Leucism in Sambar at Mukurthi National Park, Tamil Nadu, India

Leucism affected Sambar *Rusa unicolor* at Mukurthi National Park. © Cleamant Kiran Kumar.

Surveillance of colour abnormalities in wild mammals is remote incident because these abnormalities are rare (Caro 2005). Inherited colour defects, such as albinism and leucism, are well known in several animal species. Leucism is a total lack of pigmentation in the whole body due to an inherited defect in the pigment transfer process affecting the hair (turning white) and skin (turning pale), but having normal coloured eyes (van Grouw 2006; Samson et al. 2017). In this note, we describe leucism in Sambar *Rusa unicolor* (Family Cervidae) at Mukurthi National Park, The Nilgiris, Tamil Nadu, India.

Mukurthi National Park (MNP) is a 78.46km^2 protected area located in the western corner of the Nilgiris Plateau, west of Udhagamandalam Hill Station in the northwest corner of Tamil Nadu State in the Western Ghats mountain range of southern India. The park was created to protect its keystone species, the Nilgiri Tahr. The park is characterized by montane grasslands and shrub lands interspersed with sholas in a high altitude area having high rainfall, near-freezing temperatures, and high winds.

On 8 May 2018, we recorded a group of Sambar (n=7) in MNP. Unexpectedly, we observed a single adult female individual which was creamy white in colour, and eyes, nose, and hoof were normal coloured and completely different from the group. Hence,

it appears to be a case of leucism and not the albinism in which whole body of albino is totally white with reddish eyes (Samson et al. 2017). Mahabal et al (2019) reported that a total of seven individuals of Sambar were affected by colour aberration in India of which three of them were confirmed as albinism, three were "undetermined" because of lack of information (but white in colour) and one was declared as leucism because the coat colour was white and eyes were normal coloured (exhibited in City Palace Archaeological Museum, Udaipur, Rajasthan). Bensch et al. (2000) and Samson et al. (2017) reported that leucistic individuals are more frequently in small and isolated populations due to inbreeding, which causes recessive alleles to be expressed. Probably, many animal species from different orders occur with anomalous colouration, but many of these records are not officially reported, probably due to lack of knowledge. We highlight the significance of photographs as important tools for documentation about natural history as a whole. In conclusion, researchers must be encouraged to report the records of colour aberration in wildlife.

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