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The rescue and treatment of an injured Ratel *Mellivora capensis* in Anandapur, Odisha, India

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Abstract

In January 2022, staff of the Keonjhar Wildlife Division in Odisha, India, came across an injured Ratel *Mellivora capensis*. The animal had apparently been hit by a vehicle. It was taken to veterinary hospitals for treatment. The animal was diagnosed with a symphyseal fracture of the mandible, which was repaired surgically. Post-surgery the animal was transferred to Nandankanan Zoological Park for observation and treatment. The animal was considered unfit for release and was kept at the zoo.

Keywords: Honey Badger, roadkill, veterinary care, wildlife surgery, wildlife vehicle strikes

On 26 January 2022, at about 22h00, a forest patrol team of the Brahmanipal Wildlife Range, under the Keonjhar Wildlife Division, came across a Ratel *Mellivora capensis* that had been hit by a vehicle at 21°10'44''N, 85°54'56''E on the Naranpur – Duburi Road of Keonjhar District, Odisha, India (Fig. 1). The female lay immobile on the road, having apparently been struck by a vehicle. A male Ratel observed at the initial encounter moved off into the roadside forest when the patrol team approached.

The female Ratel was found bleeding and breathing heavily from its nostrils. The animal was brought to the local range office (Fig. 2), where it was taken to the veterinary office for treatment.

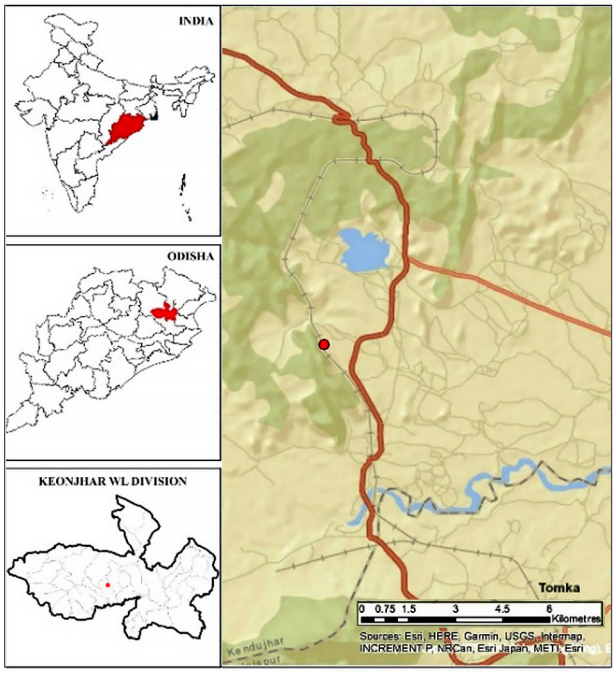

Fig. 1. The rescue location (red dot) of the Ratel *Mellivora capensis* in Anandapur, Odisha, India.

On account of the severity of its injuries, the animal was referred to the Department of Surgery and Radiology, College of Veterinary Science and Animal Husbandry, Odisha University of Agriculture and

Fig. 2. The Ratel *Mellivora capensis* (a) during transfer to Brahmanipal Wildlife Range on 26 January 2022 and (b) being treated by veterinarians on 27 January (photos: Rakesh Kumar Mohalik).

Fig. 3. (a) Radiographic and (b) physical examination of the injured Ratel *Mellivora capensis* conducted on 28 January 2022 by Dr. Indramani Nath and his team, revealing a midline symphyseal fracture of the mandible. (c) Post-surgery radiograph and (d) photograph showing the pin and cerclage wiring that fixed the broken mandible in place so that the symphyseal fracture could heal. (Photos: Aurobindo Samal.)

Technology, for diagnosis and treatment on 27 January 2022. An examination under anaesthesia by Dr. Indramani Nath and his team revealed a fracture of the mandible symphysis (Fig. 3a, b). During surgery, internal and external fixation measures stabilized the fracture (Fig. 3c, d). This the first case of the successful rescue and treatment of an injured Ratel in Odisha of which we are aware.

For further observation and follow-up, the animal was transferred to the Nandankanan Zoological Park, in Bhubaneswar. The Ratel removed the pin and wiring three days after surgery. The Ratel showed signs of healing and normal physiological conditions, but it was determined that the animal could not be returned to the wild because concerns that it would not be able to survive in the wild.

The proliferation of roadways has led to the fragmentation of the Earth's terrestrial surface into more than 600,000 fragments, with a majority of these being less than 1 km^2 in area (Ibisch et al. 2016). Roads are a significant source of mortality for India's wildlife (e.g. Carter et al. 2020). Identifying solutions, particularly in more populous states such as Odisha, remains a pressing challenge

Acknowledgements

We thank Principal Chief Conservator of Forest Wildlife, the Director and Deputy Director of Nandankanan Zoological Park for their support. The Divisional Forest Officer and Keonjhar Wildlife Division are thanked for their support and timely intervention. We thank Rashmi Ranjan Rout and the team of Brahmanipali Wildlife Range for rescuing the animal from the road. We are thankful to Dr. Indramani Nath and his team for the successful surgery. Comments and edits by Guillaume Douay greatly improved the quality of this manuscript.

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