MPALA
AFRICA'S LIVING LABORATORY

Newsletter

January 2026 | Newsletter **#38**

Dear Mpala Community,

Happy New Year! We hope that your year is off to a wonderful start. 2026 has opened in full swing at Mpala Research Centre, with the return of many long-term researchers and student groups.

We explored opportunities to broaden our research into the social sciences by welcoming faculty and collaborators from Princeton University across a variety of disciplines, including architecture, archaeology, and geology. This occasion brought together more than ten Mpala researchers, who presented their research and began discussing opportunities for interdisciplinary collaboration.

We hosted faculty and students from Columbia University for a tropical biology field course. Over the intensive two-week course, students designed and conducted four small research projects. They learned how to implement the scientific model and do real scientific research, developing a deeper understanding of the savanna ecosystem.

As part of the Master in Ecology, Evolutionary Biology and Biodiversity Conservation at the University Helsinki, students took part in a field course on human wildlife conflicts in East Africa at Mpala. MSc students from the University of Exeter also came to Mpala as members of the Conservation and Biodiversity group.

Throughout January, Mpala also hosted two Princeton University courses: a Freshman Field Biology Seminar and an Anthropology Film course. The former returned for its third iteration at Mpala, with students delving into hands-on techniques in field biology. As a new course, the latter focused on five research projects at Mpala, culminating in a screening of selected scenes from the students' wildlife and multispecies documentaries.

Students from these courses had multiple opportunities to engage meaningfully not only with the research at Mpala, but also with its surrounding community. They visited women's groups and cultural bomas in Lekiji and Il Motiok, learning more about traditional practices, and local customs. One group, in particular, chose to focus their film on Daraja Academy, a long-standing partner and champion of girls' education across Kenya.

January has set a vibrant and bustling tone for the rest of the year, and we look forward to welcoming new faces and exploring emerging research areas. It has been a joy to see Mpala's dining halls filled once again, and to share in the lively discussions and collaborations that the new year has brought.

Warm regards,

The Mpala Team

Updates from the Field

Dr Hanna Ehrlich and her Field Assistant with community livestock in Lekiji

Disease Ecologies in Shared Rangelands

In Northern Kenya, wildlife and livestock have coexisted for millennia, grazing across overlapping but contested territories, shaped by seasonal movement, land management, differential resource distributions, and increasingly rapid ecological change. This project examines how diseases circulate in shared landscapes, focusing on ticks and parasitic infections at multi-species interfaces. It aims to understand how social and ecological conditions impact zoonotic disease dynamics and cross-species transmission events.

With a team from the Global Health Program at Princeton University, Mpala, and over a dozen research staff from local communities, much of the work is carried out in communal rangelands and alongside pastoralist households. This ongoing work with community herds is part of a larger, integrated One Health research program the team aims to develop at Mpala. They are examining how livestock exclusion and reintroduction alters vector dynamics and potential spillover pathways between cattle and wildlife, with the ultimate goal of building a participatory disease surveillance network in the region. Together, these efforts link ecological research with applied surveillance, infrastructure, and policy development.

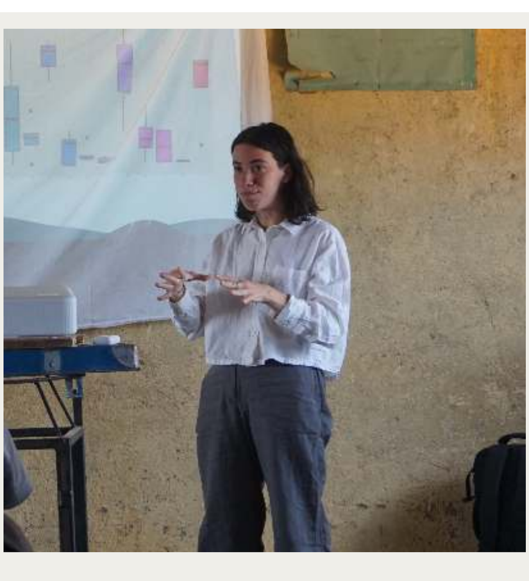
Read more about this project

Faces of Mpala

Featured Researcher: Hanna Ehrlich

From working on malaria in Burkina Faso, cholera in Tamil Nadu, COVID-19 in Connecticut, to tick-borne diseases at Mpala, Hanna has studied epidemiology and disease ecology in a wide range of settings. Her tick and parasite project combines field sampling with time spent in local bomas, learning how herders recognise disease in their animals and make care management decisions. Over the long term, Hanna hopes to build a research program that integrates ecological, veterinary, and social science approaches to better understand and mitigate diseases at the wildlife-livestock interface.

