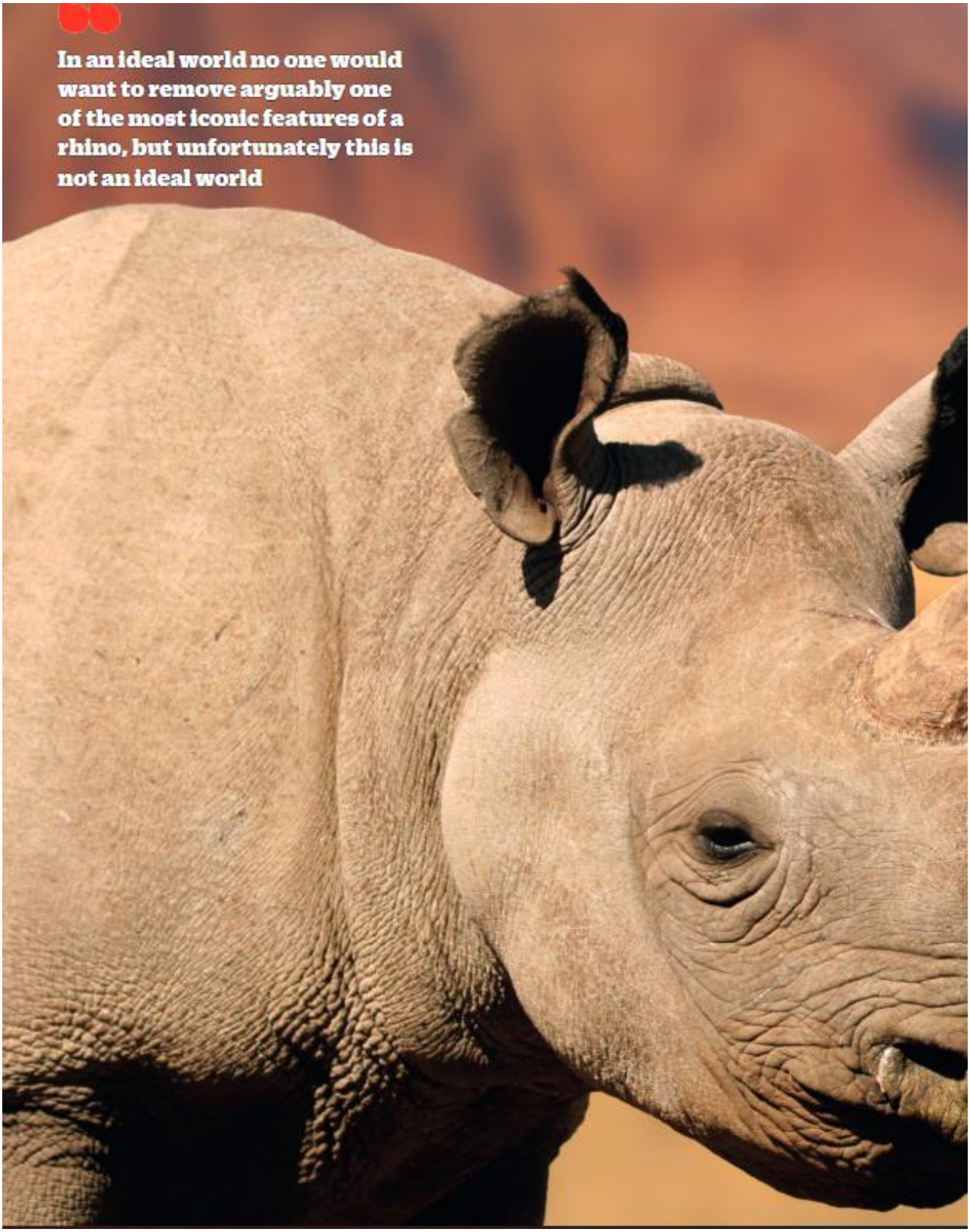

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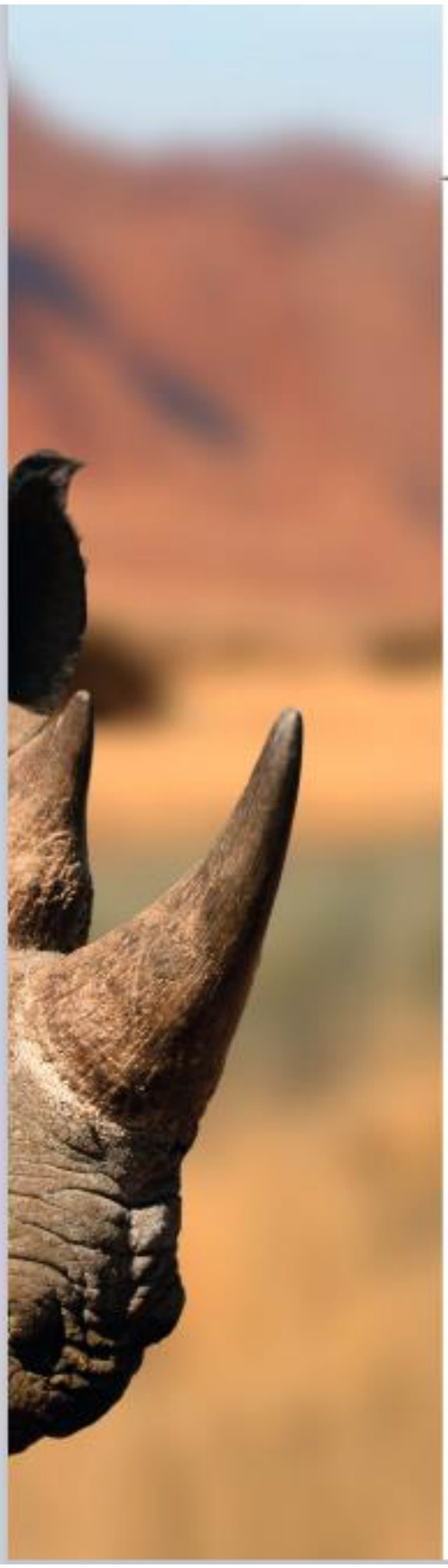

Dehorning rhinos does not affect productivity

Georgina Mills discusses new research examining the impact of dehorning black rhinos – a measure that is used to reduce the poaching of this endangered species.

DEHORNING black rhinos does not appear to affect breeding, birth, survival, life span or cause of death, new research has found.

The study, which was carried out by the University of Bristol vet school, the Namibian Ministry of Environment, Forestry and Tourism, and Save the Rhino Trust, aimed to build on existing knowledge of population productivity in horned and dehorned individuals.

It involved four subpopulations of black rhino (of the subspecies *Diceros bicornis bicornis*) in Namibia. Three of the populations had undergone some level of dehorning at least once, while one of the populations had never been dehorned. The team of researchers looked at the age of females at the birth of their first calf, average time between the birth of calves for each female, birth sex ratios, calf survival, life span and cause of death.

They found no statistically significant differences for these key factors of population growth between horned and dehorned black rhinos.

Rhino species, and their parts and derivatives, accounted for 11.8 per cent of illegal wildlife seizures by value between 2014 and 2018 – the third highest animal group behind elephants and pangolins. Demand for rhino horn is primarily driven by its use in traditional medicine and as a status symbol.

