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Summary

The Research Unit of the “Across the River – a Transboundary Peace for Sierra Leone and Liberia” project performed research activities focusing on six subresults under Result 2 of the project document from January 2010 to March 2013. While one focus of these activities was on mapping, biodiversity and threat assessments, another major focus was on capacity building of local staff and partners as well as on the collaboration with local and international partners and universities. Several standardised research designs were developed and performed in the corridor areas connecting the different parts of the Gola Rainforest National Park (GRNP) in Sierra Leone as well as the GRNP with the Gola National Forest (GNF) in Liberia and inside GNF. The activities comprised, among others, rapid assessments (birds, small mammals and bats, dragon- and damselflies, butterflies, amphibians and reptiles) as well as longer term studies performed over more than one year (e.g. camera trapping from May 2011 to March 2013, transect surveys focusing on chimpanzees and elephants from April 2011 to July 2012), yearly monitoring activities (White-necked *Picathartes*), continuous mapping, including LiDAR flights, and continuous ad hoc data collection, e.g. of threat data.

Besides acquiring important information on the distribution of key landscape species (e.g. chimpanzees, pygmy hippos, forest elephants, different duiker species, White-necked *Picathartes*, White-breasted Guineafowl), their habitat requirements and threats, the research activities revealed the presence of 206 bird species, 109 mammal species, including 11 primates, 31 bats, 31 rodents and shrews, and 17 large mammals such as antelopes, leopards and hogs, 451 butterfly species, 145 species of damsel- and dragonflies, 19 reptiles, and 35 amphibian species in the studied area. These figures do not include those species recorded throughout previous surveys and thus do not show the total number of species in the area. But this information is provided in species lists in this report. Among the observed species, 42 to 46 species were first country records for Sierra Leone, while 19 were found in Liberia for the first time. Twelve or 13 species are new to science (three butterflies, eight dragonflies or damselflies, one frog and potentially one shrew), though most of them had been found already during previous surveys in Gola or in different areas. Out of the recorded species, 22 mammals, 14 birds, six dragonflies and damselflies, 13 amphibians, and four reptiles are of global conservation concern (Near Threatened, Vulnerable, Endangered, Data Deficient or protected under CITES). Results and distribution maps of species reveal the importance of the corridor area connecting the Gola Central block in Sierra Leone with the GNF, especially in Malema and Nomo Chiefdoms, as well as the negative impacts of the high level of illegal human activities, especially hunting and mining, mainly inside the GNF.

In addition to the research work and data collection in the field, the local staff and partners experienced intense capacity building, especially in the use of techniques and equipment, species identification and data entry. Furthermore, a short term course was organised for the Sierra Leonean Research Technicians at Njala University in order to increase important background knowledge on biodiversity and conservation. Close collaborations were built up with several organisations and national and international universities (e.g. Environmental Foundation for Africa, Njala University, Eastern Polytechnic Kenema, University of Georgia) concerning combined activities and education, e.g. environmental education materials were developed together and five students wrote their Bachelor theses with ARTP.