

Capturing elephants from the wild hinders their reproduction for over a decade

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Capturing elephants to keep in captivity not only hinders their reproduction immediately, but also has a negative effect on their calves, according to new research.

Scientists from the University of Sheffield have found long-lasting [negative effects](#) on the reproduction of Asian elephants captured from the wild and kept in captivity, in a joint study with the University of Turku and the Myanmar Timber Enterprise (MTE).

Asian elephants caught from the wild were less likely to reproduce in their lifetime and started reproducing later, with these reductions lasting for over a decade. Researchers also found that this had a negative effect on the next generation, with calves born to captured mothers having reduced [survival rates](#).

Approximately 16,000 Asian elephants are held in captivity in countries like Myanmar, India and Thailand, mainly used to drag logs in the [timber industry](#) or for tourism. To sustain these industries, elephants continue to be captured from the wild, but the long term impact of this for the elephants is less studied.

With so many [wild animals](#) kept in captivity, often to try and protect threatened species, understanding how captivity affects animals in the long term is important to improve conservation efforts.

John Jackson, lead author of the study and Ph.D. Researcher at the University of Sheffield, said: "Conservation programmes that include [captive breeding](#) or captive management need to consider that taking individuals from the wild can influence animals for many years, and this may hinder future [conservation efforts](#)."

"The finding of long-lasting negative effects of capturing wild animals is important not only to sustain elephant populations in the future, but also for many other species that are taken from the wild."

Professor Virpi Lummaa, Associate of the University of Sheffield's Department of Animal and Plant Sciences from the University of Turku,

said: "The key thing that we found here is that the negative effects of taking animals out of the wild can last for decades, and have knock on effects for generations in captivity.

"This is something conservationists have to consider when capturing animals, because even if we re-create good conditions in captivity, the animals may still struggle to reproduce."

Researchers also looked at the reasons why the calves of captured elephants suffered.

Mirkka Lahdenperä, Ph.D. Researcher and co-lead of the study from the University of Turku, said: "We think that the stress imposed by the capture of elephants, which can negatively influence a whole host of processes in the animal such as the development of the foetus, body condition and social interactions, is the key reason we see such big reductions in reproduction."

The paper 'Capture from the wild has long-term costs on reproductive success in Asian [elephants](#)' is published in *Proceedings of the Royal Society B*, today.

More information: Mirkka Lahdenperä et al. Capture from the wild has long-term costs on reproductive success in Asian elephants, *Proceedings of the Royal Society B: Biological Sciences* (2019). [DOI: 10.1098/rspb.2019.1584](#)

Provided by University of Sheffield

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