

## Project Update: December 2018

Estimates of wildlife abundance provide the foundation for understanding and managing wildlife populations. With this study, we aim to determine the density of African wolf (*Canis lupaster*) across the range of Ethiopian wolves using call-up methods.

### Study area

The study was carried out at the five localities of Ethiopian Highlands where Ethiopian wolves occur (Bale Mountains, Arsi Mountains, Guassa Community conservation Area and Borena Saynt National Park).

The population size of African wolf was estimated using call up methods undertaken at 32 calling stations (matrix=9, core=10 and Buffer=13) from September to November 2018 from 18:00 to 22:00 (evening) and 04:00 to 06:30 (morning). Continuous jackal howlings were played at full volume for about an hour on an MP3 player connected to a megaphone (Monacor 45) mounted onto the roof of the vehicle (Figure 1 and 2). The distance between neighboring calling stations along transects was 4–5 km based on our calibration result and other studies. Calling stations were selected according to topographical characteristics in order to optimise sound transmission and located in open areas to enable observation of responding African wolves. We also used camera trap to see if other jackal species such as black backed jackal (*Canis mesomelas*) exist in the area (figure, 3)





Top: Survey of African wolves during night. Above: and late afternoon using call up methods



Left: Tariku with camera. Right: Camera trap on the Ethiopian Highlands to estimate African wolves.



African wolves taken by camera trap from Guassa Community Conservation Area

### **Preliminary result**

Over the entire study period, African wolves were recorded 19 (59%) of the total 32 calling station sites. A total of 83 African wolves were recorded at call stations. Detailed data analysis will be presented on the final report