Ethics and Justice at the Frontiers of Conservation Biology
Mini-Course — Stanford — November 11-13, 2023

2 Units
Grading: S/NC

Classroom: LK 208, Li Ka Shing Learning & Knowledge Center, 291 Campus Dr.

Instructors: Professor Rodolfo Dirzo, Dr. Dakota McCoy, Kaiku Kaholoaa, Chinmay Sonawane, and invited guest Ben Wilcox (WWF-US)

Course Description: This weekend-long "retreat"-style mini-course introduces students to four distinct types of cross-disciplinary ethical challenges that will face the next generation of conservation biologists and biotech entrepreneurs. Taught over the course of a single long weekend, students will wrestle with vexing questions of scientific ethics, interspecies justice, environmental justice, and policy. We will employ structured debates, meetings with conservation-tech companies, and outings to local conservation areas.

Goals for Students' Personal and Professional Development: Students will learn about some of the ethical, philosophical, and values-based dilemmas facing conservation biologists in the 21st century– with a special focus on issues of ethics, diversity, and justice. They will learn about potential careers in conservation policy, biotechnology, and environmental science (and connect with expert practitioners in each area). Students will practice engaging with diverse stakeholders on issues of science, ethics, and value systems.

Topics:
The four areas of ethics that students will address are:

1) Working ethically with Indigenous and local communities: To support healthy land and seascapes, we must move beyond the colonial legacies of "fortress conservation" to develop new protection strategies that better leverage traditional Indigenous land management systems, among other concerns. What are the most promising new strategies and methods for working with and learning from Indigenous and local communities?
2) Biotechnology, rewilding, and de-extinction: Genetic engineering tools may soon allow us to restore iconic species, like the dodo or the wooly mammoth, to landscapes where they have not been seen in hundreds or even thousands of years. What are the ethical and ecological implications of these "de-extinction" ideas for animals, scientists, and our planet? Should we move forward with these ideas?
3) Economics of nature: Nature is an investment portfolio. We subsist off the dividends she pays — food, water and climate stabilization, to name a few. In times of need, we may even liquidate the initial capital for immediate benefit, but at the expense of diminishing returns in the future. So how should we use and preserve these natural resources? To whom should we distribute these natural resources? We will explore how natural capital — often limited, yet self-generating — can be managed.

4) Wilderness, gardens, and the Anthropocene: Many conservationists aspire to protect "pristine" or "untouched" wilderness, define species as "native" or non-native, and decry human presence as antithetical to a functioning ecosystem. But humans have long stewarded natural processes. Moreover, even if there were once a pristine nature, is it worth trying to return to now? How do our ideas of "wilderness" and "pristineness" affect human and non-human communities– and how might we move beyond these norms for creative and inclusive coexistence in the Anthropocene?

Schedule:

Saturday 9:30 - 10:00 AM: Coffee and pastries in LK 208

Saturday 10:00 AM - 12:00 PM: **Introduction.** Students will share their motivations for taking the course and their background expertise. Course instructors will provide an overview of the four themes we cover in this course.

Saturday 12:00 PM - 1:30 PM: Lunch will be served.

Saturday 1:30 PM - 5:00 PM: **Working ethically with Indigenous and local communities.** Students will explore case studies, participate in discussions, and then present. Students will learn about colonialist legacies of conservation and promising current approaches.

Sunday 9:30 - 10:00 AM: Coffee and pastries in LK 208

Sunday 10:00 AM -1:30 PM: **Biotechnology, rewilding, and de-extinction.** Students will zoom with Ben Novak, Lead Scientist at Revive & Restore. Next, students will debate whether it is ethical to pursue de-extinction for wooly mammoths and Tasmanian tigers. Bring your laptops. Lunch will be served.

Sunday 1:30 - 5:00 PM: **Economics of nature**. Students will explore two case studies involving trade-offs in how natural resources can be used. No prior preparation required.

Sunday 5:00-7:00 PM: Optional dinner, details TBA.

Monday 9:00 AM: Meet at the Stanford Oval to drive / Uber to Jasper Ridge Biological Preserve. We will provide transportation. Access to Jasper Ridge is ID-restricted, so please let us know if you'll be driving yourself there and we can open the gate for you.

Monday 9:30 AM: Coffee and pastries at Jasper Ridge.

Monday 10:30 AM- 12:00 PM: **Parks and protected areas**. Presentation of various philosophical and ethical positions on the value and purpose of parks, followed by a group discussion and walk through the Jasper Ridge Biological Station. We will provide transportation back to campus.

Access and Accommodations

Stanford is committed to providing equal educational opportunities for disabled students. Disabled students are a valued and essential part of the Stanford community. We welcome you to our class.

If you experience disability, please register with the Office of Accessible Education (OAE). Professional staff will evaluate your needs, support appropriate and reasonable accommodations, and prepare an Academic Accommodation Letter for faculty. To get started, or to re-initiate services, please visit oae.stanford.edu.

If you already have an Academic Accommodation Letter, we invite you to share your letter with us. Academic Accommodation Letters should be shared at the earliest possible opportunity so we may partner with you and OAE to identify any barriers to access and inclusion that might be encountered in your experience of this course.