

## Wild Welfare Position Statement on White Lions and White Tigers in Captivity

## August 2019

Wild Welfare believes that unnatural colouration of individuals in captivity should not be intentionally bred due to potential welfare issues and the miseducation surrounding the use of white animals in captivity\*. Whilst captive facilities should ensure that current individuals carrying these recessive genes receive the best care possible, these should be the last atypical colour morphs to be seen ex situ.

Leucistic and albinistic traits occur when two parents carry a recessive gene, which results in the lack of pigmentation of the skin or hair<sup>1</sup>. This results in white colouration, often with pink skin or blue eyes. Although this occasionally occurs *in situ*, it is incredibly rare<sup>2</sup> and is usually the result of isolation or reduction of potential breeding partners<sup>3</sup>. Breeding purposefully for white colouration in captive species, particularly big cats such as lions and tigers, is the result of genetic inbreeding<sup>4</sup>. This brings with it a multitude of associated health problems due to a lack of genetic diversity. These can include a compromised immune system, sensory defects, mental impairments and developmental defects such as spinal problems<sup>5</sup> as well as a whole host of other conditions.

Some captive collections state that their white individuals are a rare subspecies and are part of conservation breeding programmes. However, this is not the case. Leucistic and albinistic individuals will have less genetic diversity than their normal coloured conspecifics therefore have no role in a breeding programme. As individuals they would also struggle with behavioural adaptations based on regular phenotypic output such as crypsis to enable effective hunting techniques *in situ*. To claim that these individuals are important for conservation will result in a redirection of funds and management effort from projects which hold true conservation and education value. Unnatural colourations of individuals should not be intentionally bred for and should never claim to be of conservation value. Whilst zoos should ensure that current individuals carrying these recessive genes receive the best care possible, these should be the last atypical colour morphs to be seen *ex situ*. Appropriate education surrounding this topic should also take place from all holders of these individuals to ensure understanding from a public perception.

\*Wild Welfare is not referring to naturally occurring white coloured animals, but those for which the white colour has been specifically bred for.

- Hosey, G. Melfi, V. Pankhurst, S. (2009). Zoo Animals (1<sup>st</sup> ed.). Oxford University Press. Chapter 9, page 294.
- 2. Abreu, M. et al (2013). Anomalous colour in Neotropical mammals: a review with new records for *Didelphis* sp. (Didelphidae, Didelphimorphia) and *Arctocephalus australis* (Otariidae, Carnivora). Brazillian Journal of Biology (73) number 1.
- 3. Łopucki, Rafał & Mróz, Iwona. (2010). Cases of colouration anomalies in small mammals of Poland, and reasons for their incidence. Annales UMCS, Biologia. 65.
- 4. Xu, X. et al (2013). The Genetic Basis of White Tigers. Current Biology (23)1031 1035.
- 5. Christie, S. and Ruvio, E.B. (2010). There is no place for white tigers in a modern zoo. Zooquaria Magazine 70 (Summer 2010), European Association of Zoos and Aquaria.