



Syllabus: ANR290 Wildlife Conservation

Course Information

Course Title: Wildlife Conservation

Course Prefix/Number: ANR290

Semester: Fall 2025

Class Days/Times: Online Asynchronous

Credit Hours: 4

Instructor Information

Name: Joshua S. Hoskinson, M.S., M.A.

Phone/Voice Mail: By request; email communication highly preferred

E-mail: jhoskinson@tocc.edu

Office location: Online

Office hours: By appointment

Course Description

An introductory course studying the ecology, conservation, and management of wildlife populations. Students will learn a variety of tools to apply ecological knowledge balancing the needs of animals and plants with those of people. Topics will cover history, philosophy, inventory, planning, management, and Tohono O'odham wildlife concepts.

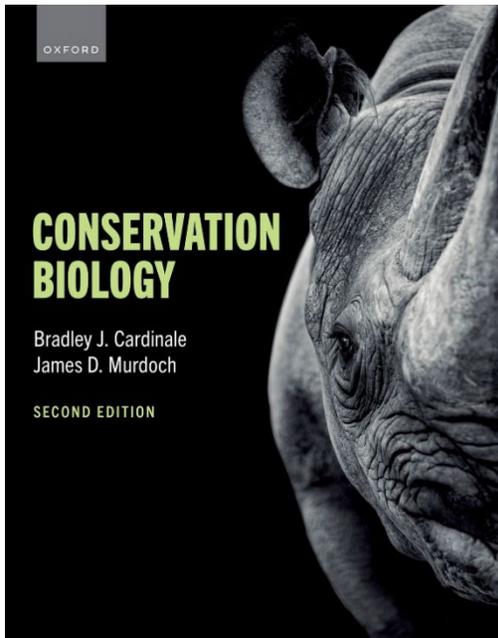
Student Learning Outcomes

After completion of the course students will be able to

1. **Focus** on the effects of current and historical decisions on wildlife populations and the local and global environment.
2. **Discuss** legal and cultural laws and regulations that have been enacted to protect wildlife resources.
3. **Learn and use** one surveying method for managing wildlife resources.
4. **Demonstrate** knowledge of Tohono O'odham cultural/wildlife views along with those of Western science wildlife conservation methods.
5. **Demonstrate** applications of ecological principles to the management of wildlife resources.

Course Learning Materials and Textbook Information

For this course, we will be using myriad textbooks and other materials that will be directly provided to you. However, the textbooks below will be our primary resources throughout the entire course.



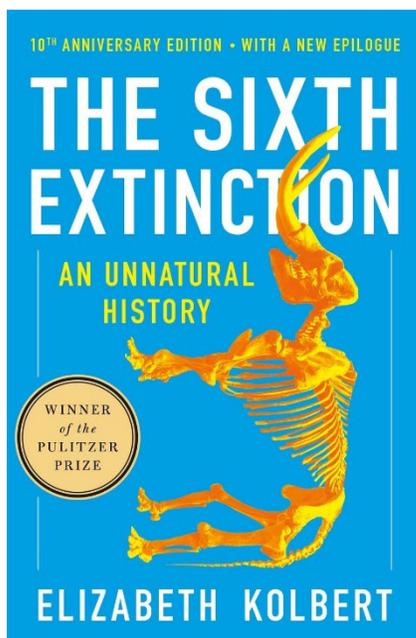
Title: *Conservation Biology 2e*

Author: Bradley J. Cardinale, James D. Murdoch

Publisher: Oxford University Press

Publication Year: 2025

*Note: I will be providing this book to you with scanned PDF. This is a brand new version of a very popular textbook in this field. Therefore, purchase of the physical copy or eBook is not required.



Title: *The Sixth Extinction: An Unnatural History*, 10th Anniversary Edition

Author: Elizabeth Kolbert

Publisher: Picador

Publication Year: 2024

*Note: This course will be using a physical version of this book. San Carlos Apache College will be providing access; make sure to submit a Textbook Request Form to have this book sent to your mailing address.

Policies and Expectations

These are organized around SCAC's ARROW framework – accountability, respect, resilience, openness, and wisdom.

Accountability

Defines grade expectations and accountability for coursework; emphasizes students' responsibility for original work and proper citation; stresses punctuality, participation, and consequences of absences.

Evaluations and Grading & Assignments:

Your final grade will be based on the percentage of points you earn as follows:

Letter Grade	Percent Range
A	90-100%
B	80-89.99*%
C	70-79.99*%
D	60-69.99*%
F	0-59.99*%

*Rounding of grades to the next grade level is at the sole discretion of the instructor.

There will be no extra credit offered in this course.

