Predicted distribution of the Sunda Stink-badger Mydaus javanensis (Mammalia: Carnivora: Mephitidae) on Borneo

Abstract

The Sunda stink-badger Mydaus javanensis is a small carnivore inhabiting the Southeast Asian islands of Java, Sumatra, Borneo and Natuna Islands. It occurs in a wide variety of vegetation types and is presently listed by The IUCN Red List of Threatened Species as Least Concern. We analysed 15 (Balanced Model) or 77 (Spatial Filtering Model) location records to predict habitat suitability across Borneo. The analysis suggests that most of the suitable habitat is located in Sabah, northeast Sarawak and North Kalimantan. In addition, this species is also recorded, mostly historically, patchily in west Sarawak, and West, Central, South and East Kalimantan. Although this species appears to be disturbance-tolerant and is frequently observed in village areas, some conservation action – such as limiting large-scale forest conversion to oil palm plantations – is warranted because most lowland habitat is unprotected. Further research in central and southern Borneo needs to focus on showing if there are any further sizable populations. Also, hunting of Sunda stink-badger has been reported in some parts of Borneo and might be a possible driver for the species's patchy distribution. More research is warranted to understand what determines the species's distribution and density, based on which proper conservation strategies, if needed, can be developed to preserve the species.