

029

SEASONAL VARIATION IN CHIMPANZEE DIET AND HABITAT USE IN A SMALL TROPICAL MONTANE FOREST

R.L. Chancellor^{1,2}, A.S. Rundus^{1,3}, S. Nyandwi¹

¹Great Ape Trust of Iowa, Des Moines, Iowa, USA, ²University of California, Davis, California, USA,

³University of Nebraska, Lincoln, Nebraska, USA

Presenter's Email: rlchancellor@gmail.com

Increasing numbers of primates are living in small forests as a result of habitat loss from human disturbance. Understanding how different species cope with forest fragmentation is important for the development of effective conservation strategies. Over a period of 12 months, we documented seasonal variation in diet and habitat use of a small population (N = 15) of chimpanzees (*Pan troglodytes schweinfurthii*) in Gishwati forest, Rwanda. To characterize diet, we systematically collected and analyzed approximately 1,000 fecal samples supplemented by documentation of feeding remains and direct observations of feeding behavior. To quantify habitat use, we walked 10 transects every month, ranging from 1.5-3.5 km each and totaling approximately 25 km, using marked-nest census methodology. We examined diet and habitat use in relation to periods of fruiting. Here we show that chimpanzee diet changed seasonally, however some fruit species, including *Ficus spp.*, were found in fecal samples throughout the year. Furthermore, we report how vegetation type in different fruiting seasons influenced chimpanzee habitat use and nest group size. We compare the results of our study to data collected from nearby chimpanzee populations including two larger montane forests, Nyungwe National Park and Kahuzi-Biega National Park. We discuss the implications of our results for the conservation efforts of chimpanzee populations living in small forests.

Keywords: forest fragments, chimpanzees, diet, habitat use