ANNA YUE YU

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EDUCATION

Ph.D. Student, School for Environment and Sustainability, University of Michigan — Ann Arbor, MI
Resource Ecology and Management, *Advisor: Dr. Neil Carter* — 2027 (expected)

Master of Environmental Management, **School of the Environment, Yale University** — New Haven, CT
Ecosystem Management and Conservation — 2022

Bachelor of Arts, **Colby College** — Waterville, ME
Environmental Computation (Conservation Biology track), *summa cum laude with honors, GPA 4.00* — 2019

FELLOWSHIPS, AWARDS AND HONORS

Teaching Fellow Award for Excellence ($500), Yale School of the Environment — 2022
McCarthy-Worth Scholarship for Leadership in Conservation Sci. ($2,500), Yale School of the Environment — 2021
Berkley Conservation Scholarship ($4,000), Yale School of the Environment — 2020
Environmental Studies Award, Colby College — 2019
Awarded to the senior Environmental Studies student with the highest grade point average
Special Project Grant ($500), Colby College — 2019
Phi Beta Kappa, Colby College — 2019
F. Russell Cole Student Research Fellowship ($3,500), Colby College — 2018-2019
Dean's List, Colby College — 2015-2019
Charles A. Dana Scholar, Colby College — 2017, 2018
Awarded to students on the basis of a strong academic performance and potential leadership
Kathryn Ellis Fredericks Student Research Fund ($3,500), Colby College — 2017
Environmental Studies Program JanPlan Fund ($1,500), Colby College — 2017
Julius Seelye Bixler Scholar, Colby College — 2016
Awarded to top-ranking students as determined by the cumulative academic record by the end of the preceding year

RESEARCH EXPERIENCE

University of Michigan, School for Environment and Sustainability — Ann Arbor, MI
Graduate Student Research Assistant, Advisor: Dr. Neil Carter — January 2023-Present

- Assess the relationship between social values towards wildlife and species richness at the county level in the U.S.

Yale University, School of the Environment — New Haven, CT
Project Course, Advisor: Dr. Amy Vedder — February-May 2022

- Mapped temporal and spatial development trends of environmental protection and biodiversity conservation NGOs in China. Conducted integrative coding to classify key roles Chinese non-state actors play in conservation

Master's Capstone Project, Advisor: Dr. Bill Weber — Summer 2021-May 2022

- Surveyed and interviewed to study how socio-economic factors and conservation project design impact local community's motivation to participate in community-based snow leopard (*Panthera uncia*) monitoring in Sanjiangyuan, China. Performed qualitative and quantitative analyses to match appropriate incentive policies

Yale Center for Earth Observation, Geospatial Assistant for Dr. Shimon Anisfeld — September 2019-May 2020

- Processed and analyzed UAV images (2016-2019) to distinguish vegetation changes in Quinnipiac River marshes

Shan Shui Conservation Center — Sanjiangyuan/Hangzhou/Beijing, China
Snow Leopard and Grassland Conservation Program, Consultant — February-August 2021

- Conducted community-based snow leopard monitoring and studied snow leopard distribution and population dynamics across nine field sites in Sanjiangyuan and Nagqu, China. Worked with 256 Tibetan herders to place over 560 infrared cameras based on 5x5 km grids. Facilitated community capacity building programs such as training workshops, human-wildlife conflict community insurance, and village-cooperative ecotourism

Citizen Science Program, Consultant, Supervisor: Dr. Chen Cheng February 2020-February 2021

- Led scientific design and management of citizen science projects to facilitate urban biodiversity conservation in China. Projects reached 5,300 participants online and offline. Used citizen science data to study "phenological differences of deciduous trees in Hangzhou city and scenic areas," "gingko (*Ginkgo biloba*) leaves discoloration map of China," and "Pallas's squirrel (*Callosciurus erythraeus*) population density near the West Lake region"

Nature Watch Program, Database Intern, Supervisor: Dr. Chen Cheng December 2019-February 2020

- Practiced big data analytics in ArcGIS on ecological impacts of construction projects in China. Used Python to establish an EIA database of 1.4 billion records and extract key information from 1.2 billion EIA files

