

Chimps in Context Abstract re-Submission – February 26 2016

Chimp&See: an online citizen science platform for large-scale, remote video camera trap annotation of chimpanzee behaviour, demography and individual identification

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The Pan African Programme: The cultured chimpanzee (PanAf) is a large-scale research project across the chimpanzee (*Pan troglodytes*) range which aims to better understand and model the socioecological and demographic drivers of chimpanzee diversity. As part of the PanAf, over 350,000 1-minute camera trap videos have been recorded. To annotate this large data set and ascertain individual chimpanzee identifications from 39 different temporary and collaborative chimpanzee research sites, we developed the web-based citizen science platform Chimp&See (www.chimpandsee.org) in collaboration with the Zooniverse. Chimp&See allows members of the general public to view the PanAf videos online and annotate which species are present and the behaviours they exhibit in each video. These citizen scientists also watch and discuss videos to determine unique chimpanzee individuals and match them from different video clips. Each video is viewed by up to 15 unique users, allowing us to obtain a confidence score based on the number of consensus matches for each identification. In this poster, we compare the accuracy and efficiency achieved by the general public on this platform to automated facial detection software and expert scientific annotators. We also evaluate whether citizen science and video camera trapping is a way forward for accessing chimpanzee age/sex structure, density and community size in a cost and time effective manner. Finally, we discuss the balance between maintaining user engagement and obtaining detailed and accurate scientific data from citizen scientists.