



DSAIL-Porini: Annotated camera trap images of wildlife species from a conservancy in Kenya

Introduction

- Camera traps record accurate data in a non-invasive way
- These data can be reviewed/used by other researchers.
- Replaced traditional techniques
- Deployed 4 camera traps for 7 months.

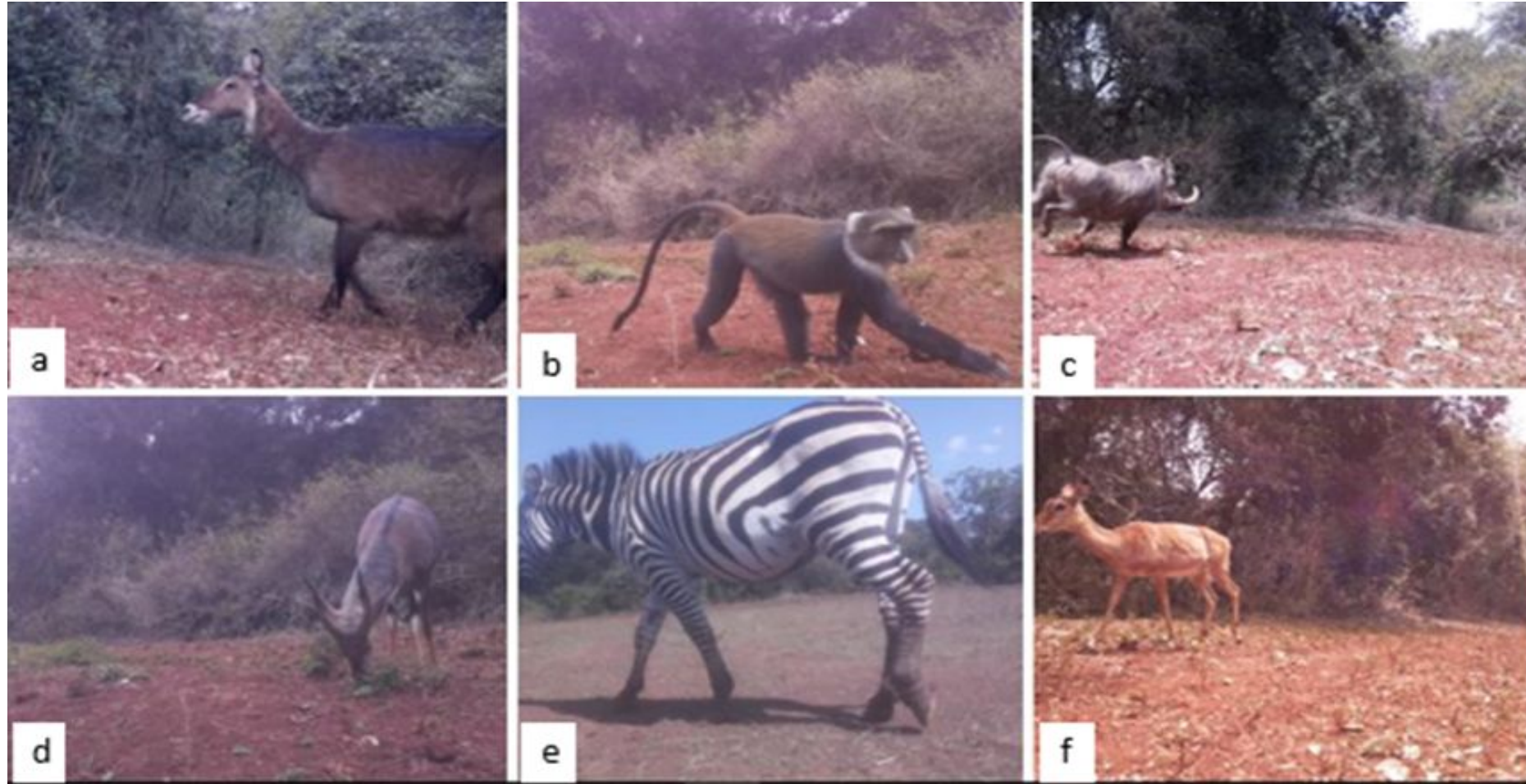


DSAIL-Porini Dataset

- 8524 annotated images of animals;
- The dataset has 6 categories;
 - Impalas,
 - Warthogs,
 - Zebras,
 - Monkeys,
 - Waterbucks
 - Bushbucks.



