

**CONSEQUENCES OF INCREASED ARTISANAL MINING FOR PRIMATES IN NORTHERN DRCONGO**

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The northern forests of the Democratic Republic of Congo are home to the largest remaining population of eastern chimpanzees (*Pan troglodytes schweinfurthii*) in the world, yet little is known about them. This area is undergoing a massive escalation of artisanal-scale gold and diamond mining. As a result, human population densities are rising rapidly in this region that has historically had some of the lowest population densities in DRC. Semi-structured interviews were conducted with over 250 miners and villagers in 30 mining camps and two villages between 2008 and 2009. Participants were asked about their current and past health problems, and about their consumption of primate bushmeat. Preliminary trends show that miners kill and eat significantly more primate bushmeat than villagers. Evidence of chimpanzee occupation (nests) was found near many mining camps and faecal samples were collected from nests in varying proximity to camps and analyzed using standardized protocols. Human-primate pathogen transmission was confirmed by the discovery of *Strongyloides stercoralis*, a pathogenic human parasite, in chimpanzees sampled close to mining camps. This parasite has only been found previously in the wild within populations of non-human primates in heavily logged and disturbed forests. Initial indications, based on the poor health of the miners and their proximity to wild primate populations, suggest that the arrival of artisanal mining into the region has increased the risk of disease transmission from humans to apes. Artisanal mining needs to be better regulated to avoid activities in sensitive areas and to reduce the possibility of transmission of diseases between fauna and humans.

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