TWO MSC STUDENETS TRAINED IN THE EMERGING SCIENTIST PROGRAM 2021
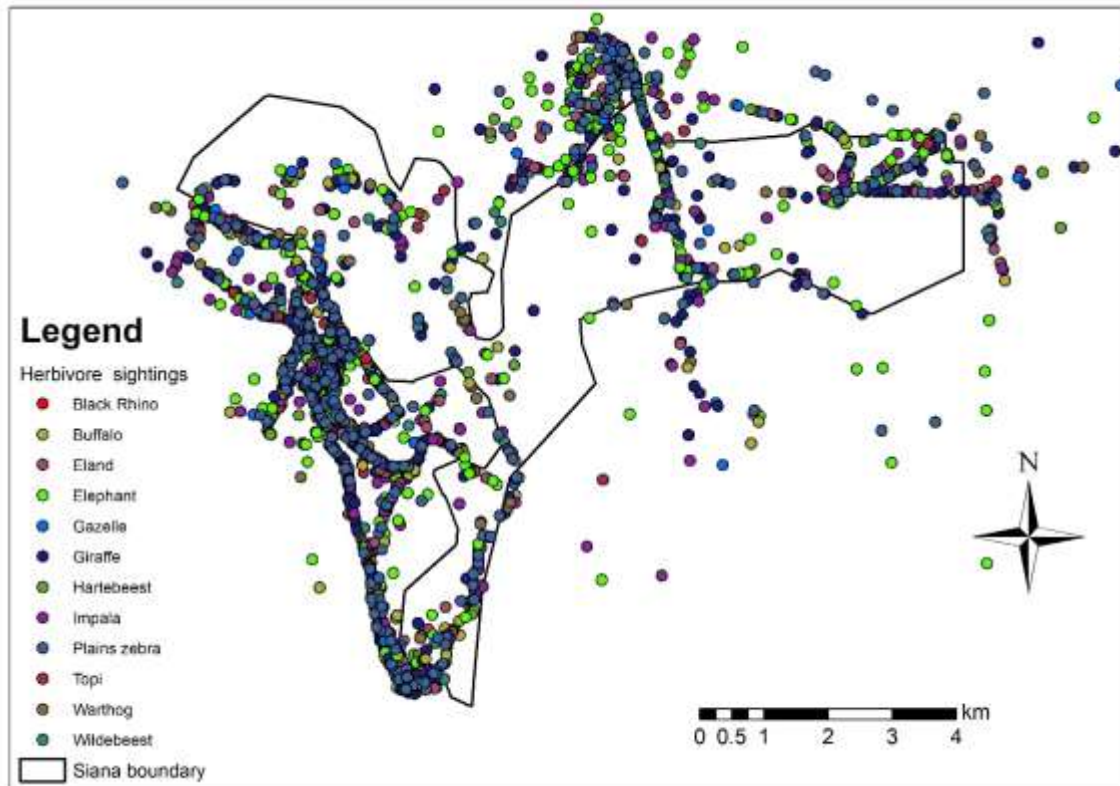**September 15, 2021, to September 26, 2021**

The Emerging Scientist Program is a training program meant to equip young scientists with the fundamental research skills they require to be competent and impactful researchers. Dr. Caroline Ng'weno, who is currently a Wildlife Ecologist at Earthwatch Institute, founded the Program. Dr. Ng'weno is passionate about mentoring young ecological researchers.
The Emerging Scientist 2021 training was conducted in Maasai Mara, Narok County. It was held from September 15, 2021, to September 26, 2021.

The two weeks of intensive training involved hands-on research design, data collection, data analysis, and presentation of research findings. The objective of the Emerging Scientist Training Program was to provoke a rivetted mindset and foster essential foundational skills for a professional career in ecology. The exercises were centered on ensuring that the emerging scientists gathered knowledge and skills that would allow them to plan, execute, and report their planned scientific research activities.

The training required the budding scientists to explore possible research areas and problems within the Mara Siana Conservancy and develop scientific publications by the end of the training duration. The ten upcoming researchers settled on three research areas: woody vegetation and grass biomass assessment, wildlife population distribution, abundance, density estimations, and finally, human-wildlife conflicts within the conservancy. These were settled on to address interlinked savanna ecology questions and develop strategic adaptive management philosophies that are authentic to the unique ecosystem.

Once settled on the research areas, the training then proceeded to data collection. The group was taught various data collection methods that optimized the data they required for their research. The methods taught were in the context of how they can be used to address fundamental questions in rangeland/savanna ecology. The methodology included camera trapping, distance sampling, Adapted Point-Centered Quadrat technique, and the use of secondary data. Once the data was gathered, the emerging scientists were tasked with data entry, cleaning, and analysis.

On analysis, the emerging scientists were trained on how to use R to analyze their data. They were also taught how present their data using ArcMap and QGIS software. The group was further trained on how to present their findings in a consumable form of scientific papers and infographics depending on the target audience. It was emphasized that the purpose of the research was to inform management decisions and impact change. As such, it was critical that the findings be organized and presented in an effective form.

Legend

Herbivore sightings
- Black Rhino
- Buffalo
- Eland
- Elephant
- Gazelle
- Giraffe
- Hartebeest
- Impala
- Plains zebra
- Topi
- Warthog
- Wildebeest
- Siana boundary

More than the technical aspects of scientific research, the training was workshop structured to facilitate exhaustive brainstorming sessions. The brainstorming workshops were intended to develop the core skills of emerging scientists. These skills included taking the initiative and responsibility of one's learning, applying theoretical knowledge in practical contexts to solve real-world problems, sourcing and organizing information effectively, embracing technology in scientific research, working effectively in groups situations in a manner that promotes creativity and teamwork, effective listening, communicating in writing and orally, and finally self-reflection of one's learning, progress, and achievements.

Guest lecturers were also keen on sharing their knowledge and skills with emerging scientists to apply for grants and funding for their research projects. This was critical because scientific research is often costly beyond their financial capacities. The emerging scientists were guided on how and where to look for scholarships and grants. Writing winning research proposals and how to remain persistent and focused in their quests.

The Emerging Scientist Training program was funded by World Wide Fund for Nature Kenya (WWF - Kenya). The Field Course was led by Dr. Caroline Ng'weno (Earthwatch Institute, PI Exploring lions and their prey in Kenya's Maasai Mara). Field Course Instructors were Nickson Ndiema (Swedish University of Agriculture, Sweden) and Alfred Kibungei (Conservation Data Analyst, Ol Pejeta Conservancy, Kenya), while the Field Course Coordinator was Dennis Kipngetich (Karatina University). Among the emerging scientists, Elizabeth Githendu and Solomon Mugi, both students from the Department of Land Resource Management and Agricultural Technology (LARMAT), pursuing MSC in Range Management, represented the University of Nairobi