



Endangered Wildlife Trust

Perspective on the intensive breeding of wildlife species with particular reference to selective breeding for colour variants

The Endangered Wildlife Trust's (EWT) mission is to conserve threatened species and ecosystems in southern Africa to the benefit of all people.

This position represents the EWT's view on the intensive breeding of wildlife, with specific reference to breeding colour variants of African wildlife, including antelopes (e.g. golden wildebeest, black impala, white springbok) and large predators (e.g. white lions). We apply the same position to other types of Intensive breeding. For instance, the breeding of large predators, either to maximise reproductive capacity and increase production rates, or to promote certain traits such as mane colour and cape size. Intensive breeding reflects other types of interference too, including the selective breeding of wildlife to maximise traits like body size and horn length and the farming of rhinos to harvest their horns.

The practice of breeding colour variants is restricted, largely, to South Africa. It can be defined as the selective breeding of individuals with unique pelage colours or patterns, so as to promote that pelage. The International Union for the Conservation of Nature (IUCN) [Antelope Specialist Group](#) refers to the practice as involving the '...intentional genetic manipulation of antelopes to create modified phenotypes such as novel coat patterns...' in small fenced areas where food, water and nutritional supplements are provided, and parasite and predator control is implemented. The practice is not illegal under South African law.

The EWT acknowledges that natural colour variants occur from time to time in free-living wildlife populations, though these variants are rare, and there is little information on the incidence of colour variants amongst wild populations.

Given that intensive wildlife breeding (with reference here to the breeding of colour variants) has ***no tangible, direct, benefits for wildlife conservation*** and few for society more generally, and given that the practice is driven almost entirely by a profit motive which may trump the application of sound conservation principles, the EWT does not endorse this practice. The EWT does, in fact, harbour several major concerns about this practice such as:

1. The selective or intensive breeding of wildlife is detrimental to animal health

Breeding colour variants involves the selective inbreeding of wildlife to produce offspring with similar, but unusual, colour variations similar to their parents. This inbreeding results in reduced genetic diversity that negatively impacts individual fitness, health, survival and future adaptability as it allows for the phenotypic expression of deleterious recessive genes. This may be exacerbated by the absence of selection pressures such as predators, parasites, food and water shortages. Thermoregulatory stresses have also been reported, as have cancers, melanomas



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and cataracts, especially in white varieties. Selective and intensive breeding is also a step towards the domestication of a species and the proliferation of new names and traits that already differentiate the 'new' progeny are proof of this process. In summary, the selective breeding of wildlife for aesthetic purposes does not have any benefit for the survival of either individuals or the species.

2. Intensive breeding for colour variants is far-removed from the conservation of wild animals

The practice involves the intensive breeding of wildlife, normally in small, carefully controlled camps and under controlled conditions. Animals may be heavily managed through treatment with both nutritional supplements and veterinary medications as well as parasiticides – an entirely unnatural process. Ongoing and increased use of external- and internal-parasiticides may lead to resistant parasites and the loss of disease resistance in farmed species. There are potential negative consequences for other wildlife too, for example, the detrimental effects on dung beetles from the use of inappropriate endoparasiticides has been well documented.

3. Persecution of wildlife including threatened predator and scavenger species

Compared to their normal pelage, colour variants are afforded high commercial value in South Africa due to their novelty value – at least while demand for them exceeds supply amongst animal breeders. The high value of colour variants places greatly increased pressure on free-ranging predators in the vicinity of their camps, given the risk that they may predate these high commercial value individuals. Wildlife at risk includes free-roaming populations of large, threatened carnivores such as Cheetahs and African Wild Dogs, as well as eagles and other raptors that occasionally predate antelope calves. Vultures too, though they only ever scavenge and never kill their food.

4. Intensive breeding leads to habitat fragmentation and loss

Wildlife ranchers use virtually impenetrable electric fences, and often extravagant security systems, to protect their high-value wildlife investments in small camps. This fragments habitats and reduces natural roaming space, and has also led to the deaths of large numbers of animals from electrocution, such as tortoises, pangolins and pythons. The extent of operations is widespread – we estimate that six per cent (6%) of game ranching areas in South Africa have been converted to this type of activity and that over 18 per cent (18%) of the auction turnover of game in South Africa is now based on colour variants.

5. No conservation value of colour variants

Colour variants are not bred for conservation. These animals will never be allowed to return from their camps to mix with free-roaming wildlife. The Department of Environmental Affairs has also raised concerns on the impacts of intensive and selective breeding of wildlife. The Scientific Authority (SA, 10 Sept 2010) advised government that that 'the breeding of recessive colour morphs does not further the conservation of South Africa's wild biodiversity and therefore cannot be supported,' should be dis-incentivised and carefully monitored.¹ Globally, many organisations

¹ <http://africanindaba.com/2015/04/south-african-biodiversity-institute-sanbi-on-color-morphs-april-2015-volume-13-2>



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have produced statements distancing themselves from this practice due to increasing concerns about the negative conservation impact of the practice.

6. The affordability of wildlife

The demand for colour variants appears to have led to wide fluctuations in the price of wildlife at game auctions. This can push the prices outside margins for other ranchers (including in the sport hunting and ecotourism sectors) and could potentially disadvantage them due to trade in colour variants. This is significant given the area of land under wildlife management (about 14% of South Africa, or two and a half times as much land as under government protection) that contributes directly to conservation. The high prices afforded by colour variants have resulted in more and more land being used for this practice, at the expense of traditional wildlife ranching activities. There is thus increasing concern that the practice may have detrimental consequences for biodiversity and the biodiversity economy. Also, that breeding colour variants may reduce the ability of ecotourism and hunting to contribute sustainably to the economy.

Summary

In the EWT's opinion, the practices of intensive and selective breeding of wildlife hold no conservation value and the EWT supports global calls for:

- Robust legal frameworks supported by well-resourced implementation and enforcement plans to ensure the best welfare standards for all wildlife in intensive breeding operations and norms and standards for husbandry practices of intensively bred species;
- The prohibition of hybridisation of wildlife species and subspecies;
- Prohibition of the release of intensively bred or genetically manipulated animals into the wild;
- The development of legal frameworks to regulate, monitor and mitigate conservation impacts associated with this practice;
- Adequate capacity for monitoring, education and enforcement; and
- The implementation of certification systems for wildlife operations to ensure transparency so that end users know the origin and extent of manipulation of the animals they are using/buying.

The EWT bases its perspectives on the best available information and data available at the time. Our positions and opinions may change as more information and data become available.