanger-wildlife>

Zuckerwise, A. (2019). Urbanization & Human-Wildlife Conflict in the West. *Ucross High Plains Stewardship Initiative*, New Haven, CT. <https://highplainsstewardship.com/urbanization-human-wildlife-conflict-in-the-west-amy-zuckerwise/>

Zuckerwise, A. (2018). Ecotourism is good for cheetahs? Not so fast. *Yale Environment Review*, New Haven, CT. <https://environment-review.yale.edu/ecotourism-good-cheetahs-not-so-fast>

Zuckerwise, A. (2015). Bobcat distribution and abundance at Jasper Ridge Biological Preserve in Northern California. Honors thesis. Stanford University, Stanford, CA.

GRANTS AND FELLOWSHIPS

Total (USD): \$235,038 (external: \$150,000)

2026	One-Term Dissertation Fellowship (\$22,688) University of Michigan Rackham Graduate School
2024	Robert & Judy Marans/Kan & Lillian Chen Dissertation Award in Sustainability & Survey Methodology (\$11,000) University of Michigan Institute for Social Research
2024	Graduate Student Candidate Research Grant (\$3,000) University of Michigan Rackham Graduate School
2024	Summer Training Award (\$2,100) University of Michigan Institute for Social Research & Rackham Graduate School

2023	Future Investigators in NASA Earth and Space Science and Technology Award (\$150,000) National Aeronautics and Space Administration
2023	Menakka & Essel Bailey Graduate Fellowship (\$9,000) University of Michigan Center for the Education of Women+
2023	Language Training Award (\$6,000) University of Michigan Rackham Graduate School
2023	Graduate Student Pre-Candidate Research Grant (\$1,500) University of Michigan Rackham Graduate School
2023	Faculty Supplementary Funding (\$1,000) University of Michigan Undergraduate Research Opportunity Program
2019	MK McCarthy-RW Worth Scholarship for Leadership in Conservation Science (\$4,000) Yale University School of the Environment
2019	Schiff Fund for Wildlife Habitat and the Environment (\$9,000) Yale University School of the Environment
2019	Leonard G. Carpenter Fund (\$7,000) Yale University School of the Environment
2019	Research Fellowship (\$5,000) Yale Tropical Resources Institute
2019	Travel Grant (\$750) Yale MacMillan Center Council on Latin American & Iberian Studies
2014	Jasper Ridge Mellon Grant (\$1,500) Stanford Jasper Ridge Biological Preserve
2014	Small Grant (\$1,500) Stanford University Vice Provost for Undergraduate Research

PROFESSIONAL EXPERIENCE

2021-pres.	Graduate Student Research Assistant, Conservation and Coexistence Lab, University of Michigan, Ann Arbor, MI
2020-21	Environmental Scientist, Bobcat Program, California Department of Fish and Wildlife, San Diego, CA
2020	Research Intern, Northern Jaguar Project, Tucson, AZ
2016-18	Biological Resources Coordinator, Sapphos Environmental, Inc., Pasadena, CA
2016	Research and Education Intern, Felidae Conservation Fund, Mill Valley, CA
2015-16	Conservation Technician, Stanford Habitat Conservation Program, Stanford, CA
2012-13	Research Assistant, Paleobiology Lab, Stanford University, Stanford, CA

2012 Research Intern, Fukami Lab, Stanford University, Stanford, CA
2011-12 Research Assistant, Boggs Lab, Stanford University, Stanford, CA

TEACHING AND MENTORSHIP

Teaching

Undergraduate Research Opportunity Program, Fall 2023-Winter 2024
Research Mentor, University of Michigan College of Literature, Science, and the Arts
Global Conservation Policy and Planning, Spring 2020
Course Organizer, Yale University School of the Environment
Conservation Biology, Fall 2019
Teaching Fellow, Yale University Department of Ecology and Evolutionary Biology

Mentees

2026-pres. Deepika Bagale, Institute for Social and Environmental Research-Nepal
2025-pres. Walker Owen Widdis, University of Michigan, M.S. expected 2027
2025-pres. Shiyang Du, University of Michigan, M.S. expected 2027
2022-pres. Gigi Lu, University of Michigan, B.S. 2026
2020-pres. Megan Senour, California Department of Fish & Wildlife, Scientific Aid
2020-pres. Krysten Martin, California Department of Fish & Wildlife, Scientific Aid
2023-24 Jacqueline Inzunza, University of Michigan, B.S. expected 2026
2023-24 Emma Peng, University of Michigan, B.S. expected 2027
2022-24 Fang Chen, University of Michigan, M.S. 2024
2022-24 Vatsal Parikh, University of Michigan, M.S. 2024
2022-24 Prabina Shrestha, National Trust for Nature Conservation, Intern
2022-24 Rabin Bahadur K.C., National Trust for Nature Conservation, Intern

Guest lectures

Remote Sensing of Environment, University of Michigan School for Environment and Sustainability (2026): "Integrating high-resolution radar imagery to model carnivore use of fine-scale water channels."

