Project Update: October 2023

Having completed an extensive literature review on the detection and identification of mammals using remote sensing, I am finally getting into the more exciting part where I can start gathering data in the field. As the first phase is experimental, I have just completed a number of trial flights using a drone in my study area. The purpose of this is to establish the optimal flying parameters for the benchmark that I will be conducting between manual counts done by helicopter and automated counts utilising remote sensed imagery and machine learning. This will be compared to the known populations or large mammals to establish accuracy and precision of both methods.

Besides trialling the various flying parameters, I also used these test flights to compare different camera set-ups including different combinations of thermal and colour cameras. The day was relatively cool for this part of South Africa, and the resulting thermal imagery was great. It's going to be very interesting to see if this remains a reliable detection tool when the ambient temperature is closer to the body temperature of animals.