Your grade will be determined by the following:

Homework	10%
Sixth Extinction Book Club	20%
Writing Assignments	20%
Laboratory Assignments	25%
Exams	25%

Homework. 10% of your final grade will be determined by the completion of homework assignments that are based on the readings for the course. These will mostly take the form of quizzes on the readings; this is to facilitate the reading and comprehension of the course material.

Sixth Extinction Book Club. 20% of your final grade will be determined through your participation in the Sixth Extinction Book Club. This will consist of seminar-style discussions where we will read, interpret, comprehend, and critically evaluate chapters from Elizabeth Kolbert's 2014 landmark book about the 'sixth mass extinction,' *The Sixth Extinction: An Unnatural History*. We will specifically be reading the 10th Anniversary Edition of this book, which has won many awards, including the Pulitzer Prize. Participation

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will take the form of discussion posts on Canvas; I will post a prompt for you to address about the chapter(s) we have read that week, and you will respond to that prompt given the parameters by **Thursday** of that week, and you will respond to two other students by the **Sunday** of that week.

Writing Assignments. 20% of your final grade will be determined by short writing assignments, which can range from case studies to mini projects that are designed to explore ideas related to the course.

Laboratory Assignments. 25% of your final grade will be determined by the completion of laboratory assignments, which will take the form of computer lab exercises designed to allow you the opportunity to work with conservation biology data relevant to the course topics. These will primarily originate from Cardinale and Murdoch's *Conservation Biology*, or Gibbs, Hunter, and Sterling's *Problem Solving in Conservation Biology and Wildlife Management*.

Exams. 25% of your final grade will be determined by three midterm examinations that are based on Cardinale and Murdoch's *Conservation Biology 2e* and additional course readings:

Midterm I: The Fundamentals of Biodiversity, which will cover Chapters 1-7 (history and development of conservation biology, biodiversity fundamentals, drivers of biodiversity and global biodiversity patterns, ecosystem services, ecological economics, valuation of biodiversity).

Midterm II: Threats to Biodiversity, which will cover Chapters 8-12 (extinction, habitat loss and fragmentation, overexploitation, invasive species, and climate change)

Midterm III: Strategies for Conservation, which will cover Chapters 13-17 (species-level conservation, community and ecosystem conservation, landscape scale conservation, ex situ conservation, and sustainable development).

There is no final exam for this course.

Attendance Policy

You are expected to arrive to class on time and be prepared to participate in each class period. Four unexcused absences may result in withdrawal and a "W" or "Y" will be recorded. You may request to be excused from class for religious observances and practices, for illness, for school or work-related travel or for personal or family emergency. If you will be absent, please notify the instructor as soon as possible.

Academic Integrity:

Violations of scholastic ethics are considered serious offenses by San Carlos Apache College. Students may consult the SCAC Student Handbook sections on student code of conduct, on scholastic ethics and on the grade appeal procedure.

All work done for this class must be your own, or the original work of your group. While you may discuss assignments with other class members, the final written project must clearly be original. You may use work from books and other materials if it is properly cited.

Instructor Withdrawals

Students who have missed four consecutive classes (or the equivalent), or have not submitted any assignments nor taken any quizzes by the 45th day census report, due on [date of 45th day found in Academic Calendar on SCAC website], are assumed NOT to be participating in the class and may be withdrawn at the faculty member's discretion.

Student Withdrawals

Students may withdraw from class at any time during the first 2/3 of the semester without instructor permission and without incurring any grade penalty. Please be sure to withdraw yourself by [withdrawal deadline date found in Academic Calendar on SCAC website] if you do not expect to complete the class; otherwise, you may receive an "F" grade.

Respect

Establishes a respectful learning environment free from discrimination; promotes a safe and inclusive campus.

Equal Access Statement/Disability Accommodations

San Carlos Apache College seeks to provide reasonable accommodations for qualified individuals with disabilities. The College will comply with all applicable regulations, and guidelines with respect to providing reasonable accommodations as required to ensure an equal educational opportunity. This process includes self-identifying as a student with a disability, providing supporting documentation of their disability, and being approved for services through the Disability Resources Office (DRO). It is the student's responsibility to make known to their instructor(s) the student's specific needs within the context of each class in order to receive appropriate accommodations. We will work together in order to develop an accommodation plan specifically designed to meet the individual student's requirements.

For more information or to request academic accommodations, please contact: Anthony Osborn, TOCC Disabilities Resource Coordinator, aosborn@tocc.edu, or 520-383-0033 for additional information and assistance.

Title IX

San Carlos Apache College encourages each student to have the knowledge and skills to be an active bystander who intervenes when anyone is observed or being harassed or endangered by sexual violence. Sexual discrimination and sexual violence can undermine students' academic success and quality of life on campus and beyond. We encourage students who have experienced or witnessed any form of sexual misconduct to talk about their experience and seek the support they need.

