



Early-Career Researchers



Ken Gitau/Mpala Research Centre

*Meet **Ivy Ng'iru**, an early-career researcher at Mpala who has just been awarded a prestigious PhD studentship through the NERC Centre for Doctoral Training in Ecotoxicological Risk Assessment Towards Sustainable Chemical Use (ECORISC). Based at the UK Centre for Ecology and Hydrology (UKCEH) and Cardiff University, Ivy will study the impacts that pesticide spray drift causes on non-target Lepidopteran species harbored along agricultural field margins.*

Tell us about your background.

I am Kenyan, born in Nyeri County but raised in Laikipia County. I have a background in Environmental Conservation and Natural Resource Management from the University of Nairobi. Incidentally, much as my training was in environmental science, I was most active in the field of theater and stage arts—performing in musicals, writing music, and playing in bands. I volunteered in various environmental outreaches; climate campaigns, animal rehabilitation, environmental risk assessment, environmental education and climate Activism. For these, I worked at the Kenya Wildlife Service, Chiromo Environmental Awareness Club, 350.org, The William Holden Wildlife Foundation and Education Centre, and the Mt. Kenya Game Ranch and Animal Orphanage.

What brought you to Mpala?

I first came to Mpala in December 2017, where I volunteered to carry out The Ant Surveys on the whistling thorn Acacia in Dr. Dino Martin's Lab. This was my first formal encounter with a scientist who researched in the field of Ecology, Evolution and Organismal Biology of Insects. In 2018, I joined the same lab as an intern, where I have since been working in the field of insect-plant interaction.

What projects are you currently working on at Mpala? What are your research goals?

I have worked on a wide array of projects, which include: The Butterfly Projects, The Harvester Ant Project and the Buffel and Guinea Grass Projects.

Generally, all the projects aim to enhance understanding of the ecology, evolution and biology of the study species. Specifically, the butterfly projects are concerned with butterfly genetics, spatiotemporal population dynamics and the migration of butterfly species. The Harvester Ant Project aims to better understand the ecology and biology of harvester ants. The Buffel and Guinea Grass Projects aim to illuminate the factors that drive an organism to become invasive, and those that cause a system to be invaded. The projects also study the native insect associates of these two grasses. Ultimately, the goal is to develop biological controls as well as strategies of management.

What impact has your time at Mpala had on your professional career?

I have just been awarded a PhD studentship through the NERC Centre for Doctoral Training in Ecotoxicological Risk Assessment Towards Sustainable Chemical Use (ECORISC), to study the impacts that pesticide spray drift causes on non-target Lepidopteran species harbored along agricultural field margins. I will be based at the UK Centre for Ecology and Hydrology (UKCEH) and Cardiff University.

Admittedly, the research skills taught by Dr. Dino Martins while working in his lab, the various opportunities to contribute to education through the Northern Kenya Conservation Labs, collaborations with the lab and Wildlife Direct among others, played a major role in preparing me for this studentship.

The mentorship that Dr. Dino Martins offered has endeared me to study butterflies and moths, creatures I refer to as 'my tender teachers.' His commitment and contribution to science has challenged me to not only excel in my field of study, but also to extend myself by contributing my knowledge and skills towards the progress of science.

The cross-cultural nature of Mpala has taught me the relevance of respect, unity, humility, collaboration and diplomacy in steering a vision forward. Things do take time! I have learnt a valuable lesson on patience, diligence, and commitment towards my duties. All these are ingredients that are pivotal not only to academic excellence, but also to life in general.

What is your favorite thing about working at Mpala?

Mpala is a living laboratory: With the changes in the world, especially those accredited to human influence, we have seen a great loss of biodiversity and habitats. Mpala, by virtue of cultural influence (the pastoralist way of life and belief), as well as the institution's mission, allows the landscape to remain almost pristine.