

# Satellites reveal Ethiopian elephants under threat, study shows

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African Savannah Elephant in the Babile Elephant Sanctuary. Credit: E. Greengrass.

Tens of thousands of illegal human settlements pose a real threat to the continued existence of an endangered elephant population, according to satellite analysis of the Babile Elephant Sanctuary in eastern Ethiopia by University of Oxford researchers and the Born Free Foundation.

Researchers from Oxford's School of Geography and the Environment and Born Free found, in the 11 years to 2017, that the number of illegal houses in the sanctuary soared from 18,000 to more than 50,000. Of these, some 32,000 houses are in the area in which elephants range.

According to the researchers, unless the integrity of the sanctuary can be restored, and security and [poverty issues](#) resolved, the elephants of the Babile Elephant Sanctuary will be lost within a short time. The sanctuary is home to Africa's northeasternmost population of African Savannah Elephants—one of only six populations recognized in Ethiopia.

The country's human population now stands at more than 110 million and there is a chronic shortage of land and a high demand for natural resources.

Previous studies have found that in Ethiopia, the integrity and effectiveness of many protected areas are being compromised by increasing human-related pressures, inadequate government support, and [civil conflict](#).

Emily Neil, a postgraduate researcher with Oxford's School of Geography and the Environment, says, "The situation in the Babile Elephant Sanctuary is critical. There are now only around 250 elephants left. Without the rapid resolution of the many human issues putting pressure on the elephants it is difficult to foresee a future in which this population of [elephants](#) survives."

Human pressure on the elephant population comes from different

directions. Between 2015 and 2019, the Born Free Foundation ran a field project in the sanctuary, mobilizing Ethiopian Wildlife Conservation Authority rangers to conduct daily monitoring of the elephant population. This helped researchers to understand better the elephant's range and established that in addition to poaching, human-elephant conflict is a significant cause of elephant mortality.

Within a context of a burgeoning rural human [population](#) dependent on scarce natural resources, chronic civil instability, poverty and [food insecurity](#), the team believes that the environmental, poverty, and security challenges in the [sanctuary](#) must be addressed jointly.

The article will be published in *Oryx*, *The International Journal of Conservation*.

**More information:** Illegal settlement in the Babile Elephant Sanctuary is threatening the resident elephant population, *Oryx* (2021). [DOI: 10.1017/S0030605320001088](#)

Provided by University of Oxford

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