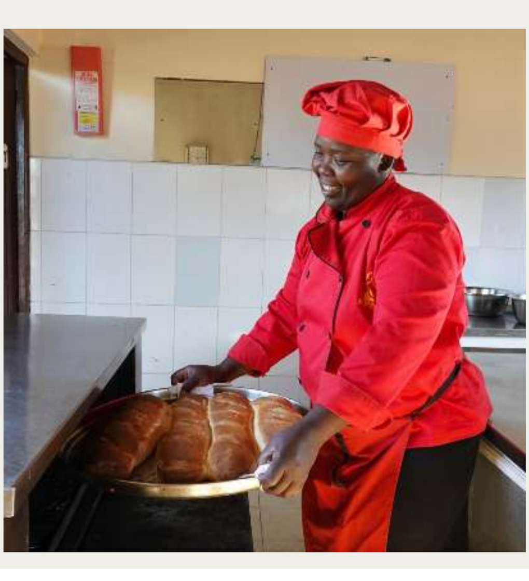
Read more about Hanna



Featured Staff: Eunice Chepkinyo Koech

For anyone who has visited Mpala over the years, Head Chef Eunice is a familiar face. With 26 years of experience at Mpala, Eunice is passionate about leaving a lasting legacy through her work. Her role allows her to interact closely with guests, whilst gaining culinary inspiration from around the world. To Eunice, Mpala is more than a workplace, it is a family that has supported her journey from the very beginning of her career to becoming a seasoned field station chef.

Read more about Eunice



Featured Course

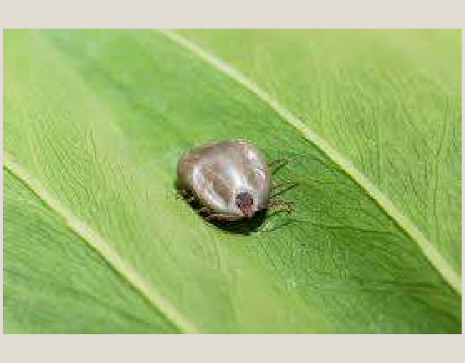
Columbia University students visiting an abandoned boma on Mpala

Columbia University Tropical Biology Field Course

Columbia University hosted their annual Tropical Biology field course at Mpala Research Centre in January 2026. The 15-day immersion in field biology brought together a dozen or so undergraduate students. Led by Professor Dustin Rubenstein, this course introduced students to tropical biology, savanna ecology, animal behavior, and conservation biology through intensive field research training.

Read more about this course

Featured Publications



Potential spillover investigated by metagenome sequencing in Laikipia, Kenya reveals tick-borne pathogens and a novel bunyavirus

Kamau, M., Ergunay, K., Bourke, B.P., Mutura, J., Lebunge, R., Ochieng, G., Gathii, K., Waitumbi, J., Mutai, B., Hassell, J. and von Fricken, M., (2025)

Using nanopore-based metagenomic sequencing, this study screened ticks from central Kenya and found high prevalences of tick-associated bacteria and viruses, with Jingmen tick virus (JMTV) being the most common. Genome analyses placed JMTV within an East African–Asian lineage and enabled identification of a novel virus, Mpala tick virus. Overall, the approach demonstrates the effectiveness of agnostic sequencing for detecting diverse and emerging tick-borne pathogens.

Continue Reading

Tissue-specific localization of tick-borne pathogens in ticks collected from camels in Kenya: insights into vector competence

Khogali, R., Bastos, A., Bargul, J.L., Getange, D., Kabii, J., Masiga, D. and Villinger, J., 2024.

This study found that tick-borne pathogen *Candidatus Anaplasma camelii* was highly prevalent in camels but absent from all tick tissues. In contrast, *Rickettsia* and *Ehrlichia* species showed clear tissue- and tick-species–specific patterns, with *Rickettsia africae* predominantly detected in the hemolymph of *Amblyomma gemma*. These findings suggest that pathogen localization in the hemolymph, rather than whole-tick detection alone, may better indicate vector competence and transmission potential.

Continue Reading

Oxpecker (*Buphagus erythrorhynchus, Buphagus africanus*) and tick abundances in acaricide-treated livestock areas

Welsh, E.C., Kessing, F., & Allan, B.F. (2019)

Using agnostic nanopore metagenomic sequencing, this study screened ticks from central Kenya and detected a high diversity of tick-borne bacteria and viruses, with Jingmen tick virus (JMTV) being the most prevalent. A complete JMTV genome was assembled and shown to cluster within an East African–Asian lineage, and expanded screening confirmed its circulation across multiple tick species. The approach also enabled discovery of a novel virus, Mpala tick virus, demonstrating the utility of nanopore sequencing for identifying known and emerging tick-borne pathogens.

Continue Reading

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