

Status of proboscis monkeys in Kota Belud, Sabah, Malaysia: insights from population surveys and habitat assessment

ABSTRACT

Proboscis monkeys, an iconic Bornean endemic species, are facing threats from habitat loss, degradation, and fragmentation due to human activities. Past surveys have covered only a limited number of proboscis monkey populations across their range, leaving the status of many populations largely unknown. We surveyed the previously unexplored Kota Belud region in northwestern Sabah, Malaysian Borneo, to determine the population and distribution of proboscis monkeys. Our assessment of the threats to their survival focused specifically on land-use and land-cover patterns, with the primary goal of evaluating the population status of proboscis monkeys in this region through an analysis of habitat change. Between January and September 2022, we conducted boat-based surveys in wetland forests—potential habitats of the proboscis monkeys. Of the six sites we surveyed, we directly observed proboscis monkeys at just one, although local residents reported their presence at other sites. Our observations identified 25 individuals in at least three one-male-multifemale groups and one all-male group, all along the Tempasuk River near the coastline. Overall, our study highlights the concerning state of the proboscis monkey population in Kota Belud, which is small, highly fragmented, and likely reaching its limits of adaptability to habitat changes due to human activities. While acknowledging the need for further studies, urgent conservation strategies are needed. For the long-term survival of the proboscis monkeys in Kota Belud, we recommend prioritizing the identification and protection of remaining habitats, rehabilitation, reconnection of isolated areas, and proactive measures to prevent further habitat fragmentation.