Wildlife and Society, University of Michigan School for Environment and Sustainability (2026): (1) "Values toward nature"; (2) "Nature's contributions to people"; and (3) "Land sharing vs. land sparing."

Research Paradigms, University of Michigan School for Environment and Sustainability (2023): "Tiger ecology in a dynamic landscape: research and funding approaches."

Conservation Biology, Yale Department of Ecology & Evolutionary Biology (2019): "Case study: the Madidi Landscape, Bolivia."

Workshops

"Home range estimation in R" (2023): National Trust for Nature Conservation Biodiversity Conservation Center, Sauraha, Chitwan, Nepal.

"Stating your positionality" (2023): Society for Conservation Biology, University of Michigan Chapter, Ann Arbor, MI.

"Conservation Careers Workshop" (2023): Society for Conservation Biology, University of Michigan Chapter, Ann Arbor, MI.

PRESENTATIONS

Invited academic presentations

Zuckerwise, A. (2026). Social Organization and Adaptation to Human–Tiger Conflict Risk in the Nepal Terai. Nepal Population and Environment Scholars Network, Chitwan, Nepal (virtual).

Zuckerwise, A. (2026). Tigers on the prowl: behavioral ecology in a changing landscape. University of Missouri Tigers for Tigers, Columbia, MO (virtual).

Zuckerwise, A. (2023). Linking dynamic acceleration and behavior with tiger conservation in Nepal. Association of Zoos and Aquariums Felid Taxon Advisory Group, Columbus, OH.

Zuckerwise, A. (2021). Bobcats: the wildcats next door. UC Santa Barbara Sedgwick Reserve and Santa Ynez Natural History Society, Santa Ynez, CA. <https://syvnature.org/thursday-july-22-2021-bobcats-the-wildcats-next-door-webinar/>

Zuckerwise, A. (2015). Mammalian carnivore activity at Jasper Ridge Biological Preserve. Stanford-UC Santa Cruz Species Interactions Workshop, Stanford, CA.

Conference presentations

Zuckewise, A., Neupane, P., Pradhan, N.M.B., Subedi, N., Lamichhane, B.R., Hengaju, K.D., Acharya, H.B., Kandel, R.C., & Carter, N.H. Expanding roads and traffic limit connectivity for endangered tigers. *North American Congress for Conservation and Restoration*, Milwaukee, WI, USA.

Zuckerwise, A., Pradhan, N.M.B., Subedi, N., Lamichhane, B.R., Hengaju, K.D., Acharya, H.B., Kandel, R.C., & Carter, N.H. (2025). High-resolution earth observations suggest fine-scale waterways serve as carnivore movement corridors in a dynamic landscape. *International Association of Landscape Ecology-North America Annual Meeting*, Raleigh, NC, USA.

Zuckerwise, A., Pradhan, N.M.B., Subedi, N., Lamichhane, B.R., Hengaju, K.D., Acharya, H.B., Kandel, R.C., & Carter, N.H. (2025). Space-based hydrological models improve identification of fine-scale wildlife movement corridors. Poster. *BIOSPACE 25 - Biodiversity Insights from Space*, European Space Agency, Frascati, Italy.

Zuckerwise, A. (2024). Rising tigers: building a resilient future for tigers and people in Nepal. *North American Congress for Conservation Biology*, Vancouver, Canada.

Zuckerwise, A., Carter, N.H., Pradhan, N.M.B., Subedi, N., Lamichhane, B.R., Hengaju, K.D., Acharya, H.B., & Kandel, R.C. (2023). Rapid behavioral responses of endangered tigers to major roads during COVID-19 lockdown. *Ecological Society of America Annual Meeting*, Portland, OR, USA.

Carter, N.H., **Zuckerwise, A.**, Pradhan, N.M.B., Subedi, N., Lamichhane, B.R., Hengaju, K.D., and Acharya, H.B. (2022). Tiger response to highway and anthropause in Nepal: using GPS-based movements to inform conservation planning. *The Wildlife Society Annual Meeting*, Spokane, WA, USA.

Zuckerwise, A. (2021). Tracking the tigrillo: indigenous and local knowledge improves conventional surveys for ocelot occupancy in the Amazon. *Ecological Society of America Annual Meeting*, Long Beach, CA, USA (virtual).

Zuckerwise, A., Anderson, C., Ayala, G., Viscarra, M., Wallace, R., & Schmitz, O. (2019). Comparison of methods to measure ocelot occupancy in the Bolivian Amazon. Poster. *The Wildlife Society Annual Conference*, Reno, NV, USA.

Zuckerwise, A., Mendoza, E., & Dirzo, R. (2015). Bobcat distribution and abundance at Jasper Ridge Biological Preserve in Northern California. Poster. *Ecological Society of America Annual Meeting*, Baltimore, MD, USA.

Zuckerwise, A. (2015). Spatiotemporal interactions among carnivores at Jasper Ridge Biological Preserve. Poster. *Stanford Symposium of Undergraduate Research and Public Service*, Stanford, CA, USA.

Organized symposia

Hagani, J. and **Zuckerwise, A.** (2026). Movement in the Anthropocene: Human Impacts on the Spatial Ecology of Terrestrial Carnivores. *North American Congress for Conservation and Restoration*, Milwaukee, WI, USA.

