

THE SCHOOL FOR FIELD STUDIES

DIRECTED RESEARCH KENYA

Center for Endangered Species Conservation · Kimana. A complete record of student research projects from the four most recent semesters.



SPRING 2026	3 projects · 20 student authors
FALL 2025	3 projects · 15 student authors
SPRING 2025	3 projects · 21 student authors
FALL 2024	3 projects · 17 student authors

12	73	5	4
RESEARCH PROJECTS	STUDENT AUTHORS	FACULTY ADVISORS	SEMESTERS

FALL 2024 – SPRING 2026

ABOUT THIS GUIDE

Directed Research is the capstone of every SFS semester: students work in small teams with resident faculty on questions set by the needs of the host community and its ecosystems. This guide collects the Directed Research projects completed at the Center for Endangered Species Conservation in Kimana, Kenya, over the four most recent semesters.

Projects are listed newest first. Each entry gives the project title, its faculty advisor or advisors, and the student authors with their home institutions. Each entry closes with a research summary drawn from the Center’s semester final report for that project. Where a project’s final paper carries a formal author abstract, that abstract replaces the summary and is labelled as such.

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FACULTY ADVISORS

Directed Research at the Center for Endangered Species Conservation was advised by 5 faculty and researchers across these semesters.

ADVISOR	PROJECTS	SEMESTERS
Dr. John Kiringe	4	All four semesters
Jennifer Wanyingi	4	All four semesters
Dr. Lucy Atieno	2	Fall 2025, Spring 2026
Dr. King’asia Mamati	1	Spring 2025
Dr. Richard Kiaka	1	Fall 2024

Center for Endangered Species Conservation · Kimana, Kenya

01 Key Factors Influencing Community-Wildlife Coexistence in the Amboseli Ecosystem

Faculty advisor: Dr. Lucy Atieno

Grace Baldauff¹, Hunter Kraus², Lucia Fernandez³, Matthew Vaughn⁴

¹ Hope College, ² University of Colorado Boulder, ³ University of San Diego, ⁴ Elon University

RESEARCH SUMMARY

This project identified the factors that most shape whether people and wildlife can coexist in the Amboseli ecosystem, working through interviews with local communities rather than through wildlife survey. The advisor reports that the group performed exceptionally, both in the field and in their final papers. Future iterations will set out the wildlife-focused components of the study more clearly at the outset while retaining its social science focus.

02 Hyena Den Distribution, Prey Preference and Human-Hyena Interactions in Amboseli Ecosystem

Faculty advisor: Jennifer Wanyingi

Steven Awve¹, Perrin Hill², Lydia Huff³, Corinne LePage⁴, Gabriele Lobardo⁵, Mathew Smytheman⁶, Piper Staples⁷, Jack Wood⁸

¹ University of Wisconsin–Madison, ² Bates College, ³ Mount Holyoke College, ⁴ Brown University, ⁵ Bucknell University, ⁶ Washington State University, ⁷ Wheaton College, ⁸ Iowa State University

RESEARCH SUMMARY

This project mapped hyena den distribution across the Amboseli ecosystem and paired it with prey preference and the interactions hyenas have with people. Long distances between identified dens made the fieldwork demanding, and the rainy season left some sites unreachable, so parts of the assessment went undone. The next round will separate ecological data collection and household surveys onto different days — avoiding market day and Sunday, when the community is away — and set camera traps at identified dens ahead of data collection.

03 The Status of Lions in the Amboseli Ecosystem

Faculty advisor: Dr. John Kiringe

Snow Boyd Vigil, Kyle Decker, Paige Avis, Isabella Danos, Eleanor Scheetz, Mary Richards, Shannon McGuire, Nico Gitterle

University of Vermont · University of Minnesota Twin Cities · Bucknell University · Sewanee: The University of the South · Colorado College · University of Wisconsin–Madison · University of New Hampshire

RESEARCH SUMMARY

The second semester of a study on the status of lions in the Amboseli ecosystem, this project set out to track the population and its distribution across the landscape. Heavy rain in March altered the landscape and dispersed both lions and their prey, which made the animals unusually hard to locate. In view of that difficulty, the advisor has suspended the project until the problem of spotting lions can be resolved.

