

Assessing habitat requirements of Asian tapir in forestry landscapes: implications for conservation

ABSTRACT

The iconic large-bodied Asian tapir (*Tapirus indicus*) is endemic to Southeast Asia and is currently listed as endangered. To date, little is known about how tapir respond to habitat fragmentation in forestry landscapes. This study aimed to assess tapir occurrence in eight forestry reserves, outside the main protected areas in Peninsular Malaysia, using non-intrusive camera trapping methods. These reserves include logged or unlogged, contiguous or fragmented, peat swamp forest and lowland dipterocarp forest. Out of 345 camera-trapping locations, over six years, we detected tapir at 39 locations, represented by 960 images. An assessment of vegetation structure and landscape variables was conducted to identify the key factors associated with their tapir presence. We found that tapir occurrence significantly increased with the number of trees with a DBH of 5–45 cm, number of saplings, percentage of canopy cover, trees with a DBH of more than 45 cm and distance from the nearest road. While, tapir detection decreased with the number of dead fallen trees and number of palms. Our data highlights the importance of conserving these remaining fragmented forest reserves, particularly peat swamp forests and ways in which suitable habitat conditions may be created to support tapir populations. We conclude by discussing intervention approaches such as relocation, reintroduction and restocking and restoration to improve the structural attributes of vegetation utilised by tapirs.

Keyword: Deforestation; Logging; Habitat fragmentation; Camera trapping; Peat swamp; Lowland dipterocarp forest

