Saving critically endangered species

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Wellington is a long way from the continent of Africa but research being conducted at Victoria University is helping restore populations of animals like rhinoceros that live on the African savannahs.

Dr. Wayne Linklater, a Senior Lecturer in Victoria's School of Biological Sciences, is leading a research project that is looking for affordable ways of successfully conserving populations of large mammals.

Dr. Linklater has previously studied breeding in the Kaimanawa wild horse population, worked as a researcher at San Diego Zoo, and carried out a variety of sponsored research on the African continent.

His latest project was launched to address problems being faced by relocation and breeding programme managers in South Africa and Namibia.

Animals are transferred from one location to another for a variety of reasons, including removing them from danger, returning them to habitat once occupied by their species, or supplementing an existing population.

"But there are typically very high death rates after the animals are released in the new environment and female breeding rates also tend to go down," says Dr. Linklater.

His team has been analysing data sets covering 682 releases of rhinoceros over 25 years, providing a rich pool of information for

researchers.

The factors examined by the Victoria team include characteristics of the new physical and social environment, when the animal was released, the age of the animal and the presence of predators.

Dr. Linklater says existing scientific literature is full of elaborate hypotheses about what will ensure a successful transfer but his research has found that, when it comes to black rhinoceros, the recipe is actually quite simple.

"When populations are being restocked, only a few things really matter and the most important is the age of the animal when it is released. They have to be adults that are capable of fending for themselves which, in the case of a rhino, means six years or older."

He says the size of the cohort being restocked and the habitat at the new site are much less important than previously thought.

While rhino numbers are increasing, Dr Linklater says they remain a critically endangered species, especially given an alarming increase in poaching in Southern Africa.

Dr. Linklater says the information he is gaining from the research can be applied to studies of endangered species in New Zealand.

"It would be a mistake to think that New Zealand flora and fauna is so unique we can't learn lessons from what happens in other places."

Dr. Linklater's work has been funded by the United States Fish and Wildlife Service, Department of the Interior.

Provided by Victoria University