

Assessing the Threat of Poaching to African Rhinos

Introduction

Only 150 years ago both black and white rhinos number in the millions but today there are little more than 6,000 Black Rhino and 20,000 White Rhino. The biggest threat to the rhino's over the last 100 years has been poaching, rhinos are poached for their horns because countries in the far east think that the horn helps with sexual libido or even cure cancer none of which is supported by scientific evidence. The reason that people will go to extreme lengths for rhino horn is that a poacher can earn up to 60,000\$ per kilogram. While there are programs in place to protect the rhinos the poaching numbers are still staggeringly high. In 2014 in South Africa alone 1,215 rhinos were killed that is 9,000% increase since 2007.

Poaching of rhino is not only devastating to the species but could also have drastic ecological effect as rhino are grazers that eat a lot which helps maintain vegetation which in turn help the ecosystem as well. Rhino also brings vast sums of money to the African countries that have them as tourists pay top dollar to see them which in turn help the local people with another source of income. The extinction of rhino would be bad for both the environment and people who depend on the income that the rhinos generate. Not all hope is lost though as White Rhino populations, particularly in South Africa, are on the rise from the brink of extinction and the Black Rhino has also seen an increase in population size. There has been new-found hope thanks to immense anti-poaching and conservation efforts on behalf of the rhinos, but they are far from being stable, and poaching still presents a significant problem for the species going forward.

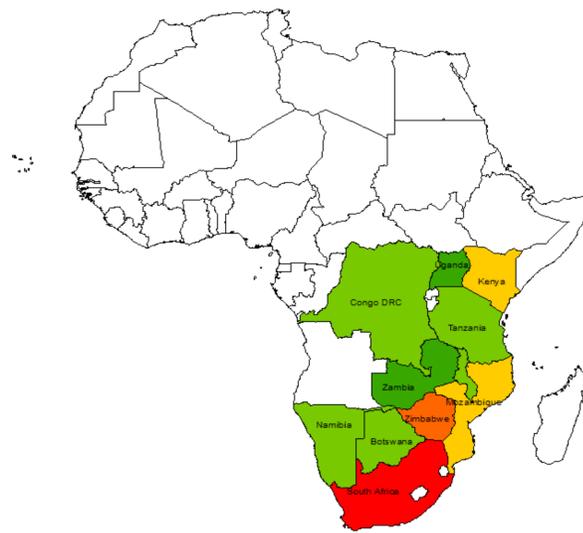
Methodology

The five maps that were created are a result of researching data from over 20 sources about both white and black rhino populations and the poaching of these rhinos. After compiling data it was transferred into excel so that it could be represented in Arcmap. Additional already created shapefiles were also included. Through combining the shapefiles and the data 5 maps were created attempting to show the range of both rhino species, today and in the past, as well as the effects that poaching has had on the species.

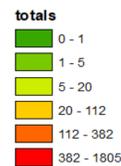
GIS 101- Perez
Data Source: Esri, ArcGis, Knoema, WWF, IUNC redlist

Image and other citations:
<https://www.savetherhino.org/rhino-info/poaching-stats/https://news.nationalgeographic.com/2018/01/wildlife-watch-rhino-poaching-crisis-continues-south-africa/>
<http://www.wildheartwildlifefoundation.org/index.php/21-rhino-horn-trade-selling-of-a-myth>
<http://www.poachingfacts.com/poaching-statistics/rhino-poaching-statistics/>
<https://wildaid.org/rhino-poaching-in-south-africa/>

Poaching Deaths



Total Rhino Poaching Deaths Last 3 Years



How Much Does Rhino Horn Cost?

