Fishing Cat *Prionailurus viverrinus*

Taxonomy

Kingdom: Animalia

Phylum: Chordata

Class: Mammalia

Order: Carnivora

Family: Felidae

Scientific Name: *Prionailurus viverrinus* (Bennett, 1833)

Species Authority: Bennett, 1833

Common Name(s): Fishing Cat

Synonym: *Felis viverrina* Bennett, 1833

Subspecies- *Prionailurus vivverinus vivverinus* (Bennet, 1833; 65), *Prionailurus vivverinus rhizophoreus* (Sody, 1936; 45).

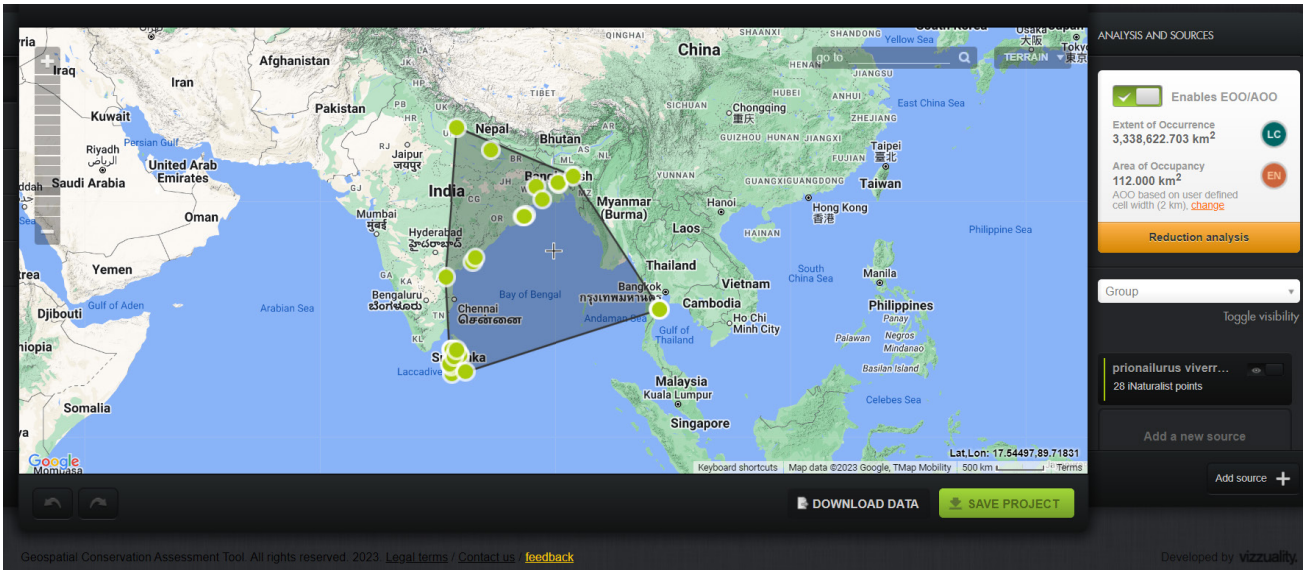
Geographic Distribution

It is restricted to southern and southeastern Asia. *Prionailurus vivverinus vivverinus* is widely distributed in India, Nepal, Pakistan, Bangladesh, Malaysia, Myanmar, Thailand, Bhutan, Vietnam, Indonesia (Java), Cambodia, Laos, Sri Lanka (Roberts 1977; Mukherjee et al. 2010; Chowdhury et al. 2015) and the other subspecies *Prionailurus vivverinus rhizophoreus* (Sody, 1936) is only restricted to Java, Indonesia (Kitchener et al. 2017).

In India, the distribution of the Fishing Cat is patchy, it is limited to three broad clusters in the Terai region, eastern Coast, and Brahmaputra floodplains (Rana et al. 2022). Earlier, Fishing Cats were recorded in 12 Indian states but today their distribution ranges from the Sundarbans Mangroves & Hoogly in West Bengal, Bharatpur in Rajasthan, Andhra Pradesh, Odisha, Uttarakhand and Uttar Pradesh (Pocock 1939; Sunquist & Sunquist 2002; Rais et al. 2011; Mishra et al. 2018).

Habitat

This cat mainly prefers wetland habitats like swamps, marshes, rivers, mangroves (Mishra et al. 2018), agricultural fields, fish farms (Mukherjee et al. 2010; Chowdhury et al. 2015) including alluvial floodplains, river deltas, and mangrove forests (Mukherjee et al. 2012). Ponds, canals, rivers, tidal creeks, mangroves,



etc. are also considered as critical habitats for this species (Cutter 2015), and the individuals that are mostly observed have been reported near the vegetation patches or grasses adjoining rivers or streams (Mukherjee et al. 2012). Being an opportunistic feeder, this species is also well-recorded in man-made habitats like shrimp and fish culture ponds, rice fields, and coconut plantations (Cutter 2015) including human habitation areas like mosques and abandoned houses (Eva et al. 2022).

Uses and Trade

Fishing Cat skin are usually traded globally (Mukherjee et al. 2012).

Major Threats

Habitat destruction is the major threat to the species. Their prime habitats are being severely damaged by rapidly expanding brick industries, sand mining, and illegal logging (Mukherjee et al. 2012; Chakraborty et al. 2020). Invasives like Water Hyacinth and red algae often deteriorate water quality and visibility which hampers the feeding patterns of this cat (Mugerwa et al. 2020), these factors often drive the species to venture out into the human habitats where they get trapped into snares. They are often mistaken to be leopard or tiger cubs and face gruesome deaths by cruel means like poisoning by the locals. They are also a delicacy in West Bengal and Thailand (Cutter 2015). Road accidents also contribute to mortality in great numbers (Mukherjee et al. 2012).

Assessment

NT (A2cde + A3cde)

Being an elusive species there are very few studies on population dynamics. The threats are known and understood but they are in no way reversible in the near future.

Assessment is based on the following categories and criteria:

(c) A decline in AOO or EOO/ habitat quality: since the distribution is widespread, a decline in AOO or EOO is not reflected by the data, but the quality of habitat is rapidly declining because of the above listed factors.

(d) Actual or potential levels of exploitation. This species is hunted for a variety of reasons which indicate their overexploitation.

(e) Effects of introduced taxa, hybridisation, pathogens, pollutants, competitors, or parasites. Recent studies indicate the presence of micro, meso, and macro plastics in the scats of Fishing Cats, which might lead to serious damage to the species in the near future (Ratnayaka et al. 2023). Invasive species are also playing a vital role in habitat destruction.

A3: A3 can also be applied based on the increased threats, since it would be easy to predict a reduction in population in the next 100 years.

Due to the lack of studies on population dynamics, the generation length of the species is not understood. It has a widespread distribution but is restricted to small areas within the range.

Therefore, based on past threats, the species has declined visibly although the rate of decline is unknown. Due to ongoing threats, it can be predicted that the population might undergo a decline over the next three generations. That

is why I have placed the species in the Near Threatened category of the IUCN Red List for species with the criteria A2cde + A3cde.

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