



Mpala Newsletter

May 2025 | Issue #30



Community Graduate Workshop at Mpala

Letter from the Executive Director

Dear Mpala Community,

May was anything but ordinary. From early mornings filled with birdsong to spirited conversations with the next generation of conservationists, every day was a vivid reminder of how alive this extraordinary landscape truly is.

On World Migratory Bird Day (May 10th), more than 20 staff and researchers grabbed binoculars and cameras for an enthusiastic birdwatching adventure. We spotted an incredible 136 species—including some exciting first-time sightings for Mpala! Our efforts earned us 4th place in checklists and 11th in species across Kenya. The joy, surprise, and “Did you see that?!” moments made it a morning to remember.

Later in the month, we hosted 15 bright and curious students for a dynamic, three-day graduate workshop through our Community Outreach program. The sessions were packed with hands-on learning—covering everything from animal behavior and movement ecology to habitat assessments and foraging strategies. Throughout the workshop, students sharpened key scientific skills—from data handling and communication to analysis—while receiving mentorship from Mpala’s researchers, including our baboon and rangelands teams. It was a powerful reflection of our commitment to nurturing the next generation of passionate scientists.

We also welcomed two enthusiastic interns, Caroline Mwende and Shakira Mwendwa, from Daraja Academy as part of our new partnership. They’ll be with us until June 20th, rotating through various projects to gain real-world conservation experience and learn from Mpala’s leading research scientists.

These moments of curiosity, connection, and growth are what keep the spirit of Mpala thriving. Together, we’re building something truly special—and it’s a joy to share this journey with you.

Warm regards,

Dr. Winnie Kiuru, Executive Director

Featured Research

The Superb Starling Project



A superb starling in a tree. Photo courtesy of Dr. Dustin Rubinstein

Superb starlings are one of the more familiar birds in Kenya. From the Mara to the Rift Valley to the Ethiopian border, superb starlings can be found in a range of habitats across the country. Yet, despite how common they are, most people do not realize that they have one of the most complicated and sophisticated lifestyles of any bird in the world. Superb starlings form complex social groups—typically of around 25-30 birds—with multiple breeding pairs and are cooperative breeders, meaning a large number of non-breeding helpers aid in providing for offspring and nest defense.

It quickly became apparent that inter-annual rainfall variation was the key factor that influenced nearly all facets of superb starling physiology (how their body functions) and social behavior. Over the years, we have shown that year-to-year variation in dry season rainfall is directly related to levels of stress hormones, levels of reproductive conflict within groups, whether individuals try to breed on their own or help their relatives raise their young, and ultimately their survival and reproductive success. Just as interannual variation in rainfall influences the stress physiology of starlings living in savannas, it also influences body condition, immune function, and overall health.

Ultimately, we are gaining critical information about how climatic variation and environmental change influence the behavior, physiology, morphology (how they communicate), and genetic structure of superb starlings. Only through long-term studies like this one can we begin to understand the lifestyle of these complex birds.

[Read more](#)

Faces of Mpala

Featured Researcher: Andrew Halls

Andrew first came to Mpala as a Master’s student under the supervision of Professor Susanne Shultz at the University of Manchester. Now, he is in the final year of his PhD investigating the ecology of potentially zoonotic pathogens across the Laikipia landscape, with a focus on how wildlife, livestock, and human health intersect.

