

Project Update: January 2021

Details of the Project Update:

The first phase of our project involved herpetological field survey and community-based conservation activities (involving conservation sensitisation and awareness programmes). We focused our field survey in areas that were relatively unexplored during the previous herpetological survey of the park (Figure 1). Specifically, our survey focused on the Mambila Plateau and its environs. We searched for amphibians and reptiles opportunistically. We surveyed the banks of the aquatic ecosystem for amphibians, and we also searched for amphibians and reptiles in the grassland and agricultural field (Figure 2a).



Figure 1 (a): Some of the localities surveyed during the field survey.



Figure 1 (b): Some of the localities surveyed during the field survey.



Figure 2 (a): Field activities by the team members and some local people.



Figure 2 (b): Field assistants processing the vouchers collected during the field survey.

We processed the representative vouchers collected during the field survey (Figure 2b). We encountered 117 amphibians and reptiles during the field survey. We observed, collected and preserved different amphibian species (Figure 3) and morphs of geckos of the genus *Hemidactylus* for an inventory of *Hemidactylus* species in Nigeria, and description of the possibly new species (Figure 4). We also documented the geographic coordinates of different amphibian and reptile species encountered during the field survey.



Figure 3: Some amphibian species recorded during the field survey.



Figure 4 (a): Different morphs of *Hemidactylus* species recorded during the field survey.



Figure 4 (b): Different morphs of *Hemidactylus* species recorded during the field survey.

During the field survey, we observed several threats to herpetofauna. These include cattle grazing, bush burning, uncontrolled irrigation practices, use of chemical fertilisers and pesticides for agriculture, and slash-and-burn agricultural practices (Figure 5).



Figure 5: Different human activities observed during the field survey that may pose threats to the amphibians and reptiles in the area.

We further engaged in community-based conservation activities (involving conservation sensitisation and awareness programmes). We visited different communities and interacted with local people including farmers, market women and men, youths, hunters etc (Figure 6). We enlightened the public on the importance of herpetofauna in the ecosystem and the need for the conservation of amphibians and reptiles and its associated habitats.





Figure 6: Conservation awareness and sensitization programmes within the local community.

The phase of the project will be dedicated to conservation education programmes in schools and public places within the local communities in Gashaka Gumti, Taraba State, Nigeria. Alongside these activities, we will be analysing the results of our field survey and also drafting manuscript on the species distribution model of amphibians and reptiles of the area.