Conduct: Bias, Bullying, Discrimination and Harassment

San Carlos Apache College faculty and staff are dedicated to creating a safe and supportive campus environment as a core value. Harassment based on age, class, color, culture, disability and ability, ethnicity, gender, gender identity and expression, immigration status, marital status, political ideology, race, religion/spirituality, sex, sexual orientation, and tribal sovereign status will not be tolerated.

Resilience

Supports students facing unavoidable circumstances and recognizes hardships, while setting academic expectations.

Incomplete Policy

Incomplete (I) grades are not awarded automatically. The student must request an "I" from the instructor who can choose to award an Incomplete only if all three of the following conditions are met:

1. The student must be in compliance with the attendance policy.
2. The student must have unavoidable circumstance that would prohibit the student from completing the course.
3. The student must have completed over 75% of the course requirements with at least a "C" grade.

Incompletes are not a substitute for incomplete work due to frequent absences or poor academic performance. Incomplete grades that are not made up by the end of the ninth week of the following semester will be automatically changed to an F if the agreed upon work, as stipulated on the written form signed by the instructor and the student when the I grade is awarded, is not completed.

Special Withdrawals (Y) Grade

The "Y" grade is an administrative withdrawal given at the instructor's option when no other grade is deemed appropriate. Your instructor must file a form stating the specific rationale, with documentation, for awarding this grade. "Y" grades are discouraged since they often affect students negatively. Your instructor will not award a "Y" grade without a strong reason.

Openness

Encourages open discussions between students and faculty and provides transparency about expectations and learning methods

Courses Outline and Important Dates

Week	Dates	Topic	Readings	Assignments
1	Aug 18 – Aug 24	What is Conservation Biology?	Cardinale and Murdoch, Chapters 1-2 Kolbert, Ch. 1	<ul style="list-style-type: none"> Homework 1: What is Conservation Biology? Discussion 1: Kolbert Chapter 1 Writing Assignment #1: TEK and Conservation Biology Lab 1: IUCN Red List of Threatened Species
2	Aug 25 – Aug 31	What is Biodiversity?	Cardinale and Murdoch, Chapter 3 Kolbert, Ch. 2	<ul style="list-style-type: none"> Homework 2: What is Biodiversity? Discussion 2: Kolbert Chapter 2 Writing Assignment #2: Species Account Lab 2: Measures of Diversity
3	Sept 1 – Sept 7	Global Patterns and Drivers of Biodiversity	Cardinale and Murdoch, Chapter 4 Kolbert, Ch. 3	<p style="text-align: center;">LABOR DAY – SEPT 1</p> <ul style="list-style-type: none"> Homework 3: Global Patterns and Drivers of Biodiversity Discussion 3: Kolbert Chapter 3 Writing Assignment #2: Species Account Lab 3: Island Biogeography
4	Sept 8 – Sept 14	Valuation of Biodiversity	Cardinale and Murdoch, Chapter 5 Kolbert, Ch. 4	<ul style="list-style-type: none"> Homework 4: Valuation of Biodiversity Discussion 4: Kolbert Chapter 4 Writing Assignment #3: Food Webs Lab 4: Social Norm Curves
5	Sept 15 – Sept 21	Biodiversity and Ecosystem Services	Cardinale and Murdoch, Chapter 6 Kolbert, Ch. 5	<ul style="list-style-type: none"> Homework 5: Biodiversity and Ecosystem Services Discussion 5: Kolbert Chapter 5 Writing Assignment #3: Food Webs Lab 5: Ecosystem Services

