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Effects of long-term primatological research and conservation in Kibale National Park: Social sustainability, biodiversity, and chimpanzee population viability in KNP

The human population's exponential growth rate, coupled with massive loss of biodiversity, makes long-term sustainability a global concern. Implementing effective, sustainable conservation policies that maintain the delicate balance between conservation and local people's livelihood is critically important. Specific conservation initiatives (e.g., ranger patrols, ecotourism, educational outreach) can all have positive impacts on species preservation. However, such activities are vulnerable to failure when the initiative ends. One solution is to promote conservation through field sites maintained over decades. Long-term great ape sites provide anecdotal evidence showing that lasting conservation success is critically dependent on field researcher presence, influence, and activities. In a new research initiative the Centre for Biocultural History, Aarhus University, will collaborate with the Kibale Chimpanzee (KCP) and Kasiisi (KP) Projects in Kibale National Park (KNP), Uganda, to test the full effects of long-term research sites and researcher presence on multi-level sustainability. Using KCP as a test case we will build a qualitative and quantitative model analysing how long-term research projects help promote social, cultural, and biological sustainability. Preliminary data show increased tree cover between 2000 and 2010 in the KCP research area range. Other areas inside and outside KNP decreased. The introduction of the Kibale Snare Removal Program in 1997 drastically reduced snare presence in the KCP chimpanzee home range annually, more than doubling mean inter-snare intervals for chimpanzees from 7 to 15 months ($p=0.039$). Following KP conservation education interventions from 2009 to 2014 students showed consistent positive attitudinal shifts towards chimpanzees ($p<0.0001$) and the forest ($p=0.0003$).