

## Project Update: July 2020

Galliformes, an order of birds that includes the pheasants, quails, partridges, turkeys, guineafowl and grouse, are among the most threatened groups of birds. About 26.4% of the species are on the brink of extinction, mainly due to hunting for food (meat/eggs), overexploitation, depredation and habitat destruction. They are economically important to humans as domesticated animals/gamebirds. However, they are less studied, and there is little quantitative information regarding their ecology in Ethiopia. This project was therefore designed to assess the diversity, population status, distribution patterns and threats of Galliformes in Didessa River Valley, western Ethiopia.

During the preliminary survey, habitat types of the study area, sampling design and survey techniques were determined based on the vegetation characteristics and composition. The study area was stratified into four habitats, natural forest, farmland, grassland, and sugarcane plantation, and six study sites through systematic random sampling techniques. Point counting and line transect survey techniques were used in dense and open habitats respectively, to survey and estimate the diversity, relative abundance and distribution of Galliformes. Feather count, call counting, and camera trapping (Victure Wildlife Camera 1080P Full HD 12MP) techniques were also used since most species are notoriously elusive, shy, and inhabit high mountainous terrain habitats.

Three Galliformes species, namely, Clapperton's francolin (*Pternistis clappertoni*), helmeted guineafowl (*Numida meleagris*), and stone partridge (*Ptilopachus petrosus*) were identified so far. Questionnaire-based interviews conducted with 120 selected key informants from the local communities to collect data regarding the possible threats and historical range size distribution of the species.



Figure 1. Galliformes species identification in the field survey





Figure 2. Flocks of Helmeted Guineafowl (*Numida meleagris*) at Arjo-Didessa River Valley. ©Yihenew Aynalem, 2019.



Figure 3. Galliformes hunting practices in the surrounding communities through setting local snare ©Yihenew Aynalem, 2020.





Figure 4. Insects sample collection and preparation to study the feeding ecology of Galliformes at Didessa River Valley, 2019.