Two species of rhino are native to Africa: *Diceros bicornis* (black rhino) and *Ceratotherium simum* (white rhino). High levels of poaching, particularly in southern Africa, are putting both of these species at increased risk of extinction despite the implementation of extensive antipoaching strategies.

The black rhino is critically endangered, with poaching one of several threats to the species' survival. Many reserves across a number of African countries, including Namibia, South Africa and Zimbabwe, now dehorn their rhinos in an attempt to reduce poaching. It is, however, vital that antipoaching measures do not compromise the viability of these populations.

It had previously been suggested that dehorning could have a negative effect on rhino behaviour or biology, either through the consequences of not having a horn or the dehorning process itself, where the animal has to be sedated.

Lucy Chimes, one of the researchers, said: 'In an ideal world no one would want to remove arguably one of the most iconic features of a rhino, its horn, but unfortunately this is not an ideal world and relentless poaching has forced many reserves to resort to dehorning.

'Our study found there were no statistically significant differences in any of the measures of population productivity evaluated between dehorned and horned rhinos, which is reassuring for the use of dehorning as an antipoaching deterrent in black rhinos.'

Due to the small sample size, the researchers say it is particularly important that future studies collate data from as many reserves, conservancies and national parks across as many countries as possible, so a larger analysis can take place.

This will also allow for factors such as annual changes in climatic conditions, large predator abundances, rhino densities and female age to be better accounted for. ●