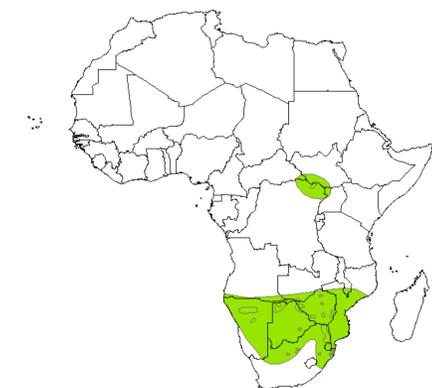


Conclusion

Both Black and White Rhino no longer inhabit the full range of territory they used to in Africa which is mainly due to poaching. South Africa is the country that both has the most amount of poaching with over 1,000 rhinos being killed per year as well as the most considerable conservation effort to protect the species. While it has taken a long time to gain traction in the fight against poaching there does seem to be hope as both the Black and White Rhino are being introduced into areas in which the previously lived. It will be some years before we know if the reintroductions have been successful, but all the signs are pointing in the right direction.

If the misconceptions about rhino horns are not addressed in Asia, then poaching will continue to be a problem as the money that comes with it outweighs the risks of prison for poachers. If there is more education about rhino horn, perhaps the connection between the horn and health remedies can be broken which would decrease demand drastically. Many steps are being taken such as rhino farming or flooding the market with fake horns to lower demand, but the threat and the survival of the species depend on the public. There is hope for the fight to save the rhino, but there is still a lot to be done as their numbers are still at a critical level.

White Rhino Historical Range

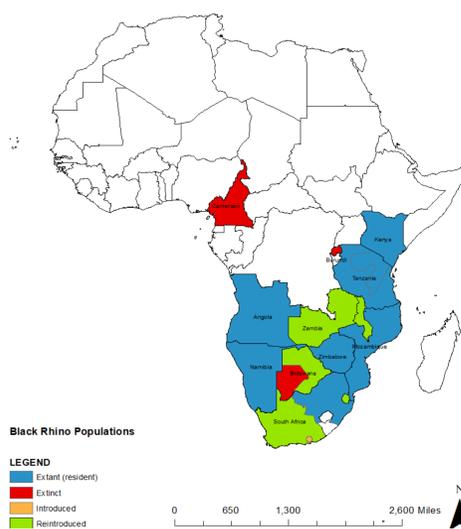


Legend

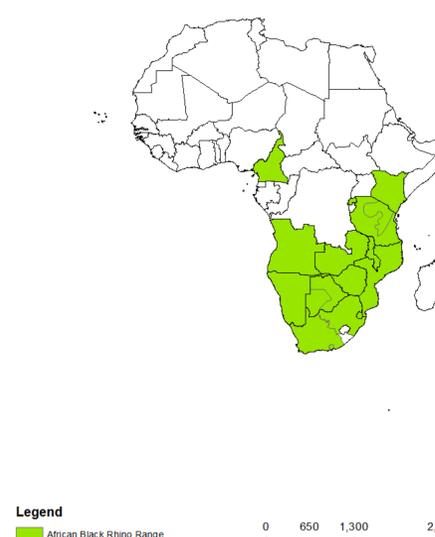
White Rhino Range



Black Rhino Survival



Black Rhino Historical Range

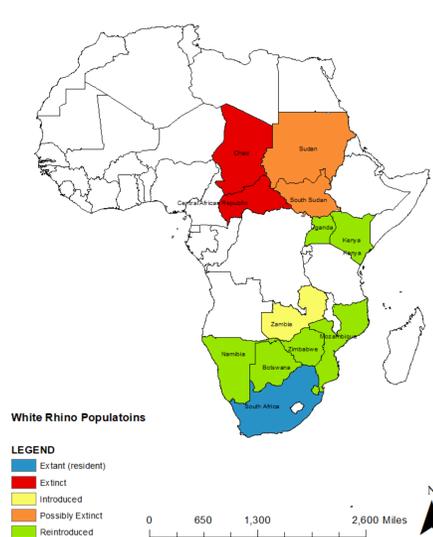


Legend

African Black Rhino Range



White Rhino Survival



White Rhino Populations

LEGEND
Extant (resident)
Extinct
Introduced
Possibly Extinct
Reintroduced

