

THE CONSEQUENCES OF SUSTAINABLE FORESTRY AND CONSERVATION EFFORTS ON WESTERN LOWLAND GORILLAS AND CHIMPANZEES IN NORTHERN REPUBLIC OF CONGO

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The industrial timber trade is the leading force in the degradation of remaining forests in Central Africa. The changes associated with logging to the natural ecology of the forest have short and long-term implications for wildlife, particularly large bodied and wide ranging species such as gorilla and chimpanzee. Preliminary conclusions imply the method of timber harvest selected has a profound effect on ape populations. To examine the effects of reduced impact logging on apes, we monitored the density and distribution of sympatric gorilla and chimpanzee over a 6-year period encompassing baseline (pre-harvest) and timber harvesting conditions in a Forest Stewardship Council certified concession in northern Republic of Congo. We conducted replicate ape nest surveys along line transects which provided systematic coverage of the entire study zone. While abundance estimates suggest both gorilla and chimpanzee populations have remained stable, even under reduced impact logging resource use by both species differed significantly in logged forests compared to unlogged forests. Results also indicate that the disturbance associated with forestry activities caused shifts in species distribution from high quality habitat to neighboring forest "refuges" of lower quality. These observations highlight the significant role that forest quality plays in the ecological needs of gorilla and chimpanzee populations and the necessity to better balance these requirements with timber exploitation. We also discuss the growing interest of companies to manage forestry concessions in environmentally sustainable ways and present guidelines based on our experience to strengthen existing policies of good forest management on the behalf of great apes.

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