Zuckerwise, A., Hagani, J., Yu, Y., Chen, F., and Carter, N.H. (2024). Implications of successful carnivore recovery: a systems-based approach to achieving coexistence in a changing world. *North American Congress for Conservation Biology*, Vancouver, Canada.

FIELD ENGAGEMENT

2021-25	Tiger (<i>Panthera tigris</i>) ecology and social resilience research – Chitwan, Parsa, Bardia, and Banke National Parks, Nepal
2020-2021	Bobcat (<i>Lynx rufus</i>) statewide assessment – Southern and Central California
2019	Ocelot (<i>Leopardus pardalis</i>) and jaguar (<i>Panthera onca</i>) monitoring project – Madidi National Park, Bolivia
2018	Ornithology and arthropod surveys – Barro Colorado Island, Panama
2016-18	Wildlife, vegetation, and wetland impact evaluation and mitigation – Southern and Central California
2016	Bay Area Puma (<i>Puma concolor</i>) Project camera trap study and community outreach – Northern California
2015-16	Habitat conservation and restoration project – Stanford, California
2014-16	Mammal community camera trap study – Stanford, California
2013	Mangrove research project – North Stradbroke Island, Australia
2012	Introduced predators in native Hawaiian forests study – Big Island of Hawaii
2011	Bobcat and puma monitoring, herpetology surveys – Santa Monica Mountains National Recreation Area, California
2010	Impacts of climate change on small mammals study – Nova Scotia, Canada

LEADERSHIP & SERVICE

2024-pres.	Graduate Coordinator, Society for Conservation Biology, Michigan Chapter
2022-pres.	DEI Facilitator, Conservation & Coexistence Group, University of Michigan
2022-pres	Peer reviewer for <i>Ecology and Society</i> , <i>Landscape Ecology</i> , <i>Conservation Science and Practice</i> , <i>People and Nature</i> , <i>Oryx</i> , <i>Ecology and Evolution</i>
2023-24	Speaker Chair, Doctoral Organizing Committee, University of Michigan School for Environment and Sustainability
2021-24	President, Society for Conservation Biology, Michigan Chapter
2020-21	Graduate Assistant, International Union for the Conservation of Nature (IUCN) Beyond the Aichi Targets Task Force, World Commission on Protected Areas
2019-20	President, Society for Conservation Biology, Yale Chapter
2018-20	Conference Coordinator, International Society of Tropical Foresters
2018-19	Symposium Coordinator, Ucross High Plains Stewardship Initiative
2014-16	Docent, Jasper Ridge Biological Preserve
2014-15	Bio Bridge Peer Advisor, Stanford Department of Biology
2013-15	President, Strategies for Ecology Education and the Environment (SEEDS), Ecological Society of America, Stanford Chapter

2010-11 Commissioner, City of Calabasas Environmental Commission

AWARDS & HONORS

2025	Professional Enhancement Award, NASA-Michigan State University
2023-24	National Fellowship Honorable Mention, Graduate Women in Science
2021	Employee Team Award for Scientific Excellence, California Department of Fish and Wildlife
2021	SEEDS Graduate Alumni Award, Ecological Society of America
2015	Phi Beta Kappa, Stanford University
2011	Commendation for Environmental Service, City of Calabasas, California

MEDIA COVERAGE

Erickson, J. (2023). ["Nepalese tigers showed rapid behavioral response to reduced road traffic during COVID-19 lockdown, study finds."](#) *Phys.org*, Omicron Limited, Isle of Man, UK.

Sherburne, M. (2023). ["Rapid behavioral response of Nepalese tigers to reduced road traffic during COVID-19 lockdown."](#) *Michigan News*, Ann Arbor, MI.

Atherton, L. (2022). ["Fostering Human-Tiger Coexistence in Nepal."](#) *Stewards*, Ann Arbor, MI.

Silverman, F. (2021). ["Tracking Small Cats in the Bolivian Amazon."](#) *Canopy*, New Haven, CT.

Wallace, E. (2015). ["Amy Zuckerwise '15 talks large predator research at Jasper Ridge."](#) *The Stanford Daily*, Stanford, CA.

ADDITIONAL TRAINING

Introduction to the Integration of Animal Tracking and Remote Sensing, <i>NASA Applied Remote Sensing Training</i>	2025
Responsible Conduct of Research and Scholarship, <i>University of Michigan</i>	2022
Chemical Immobilization, <i>California Department of Fish and Wildlife: Wildlife Health Lab</i>	2021
Using the UN Biodiversity Lab to Support National Conservation and Sustainable Development Goals, <i>NASA Applied Remote Sensing Training</i>	2020
Earth Observations for Indigenous-Led Land Management, <i>NASA Applied Remote Sensing Training and Conservation International</i>	2019
Wetland Delineation, <i>Wetland Training Institute</i>	2018

SKILLS

Languages: English (native), Spanish (intermediate), Nepali (basic)

Coding languages: R, Python, Javascript (Google Earth Engine), Git, SQL, LaTeX