National Parks Conservation Association Washington, DC/Remote

Conservation Science Programs, Endangered Species Act (ESA) Intern, Supervisor: Dr. Ryan Valdez May-July 2020

- Evaluated how well national park units captured ESA listed species and represented the U.S. biodiversity on species and ecosystem levels using ArcGIS and R. Results contributed to NPCA's ESA-National Parks Database. Presented findings using an ArcGIS StoryMap to support advocacy efforts

Colby College, **Environmental Studies Program** Waterville, ME

Honor Thesis, F. Russell Cole Research Fellow, Advisor: Dr. Philip Nyhus and Dr. Nicholas Record June 2017- May 2019

- Used ArcGIS, R, and MaxEnt modeling to develop a dynamic and predictive model of moose-vehicle collisions in Maine. The model linked 15 years of crash data with spatial and temporal attributes and provided live and hourly crash forecasts: https://eco.bigelow.org/moosecrash_v0.001/

Capstone Project, Advisor: Dr. Denise Bruesewitz September-December 2018

- Mapped and assessed the connectivity of hydrological features, land use patterns, road network, and buried infrastructures in the Waterville watershed. Analyzed causes of urban stream syndrome in Waterville streams

Round River Conservation Studies Okavango Delta, Botswana

Research Student, Advisor: Kaggie Orrick and Samara Moreira Müller February-May 2018

- Worked with community trusts to survey herbivore density and demography using distance sampling and strip-width sampling in five sites around the Okavango Delta. Compared the accuracy and efficiency of different sampling methods using R to advise for adaptive community-based natural resource management

Bermuda Inst. of Ocean Sciences/Bigelow Lab. for Ocean Sciences St. George's, Bermuda/East Boothbay, ME

Visiting Research Student, Advisor: Dr. Nichole Price and Dr. Benjamin Neal January 2017

- Surveyed benthic structures and fish behaviors. Annotated and analyzed photos on CoralNet and ran statistical tests to evaluate how benthic coral communities varied across human impacts in Bermuda

PUBLICATIONS (NON PEER-REVIEWED)

Yu, Y. 2021. Citizen Science: Squirrels vitalize the city. *Forest and Humankind (in Chinese)*. Vol. 2021: No. 4, Page 62-73.

Yu, Y. 2019. Developing a predictive and dynamic moose-vehicle collisions model in Maine. Honors Theses, Digital Commons @ Colby. Paper 992. https://digitalcommons.colby.edu/honorstheses/992

Nyhus, P. J., **Yu, Y.** & Wu, J. 2017. Of Stripes and Spots: Can a Growing Dragon Save a Tiger? *China Policy Institute: Analysis*. https://theasiadialogue.com/2017/06/27/of-stripes-and-spots-can-a-growing-dragon-save-a-tiger/

Yu, Y. & Jia, R. 2017. Distribution and accessibility of public green space in Waterville, ME. *Atlas of Maine*. Vol. 2017: No. 2, Article 3. https://digitalcommons.colby.edu/atlas_docs/vol2017/iss2/3

Yu, Y. 2017. Risk of habitat degradation, dams, and Atlantic salmon habitat in Maine. *Atlas of Maine*. Vol. 2017: No. 1, Article 15. https://digitalcommons.colby.edu/atlas_docs/vol2017/iss1/15

PRESENTATIONS

2022 **Yu, Y.**, Gao, Y., Jiang, N. & Zhao, X. Tibetan herders' motivation for monitoring snow leopards in Sanjiangyuan, China. *Poster*. **Student Conference on Conservation Science-New York**, New York City, NY/Virtual.

2022 **Yu, Y.** & Gao, Y. Mapping Chinese non-state actors in biodiversity conservation. *Poster*. **Ecological Society of America and Canada Society for Ecology and Evolution Joint Meeting**, Montréal, Canada.

2020 **Yu, Y.**, Wang, C.S., Wu, J., Tupper, B., Record, N.R. & Nyhus, P.J. Developing a predictive and dynamic model of moose-vehicle collisions in Maine. *Poster*. **Ecological Society of America Annual Meeting**, Virtual.