Species in the conservancy



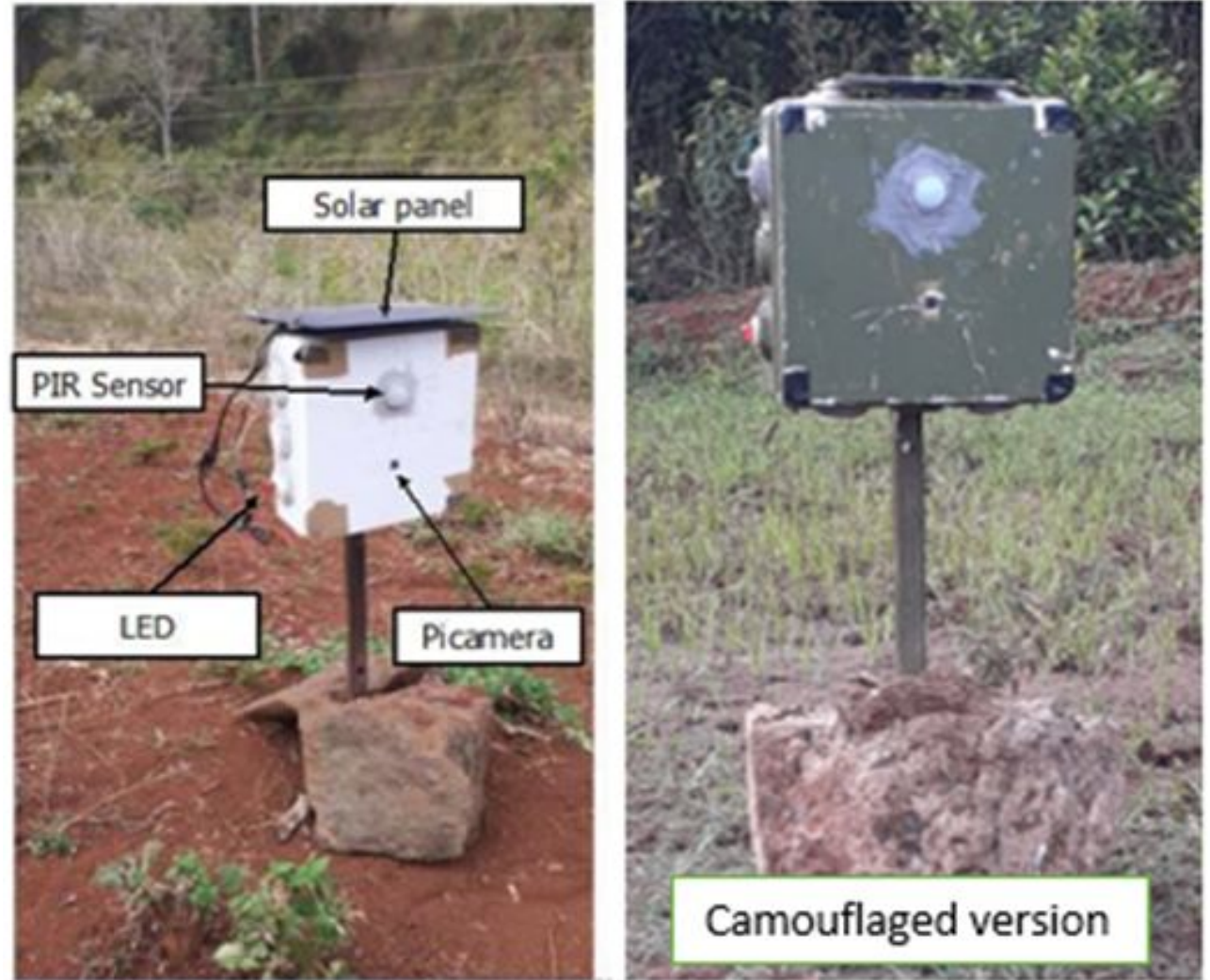


Value of the Data

- Train machine learning models for classification and Object detection
- Train and test image-based census algorithms as it includes animal counts.
- Understand animal behaviour
- Estimate the size of the animal population with time

Deployment

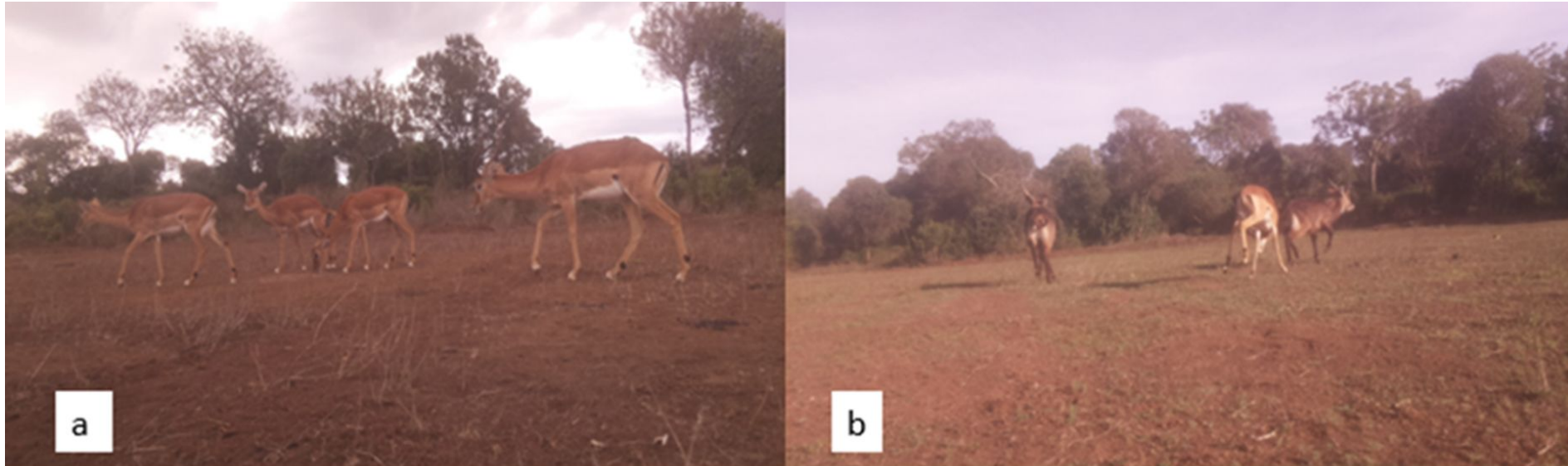
- Camouflage
- **Advantage:** more close up images