Center for Endangered Species Conservation · Kimana, Kenya

01 The Status of Lions in Amboseli National Park, Amboseli Ecosystem

Faculty advisor: Dr. John Kiringe

Alena Thalput¹, Ethan Lieman¹, Clara Berdelman², Noora Herzog³, Jenna McAmis⁴

¹ University of Massachusetts Amherst, ² University of Redlands, ³ Hamilton College, ⁴ Sewanee: The University of the South

RESEARCH SUMMARY

This project opened a study on the status of lions in Amboseli National Park and the wider ecosystem, establishing where the population sits and how it uses the park. Locating lions in the field was the principal challenge. The work continued into the following semester.

02 Hyena Den Distribution, Prey Preference, and Human–Hyena Interactions in the Amboseli Ecosystem

Faculty advisor: Jennifer Wanyingi

Robin Bock¹, Maha Fahwzi², Katherine Matczak³, Sarah Maria³, Maya Richwine⁴, Belin Tate⁵

¹ Colorado College, ² Reed College, ³ University of New Hampshire, ⁴ Muhlenberg College, ⁵ Middlebury College

RESEARCH SUMMARY

This project surveyed hyena den distribution, prey preference, and human–hyena interactions across the Amboseli ecosystem, combining den mapping with household-level accounts of encounters. The survey covered part of the intended set of target areas and sampling sites, and was extended the following spring to take in the remainder.

03 How Human–Wildlife Coexistence Is Understood by Different Stakeholders in the Amboseli Ecosystem

Faculty advisor: Dr. Lucy Atieno

Mindy Mitchell¹, Josie Dickman², Tamar Breines³, Montana Gura²

¹ Sewanee: The University of the South, ² Wesleyan University, ³ Grinnell College

RESEARCH SUMMARY

Human–wildlife coexistence means different things to a herder, a conservancy manager, and a government officer. This project examined how different stakeholders in the Amboseli ecosystem understand the term and what each expects from it. It was the first semester of the study, which continued into Spring 2026.

Center for Endangered Species Conservation · Kimana, Kenya

01 **Abundance, Distribution, and Habitat Preference of Grey Crowned Cranes (*Balearica regulorum gibbericeps*) in Amboseli N. Park and Its Environs**

Faculty advisor: Dr. John Kiringe

Olivia Beigel¹, Evan Robertson², Jaedyn Toman³, Jess Hartley-Lowe⁴, Hannah Herbst⁵, Elizabeth Ethington⁶, Jordayn Eichhorn⁷, Gavin Allvine⁸

¹ Drake University, ² Skidmore College, ³ Amherst College, ⁴ Dickinson College, ⁵ University of Wisconsin/Madison, ⁶ Bucknell University, ⁷ University of Colorado/Boulder, ⁸ Colorado College

RESEARCH SUMMARY

Grey crowned cranes (*Balearica regulorum gibbericeps*) are endangered across their African range and depend on wetlands that are under pressure throughout the Amboseli basin. This project recorded their abundance, distribution, and habitat preference in Amboseli National Park and its environs, continuing a survey begun the previous semester. The advisor reports no challenges with the fieldwork and planned a further study for the following autumn.

02 **Analysis of the Mbirikani Predator Compensation Fund's Effectiveness in Fostering Coexistence Between Humans and Lions in the Former Kimana Group Ranch**

Faculty advisor: Dr. King'asia Mamati

Anne Heissenbuttel¹, Carmela Symula², Cayden Steele³, Mary Zadronzny⁴, Mila Seifert⁵, Remy Kalmbach⁶

¹ Reed College, ² University of Vermont, ³ Washington State University, ⁴ University of Colorado/Boulder, ⁵ Vassar College, ⁶ Colorado College

RESEARCH SUMMARY

The Mbirikani Predator Compensation Fund pays herders for livestock lost to predators, on the theory that compensation removes the incentive to kill lions. This project analysed how effective the fund has been at fostering coexistence between people and lions in the former Kimana Group Ranch. The advisor notes that other group ranches should be included to allow a comparative assessment, and the findings will be shared with the Big Life Foundation and the County Government Department of Environment.