2019 **Yu, Y.** Developing a predictive and dynamic model of moose-vehicle collisions in Maine. *Flash Talk.* **GISday Conference at Yale**, New Haven, CT.

2019 **Yu, Y.** Developing a predictive and dynamic moose-vehicle collisions model in Maine. *Oral Presentation.* **Colby Liberal Arts Symposium**, Waterville, ME.

2018 **Yu, Y.** & Colmenares, M. Exploring urban stream syndrome in Waterville, Maine: patterns of catchment land use and urbanization. *Oral Presentation.* **Environmental Science Capstone Talks**, Waterville, ME.

2018 Barkan, A.*, Bluman, S.* & **Yu, Y.*** Difference in Herbivore Demography Using Distance and Strip-width Sampling in the Okavango Delta, Botswana from 2016–2018. *Oral Presentation.* **Department of Wildlife and National Parks in Botswana,** Maun, Botswana.

2017 **Yu, Y.** & Wu, J. A preliminary view on a spatial and predictive model of moose-vehicle collisions in Maine. *Poster*. **Colby Undergraduate Summer Research Retreat**, The Forks, ME.

2017 **Yu, Y.** & Jia, R. Distribution and accessibility of public green space in Waterville, ME. *Poster*. **Colby Liberal Arts Symposium,** Waterville, ME.

(* Equal contributing and presenting authors)

TEACHING EXPERIENCE

Teaching Assistantships

Conservation Science and Land Planning, Yale School of the Environment	Spring 2022
Introduction to Statistical Methods, Colby College	Spring 2019

Community Workshops

Camera Trap Field Training, Various Workstations, Nagqu Forestry and Grassland Administration	2021
Camera Trap Field Training, Various Field Sites, Sanjiangyuan National Park	2021
Community Computer Workshop, Okavango Research Institute	2018

LEADERSHIP AND OUTREACH

Community Mentorship

International Student Mentor, International Club, Colby College	2018-2019
Community Advisor, Campus Life, Colby College	2017-2019

Scientific Outreach

Writer, Yale Environmental Review	2021
Panelist, Conservation × Education Live Panel, Huatai Securities "One Yangtze River" Program	2021
Cartographer, *"Water Resources" by Dr. Shimon C. Anisfeld (2nd Edition, In Review)*	2019-2021
Conservation Education Intern, Environmental Leadership & Training Initiative	2019-2021
EcoRep, Office of Sustainability, Colby College	2016-2019
Animal Project and Group Outreach Intern, Roots & Shoots Beijing	2015, 2016

Leadership

Community Outreach Chair, Doctoral Organizing Committee, University of Michigan SEAS	2023
Treasurer, Society for Conservation Biology, University of Michigan Chapter	2022-2023
Co-Leader, Society for Conservation Biology Student Interest Group, Yale School of the Environment	2020-2021
Co-President, Environmental Coalition, Colby College	2018-2019
Program Leader, Colby Volunteer Center, Colby College	2016-2019
Student Assistant, Environmental Studies Program, Colby College	2015-2019

SKILLS

Language	Chinese (*native*); English (*proficient*); Italian (*elementary*)
Geospatial Reasoning	ArcGIS (Desktop & Pro), QGIS, RStudio, MaxEnt, Distance, Circuitscape *(proficient)*; Agisoft Metashape, Google Earth Engine, and remote sensing *(experience)*
Programming Language	Python, R, Java (*proficient*); MATLAB, C/C++, JavaScript, Flutter (*experience*)
Field Method	Camera trapping, distance sampling/transect survey, avian point count, quadrat

	sampling, UAV operations, basic mechanical knowledge
Certificate	WMA Wilderness First Responder, CPR certificate

PROFESSIONAL DEVELOPMENT

Conference Organizer: GISday Conference at Yale (2019); Colby Liberal Arts Symposium (2017); The 5th Roots & Shoots Animal Protection Project Competition in China (2016)

Conference Volunteer: The 26th Annual International Society of Tropical Foresters Conference (2020); Community, Culture, & Conservation: Sustaining Livelihoods and Landscapes Conference (2016)

Membership: Society for Conservation Biology; Society for Conservation GIS; Ecological Society of America; The Wildlife Society