Camera trap placement



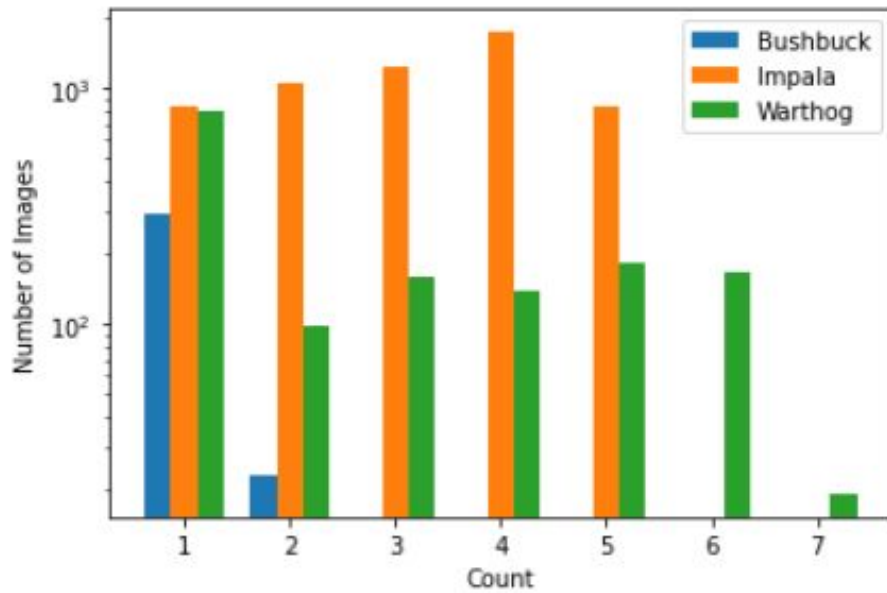
Data Annotation



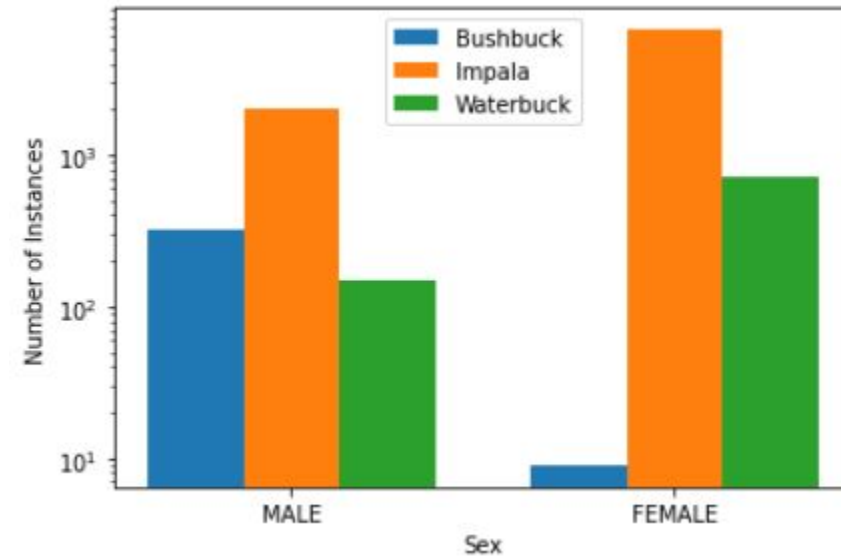
Filename	Device	Species	Count	Sex	Latitude	Longitude
2021-10-24-16-18-18.jpg	Raspberry Pi 2	IMPALA	4	MALE,FEMALE,FE MALE,FEMALE	-0.390381	36.962386
2021-11-23-07-48-43.jpg	Raspberry Pi 2	WATERBUCK, IMPALA	2,1	MALE,MALE,MALE	-0.390224	36.962036

Data analysis

COUNT DISTRIBUTION



SEX DISTRIBUTION



THANK YOU