

Analysing unique pygmy hippo footage obtained in Tai National Park

Pygmy Hippos are elusive, solitary forest animals, listed as Endangered by IUCN. Their habitat has been eroded to such an extent that they are now restricted to just a 5,000 km² area of West Africa and in 1994 approximately 3000 animals were estimated to exist in the wild, although this is now likely to be much lower.

The loss of this species would be a terrible loss for the planet and the local West African communities whose environment and livelihood depend on the unique local fauna. We are carrying out pioneering work both in zoos and in the wild to help preserve the Pygmy Hippo and save it from extinction.

Tai National Park in the Ivory Coast is one of the last strongholds for the Pygmy Hippo and our ultimate project aim is to conserve this species. We are doing this by gathering knowledge of this species in its natural habitat and working with partner Ivorian scientists so that this knowledge stays in the country. We have recently collected precious video footages (a few hundred collections) of pygmy hippos throughout a selected part of Tai forest. Analysis of this unique material will allow us to estimate the density of the species and this will be the first, important, step towards developing a conservation management program.

We are looking for a keen student to do a project with our group to analyse the video data. The analysis will be done using the 'Distance Sampling' framework and will require to first extract observation distances of pygmy Hippos from the camera trap footage. In a second step density and abundance will be estimated using the Distance software. The analysis can be done mostly at the University of Neuchatel but repeated visits to Leipzig will be needed for training.

References:

Howe, E. J., Buckland, S. T., Després-Einspenner, M. L., & Kühl, H. S. (2017). Distance sampling with camera traps. *Methods in Ecology and Evolution*, 8(11), 1558-1565.

The project will be co-supervised by:

Associate Professor Monique Paris (mparis@ibream.org), Director IBREAM: www.ibream.org

And Dr. Hjalmar S. Kühl, kuehl@eva.mpg.de, Max Planck Institute for Evolutionary Anthropology, Germany

A recent student (Alba Hendier) who worked on this project will be involved as local support. She can be reached for further questions also: alba.hendier@unine.ch