03 **Assessing the Socio-Economic Factors to Wildlife Resources Use and Giraffe Bushmeat Activity in the Amboseli Region**

Faculty advisor: Jennifer Wanyingi

Sophia Fabrizio¹, Lilly Walz², Jake Wolff³, Katie Sarko⁴, Emory Wheeler⁵, Milo Morton⁶, Trevon Neal⁷

¹ University of Michigan, ² Denison University, ³ Drake University, ⁴ University of Colorado/Boulder, ⁵ Gonzaga University, ⁶ Ohio Wesleyan University, ⁷ Iowa State University

RESEARCH SUMMARY

This project assessed the socio-economic factors behind wildlife resource use and giraffe bushmeat activity in the Amboseli region, working at household level to understand what drives the practice. A small number of areas went unassessed and will be covered during the summer giraffe programme.

Center for Endangered Species Conservation · Kimana, Kenya

01 Effectiveness and sustainability of the Mbirikani Predator Compensation Fund in enhancing community coexistence with lions

Faculty advisor: Dr. Richard Kiaka

Charlotte Bermingham¹, Emma Thomas², Hellen Henry³, Lila Iyengar⁴, Thomas Manning⁵

¹ Bard College, ² Davidson College, ³ Reed College, ⁴ Oberlin College, ⁵ DePauw University

RESEARCH SUMMARY

This project examined the effectiveness and sustainability of the Mbirikani Predator Compensation Fund in enhancing community coexistence with lions — the first phase of a study repeated the following spring. The advisor reports no challenges with the work and plans to work with the students toward publishing the findings in a peer-reviewed journal.

02 Abundance, distribution, and habitat preference of grey crowned crane in Amboseli National Park and community wetlands

Faculty advisor: Dr. John Kiringe

Hannah Carleton¹, Elizabeth Motch², Kaeley Zito³, Isabel Grass⁴, Katherine Addison⁵, Meredith Hastings⁶, Joseph Triquet⁷

¹ Smith College, ² Franklin & Marshall College, ³ Trinity College, ⁴ Sewanee: The University of the South, ⁵ Davidson College, ⁶ Reed College, ⁷ University of New Hampshire

RESEARCH SUMMARY

This project recorded the abundance, distribution, and habitat preference of grey crowned cranes in Amboseli National Park and in the community wetlands beyond its boundary; wetlands outside protected areas matter as much to the species as those within. The advisor continued the study the following semester to accumulate enough data for publication. Some students asked about publishing the work, but more data are needed before that decision can be made.

03 Anthropogenic threats, wildlife resource use, and intervention measures in conservation of Masai giraffe in the Amboseli ecosystem

Faculty advisor: Jennifer Wanyingi

Avery Graff¹, Talia de la Cruz², Autumn Sims³, Helen Gies⁴, Aileen Valencia⁵

¹ Sewanee: The University of the South, ² Sewanee: The University of the South, ³ Sewanee: The University of the South, ⁴ Wesleyan University, ⁵ Davidson College

RESEARCH SUMMARY

This project examined the anthropogenic threats facing Masai giraffe in the Amboseli ecosystem, how wildlife resources are used, and what intervention measures conservation might take. It continued the following spring across further villages, with focus group discussions and participatory mapping added to the methodology, and was extended into the summer giraffe programme so that all seasons are covered. Presentations are to be shared with Kenya Wildlife Service in the Amboseli ecosystem.

THE SCHOOL FOR FIELD STUDIES

Center for Endangered Species Conservation, Kimana, Kenya. Titles, faculty advisors, student authors, and home institutions compiled from the SFS Directed Research project lists for Fall 2024, Spring 2025, Fall 2025, and Spring 2026.