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6	Sept 22 – Sept 28	Ecological Economics and Decision Making	Cardinale and Murdoch, Chapter 7	<p>Exam I: The Fundamentals of Biodiversity</p> <ul style="list-style-type: none"> • Homework 6: Ecological Economics and Decision Making • Writing Assignment #3: Food Webs • Lab 6: Multicriteria Decision Analysis
7	Sept 29 – Oct 5	Extinction	Cardinale and Murdoch, Chapter 8 Kolbert, Chapter 6	<ul style="list-style-type: none"> • Homework 7: Extinction • Discussion 6: Kolbert Chapter 6 • Writing Assignment #4: Valuation of Biodiversity I • Lab 7: Stochasticity
8	Oct 6 – Oct 12	Habitat Loss, Fragmentation, and Degradation	Cardinale and Murdoch, Chapter 9 Kolbert, Chapter 7	<ul style="list-style-type: none"> • Homework 8: Habitat Loss, Fragmentation, and Degradation • Discussion 7: Kolbert Chapter 7 • Writing Assignment #5: Valuation of Biodiversity II • Lab 8: Metapopulation Dynamics
9	Oct 13 – Oct 19	Overexploitation	Cardinale and Murdoch, Chapter 10 Kolbert, Chapter 8	<ul style="list-style-type: none"> • Homework 9: Overexploitation • Discussion 7: Kolbert Chapter 7 • Writing Assignment #6: Valuation of Biodiversity III • Lab 9: Harvest Models
10	Oct 20 – Oct 26	Invasive Species	Cardinale and Murdoch, Chapter 11 Kolbert, Chapter 9	<ul style="list-style-type: none"> • Homework 10: Invasive Species • Discussion 9: Kolbert Chapter 9 • Writing Assignment #7: Valuation of Biodiversity IV • Lab 10: Species Distribution Models
11	Oct 27 – Nov 2	Climate Change	Cardinale and Murdoch, Chapter 12	<p>Exam II: Threats to Biodiversity</p> <ul style="list-style-type: none"> • Homework 11: Climate Change • Writing Assignment #8: Threats to Biodiversity I • Lab 11: Climate Envelope Models

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12	Nov 3 – Nov 9	Species-Level Conservation	Cardinale and Murdoch, Chapter 13 Kolbert, Chapter 10	<ul style="list-style-type: none"> • Homework 12: Species-Level Conservation • Discussion 10: Kolbert Chapter 10 • Writing Assignment #9: Threats to Biodiversity II • Lab 12: Population Viability Analysis
13	Nov 10 – Nov 16	Community and Ecosystem Conservation	Cardinale and Murdoch, Chapter 14 Kolbert, Chapter 11	<p>VETERAN'S DAY – NOV 11</p> <ul style="list-style-type: none"> • Homework 13: Community and Ecosystem Conservation • Discussion 11: Kolbert Chapter 11 • Writing Assignment #9: Threats to Biodiversity II • Lab 13: Predictors of Protected Area Success
14	Nov 17 – Nov 23	Landscape Scale Conservation	Cardinale and Murdoch, Chapter 15 Kolbert, Chapter 12	<ul style="list-style-type: none"> • Homework 14: Landscape Scale Conservation • Discussion 12: Kolbert Chapter 12 • Writing Assignment #10: Case Studies in Wildlife Management • Lab 14: Protected Area Networks
15	Nov 24 – Nov 30	Ex Situ Conservation	Cardinale and Murdoch, Chapter 16 Kolbert, Chapter 13	<p>THANKSGIVING – NOV 26-28</p> <ul style="list-style-type: none"> • Homework 15: Ex Situ Conservation • Discussion 13: Kolbert Chapter 13 • Writing Assignment #10: Case Studies in Wildlife Management • Lab 15: Inbreeding and Outbreeding
16	Dec 1 – Dec 7	The Future of Conservation	Cardinale and Murdoch, Chapter 17 Kolbert, Epilogue	<p>Exam III: Strategies for Conservation</p> <ul style="list-style-type: none"> • Homework 16: Sustainable Development • Discussion 14: Kolbert Epilogue • Writing Assignment #10: Case Studies in Wildlife Management • Lab 16: Genuine Progress Indicator

Faculty/Student Communication

A faculty member will respond to a student's communication within 24 hours of receiving the communication excluding weekends and college closures. If a course is online a faculty will login their Canvas classroom a minimum of three times per week spread evenly throughout the week and respond to any discussion posts and check on student progress in the course.

Course Feedback:

All assignments will be graded and returned to the students promptly, typically within a week after the assignment is closed for handing in. Email and phone messages will be returned within 24 hours. A student or the instructor may request a student conference at any time during the semester. Quarterly grade reports will be provided to each student, either in person, by email or via the electronic system of Canvas.

Wisdom

Encourages evaluation, reasoning and diverse perspectives; emphasizes organized and audience-aware expression, and promotes learning from elders and cultural teachings for personal and academic growth

SCAC General Education Learning Outcomes

Apache Wisdom

Learning from the teachings carried on from Apache elders and other community leaders, students will appreciate their unique history, language, and culture as a source of strength for their personal, family, academic, and career aspirations.

Critical Thinking

Approach critical issues, problems, or questions using creativity and deductive reasoning, evaluating evidence, acknowledging diverse perspectives and contexts, and synthesizing one's own viewpoint into ongoing conversations and debates.

Communication

Effectively express ideas orally and in writing. Good communication includes understanding one's audience, organizing one's thoughts, acknowledging and integrating outside sources, using the most recent technology, and following the accepted writing and citation conventions of the particular discipline.

Environmental Literacy

Students will understand their connection to social, cultural, physical, and global environments. Students will consider and evaluate strategies for cultural, community and global sustainability.

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