

## **Biology and conservation of the most endangered apes in Africa: *Gorilla gorilla diehli* and *Pan troglodytes vellerosus***

The Cross River gorilla (*Gorilla gorilla diehli*) and the Nigeria-Cameroon chimpanzee (*Pan troglodytes vellerosus*) are the most endangered subspecies of gorilla and chimpanzee in Africa. There are estimated to be around 250 gorillas remaining in fragmented habitat straddling the Nigeria-Cameroon border, and 6,500 *Pan troglodytes vellerosus* in Nigeria and western Cameroon. This symposium will bring together experts from the region for the first time to present new findings and raise awareness of these apes, covering aspects of taxonomy, genetics, morphology, distribution, ecology, behaviour, culture and conservation status.

First, this symposium will address the taxonomy and evolutionary history of these apes from a morphological, genetic and immunological perspective, discussing how biogeographic boundaries across the Gulf of Guinea region, such as the Sanaga River, may have influenced the patterning of genetic diversity.

Second, the symposium will compare and contrast ecology and cultural traditions between populations within the region, and with apes from other African localities for the first time. Chimpanzees inhabiting the remaining disconnected forests in southern Nigeria will be contrasted with those on the Nigeria-Cameroon border and with the most southerly populations in Cameroon.

Third, this symposium will address the conservation status of the gorilla and chimpanzee populations. Currently, *G. g. diehli* is classified as Critically Endangered by the IUCN and *P. t. vellerosus* is the most endangered form of chimpanzee. Long-term strategies for *ex situ* populations and a discussion of efforts being taken to protect wild populations and their habitats will complete the symposium.

### Presentations and authors

1. Historical and biogeographical perspective on the apes of western Cameroon and Nigeria (John Oates)
2. Variation in gorilla brain size: Where do the Cross River gorillas fit? (Andrea Taylor, Colin Groves, Bethan Morgan and Jacqui Sunderland-Groves)
3. The skulls and teeth of *Pan troglodytes vellerosus* (Varsha Pilbrow and Colin Groves)
4. The genetic variation of chimpanzees and gorillas in Nigeria and Cameroon (Katy Gonder)
5. The natural history of SIV infection among gorillas and chimpanzees in Cameroon (Beatrice Hahn and Paul Sharp).
6. The effects of severe habitat fragmentation and hunting on the chimpanzees of Nigeria (Liz Greengrass and Femi Ogunjemite)
7. Nest-building ecology of *Pan troglodytes vellerosus* at Gashaka, Nigeria (Andrew Fowler, Umaru Buba and Volker Sommer)
8. The gorillas and chimpanzees of the Ebo forest – ecological and cultural anomaly? (Ekwoje Abwe and Bethan Morgan).
9. The geographical extremes of Cross River gorillas: A comparison of ecology at Afi Mountain in Nigeria and Kagwene Mountain in Cameroon (Jacqui Sunderland-Groves, Hyacinth Mboh, Albert Ekinde, Kelly McFarland and Inaoyom Imong).
10. Application of remotely-sensed data to the conservation of *Pan troglodytes vellerosus* and *Gorilla gorilla diehli* (Rich Bergl and John Oates)
11. Putting ape conservation into practice in Nigeria and Cameroon (Andy Dunn, John Oates, Aaron Nicholas, Ymke Warren, Jacqui Sunderland-Groves, Bethan Morgan, Ekwoje Abwe and Richard Bergl)
12. The evolving role of rescue and rehabilitation centres in Cameroon and Nigeria in the conservation efforts of the region (Liza Gadsby and Felix Lankester)