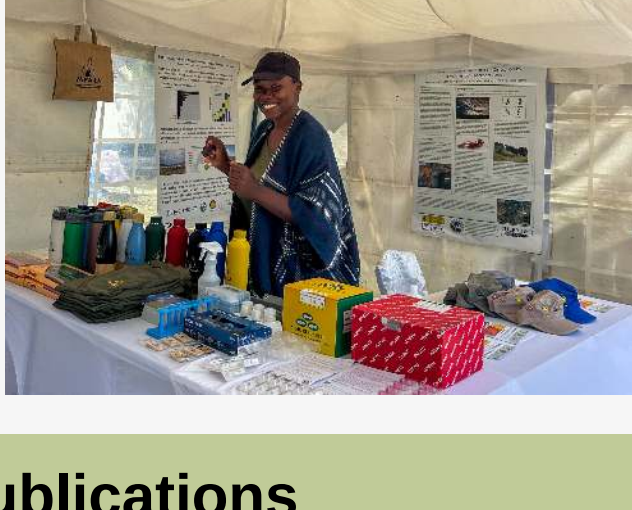
[Read more about Andrew](#)



Featured Staff: Dinah Ayoma

Since joining Mpala in March, Dinah has been handling all research projects as the Research Compliance Officer. In her role, she ensures that the compliance and permitting process is a dual carriageway where compliance meets high-quality research while also fostering an enriching research experience in Kenya and at Mpala.

[Read more about Dinah](#)



Featured Publications

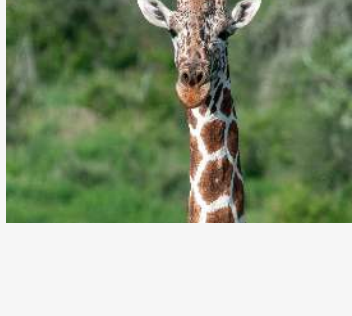


Moving as a group imposes constraints on the energetic efficiency of movement

James A. Klarevas-Irby, Brendah Nyaguthii, Damien R. Farine

Movement is a key part of life for many species. In solitary animals, the energetic costs of movement can be mitigated through energetically efficient strategies that produce faster, straighter movements. However, little is known about whether moving as part of a collective enhances or limits the ability of individual group members to express such strategies. This study draws from 6 years of population-level, high-resolution (1 Hz) GPS tracking of group-living vulturine guinea fowl to provide evidence for a substantial energetic cost arising from collective movement.

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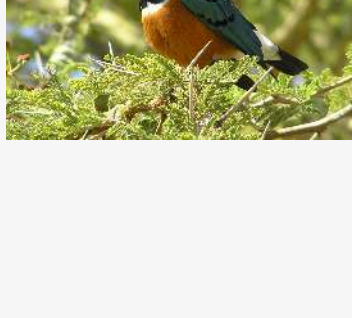


Diet-microbiome covariation across three giraffe species in a close contact zone

Elin Videvall, Brian A. Gill, Michael B. Brown, Hannah K. Hoff, Bethan L. Littleford-Colquhoun, Peter Lokeny, Paul M. Musili, Tyler R. Kartzinel

The biodiverse group of ruminant mammals are entirely dependent on their gut microbiota to extract energy and nutrients from their foods, making these symbionts vital to survival. Because variation in wildlife diets can select for distinct communities of gut bacteria, different foraging choices can have both nutritional effects and other microbially-mediated effects on animal well-being. This study used DNA metabarcoding to compare the diets and gut microbiomes of three species of the world’s largest ruminant, giraffes—reticulated, northern, and Masai—that occur along a near-contact zone in equatorial Kenya.

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A cryptic role for reciprocal helping in a cooperatively breeding bird

Alexis D. Earl, Gerald G. Carter, Arden G. Berlinger, Elkana Korir, Shaillee S. Shah, Wilson N. Watetu, & Dustin R. Rubenstein

The most complex form of cooperation in vertebrates occurs in cooperative breeders, in which helpers forego reproduction and assist in raising the young of others, typically relatives. Not all cooperative societies, however, are kin-based—nearly half of all avian and mammalian cooperative breeders form mixed-kin communities, much like those of humans. Here, using a 20-year study of superb starlings (*Lamprolornis superbus*), this study examined how direct and indirect fitness jointly influence helping behaviour.

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Mpala explores solutions to current and emerging challenges by advancing transformational ecosystems research and teaching, conserving our environment, and partnering with our community

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