Study: Elephant Poaching Costs Africa $25 Million Per Year in Lost Tourism

New research shows investing in elephant conservation is smart policy

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In Africa, tens of thousands of elephants are killed by poachers each year. Now a new study shows that this poaching crisis costs African countries around $25 million annually in lost tourism revenue.

The research was published November 1 in the journal *Nature Communications*.

“Conservation is often seen as a luxury,” says Brendan Fisher an economist at the University of Vermont who co-led the new study, “but our work shows that it pays big to protect elephants.”

Comparing this lost revenue with the cost of halting declines in elephant populations due to poaching, the study determines that investment in elephant conservation is economically favorable across the majority of African elephants’ range.

The research, undertaken by scientists at the University of Vermont’s Gund Institute for Ecological Economics, World Wildlife Fund (WWF), and the University of Cambridge, represents the first continent-wide assessment of the economic losses that the current elephant poaching surge is inflicting on nature-based tourism economies in Africa.

"While there have always been strong moral and ethical reasons for conserving elephants, not everyone shares this viewpoint. Our research now shows that investing in elephant conservation is actually smart economic policy for many African countries," said study author Robin Naidoo, lead wildlife scientist at WWF and an affiliate of UVM’s Gund Institute.

Poaching problems

Poachers kill between 20,000-30,000 African elephants each year for the illegal ivory trade, funded by global organized crime syndicates and fueled largely by demand in China and elsewhere in Asia. In just the past ten years, Africa's elephants have declined by more than 20 percent.

"We know that within parks, tourism suffers when elephant poaching ramps up. This work provides a first estimate of the scale of that loss, and shows pretty convincingly that stronger conservation efforts usually make sound economic sense even when looking at just this one benefit stream," said study co-author Andrew Balmford, a professor in the University of Cambridge's Department of Zoology and an affiliate of UVM’s Gund Institute.

“If you close your eyes and think about Africa, there’s an elephant in that picture,” says Fisher. “So it makes perfect sense that as elephants disappear off a landscape tourists are less likely to visit those places.”

The research—using statistical modelling—shows that tourism revenue lost to the current poaching crisis exceeds the anti-poaching costs necessary to stop the decline of elephants in Africa.
east, southern, and west Africa. Rates of return on elephant conservation in these regions are positive, signaling strong economic incentive for countries to protect elephant populations.

"The average rate of return on elephant conservation in east, west, and south Africa compares favorably with rates of return on investments in areas like education, food security and electricity," said UVM’s Fisher, associate professor in UVM’s Rubenstein School of Environment and Natural Resources and Gund Institute. "For example, for every dollar invested in protecting elephants in East Africa, you get about $1.78 back. That's a great deal."

However, for countries in central Africa, the study finds that elephant-based tourism cannot currently be expected to contribute substantially to elephant conservation. In these remote, forested areas where tourism levels are lower and elephants are typically more difficult to see, different mechanisms will be necessary to halt elephant declines.

“The economic argument is helpful,” says UVM’s Brendan Fisher, “but only if we have a clear ethical foundation that we should not be slaughtering elephants. Period."