A camera trap record of Asiatic Golden Cat *Catopuma temminckii* (Vigors & Horsfield, 1827) (Mammalia: Carnivora: Felidae) in State Land Forest, Merapoh, Pahang, Malaysia

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The Asiatic Golden Cat *Catopuma temminckii* is listed as Near Threatened in the IUCN Red List of Threatened Species (McCarthy et al. 2015). It is widely distributed from the eastern Himalaya (Ghimirey & Pal 2009; Bashir et al. 2011; Dhendup 2016; Chatterjee et al. 2018; Koju et al. 2020;) across southeastern Asia (Grassman et al. 2005; Coudrat et al. 2014; Than Zaw et al. 2014; McCann et al. 2020) to Sumatra (Pusparini et al. 2014). In Malaysia, it enjoys the highest legal protection under the Wildlife Conservation Act 2010 as a totally protected species (Gumal et al. 2014). In Peninsular Malaysia, it inhabits Taman Negara National Park (Kawanishi & Sunquist 2004), Jerangau Forest Reserve (Azlan & Sharma 2006) and Endau Rompin National Park (Gumal et al. 2014).

Little is known about its distribution outside protected areas in Peninsular Malaysia, making it difficult to develop a specific conservation plan in the country (Azlan & Sharma 2006). We report a record of an Asiatic Golden Cat outside a protected area in central Peninsular Malaysia. This record was obtained during a survey to assess the wildlife diversity in a State Land Forest in Pahang State.

Our study area was located in a State Land Forest west of National Park in Pahang State, Malaysia (Figure 1). State Land Forests and all forest products growing...
therein are the property of the State Authority (National Forestry Act 1984). The 23.24km² large study area is composed of a mosaic of secondary and selectively logged lowland dipterocarp forest and agricultural areas with oil palm and rubber plantations at an elevation range of 20–538 m. It partially overlaps the Malaysian Government’s Central Forest Spine – Primary Linkage 1 (CFS-PL1) (Regional Planning Division 2009), an important wildlife corridor for Tiger *Panthera tigris*, Asian Elephant *Elephas maximus*, Malayan Tapir *Tapirus indicus* and other threatened species.

We deployed 12 unpaired Browning Model BTC-8A and Reconyx Hyperfire HC500 camera traps. They were attached to trees 30cm above the ground and placed opportunistically along human trails at a distance of 2km. No bait or lure was used. Camera traps were active 24 hours per day with no delay between consecutive photographs. We replaced batteries and memory cards every four weeks. All camera traps were left in the same location for the entire study period. The coordinates of each camera trap were determined by using a Garmin GPSMap 64s device set to Kertau 1948 datum.

Our camera trap survey lasted from 25 August to 25 October 2019 with a total survey effort of 542 camera trap days. On 21 September 2019 at 17:12 h, a camera trap recorded a solitary Asiatic Golden Cat at 4.5793°N, 101.9870°E (Image 1). The camera trap was deployed along a logging road at the elevation of 167m. Other species recorded at the same location include Banded Linsang *Prionodon linsang*, Common Palm Civet *Paradoxurus hermaphroditus*, Dhole *Cuon alpinus*, Wild Boar *Sus scrofa*, Large Indian Civet *Viverra zibetha*,

Figure 1. Study area in State Land Forest west of Taman Negara National Park in Pahang State with the location where the Asiatic Golden Cat *Catopuma temminckii* was detected.
Malayan Tapir and Red Jungle Fowl *Gallus gallus*.

Our records in the State Land Forest of Merapoh indicate that this selectively logged forest serves as a wildlife corridor. In the adjacent Taman Negara National Park, the Asiatic Golden Cat has been recorded on multiple occasions (Kawanishi et al. 1999; Kawanishi & Sunquist 2004, 2008; Jambari et al. 2019).

To date, the Asiatic Golden Cat has been recorded in the unprotected Forest Reserves of Jerangau east of Taman Negara National Park (Azlan & Sharma 2006) and Gunung Basor in northern Peninsular Malaysia (Darmaraj 2007). Gumal et al. (2014) reported records farther south in the Endau Rompin Landscape, both inside and outside Endau Rompin National Park. In the Himalaya, the Asiatic Golden Cat has also frequently been recorded outside protected areas (Jigme 2011; Vernes et al. 2015; Jambari et al. 2019).

The key implication of our study is that even small and degraded forest blocks are used by the Asiatic Golden Cat and other wildlife. They also hold potential prey such as Red Jungle Fowl and Wild Boar. Faecal samples of the Asiatic Golden Cat collected in the national park contained remains of birds, primates, and rodents (Kawanishi & Sunquist 2008). It also preys on larger mammals such as Wild Boar and Muntjac *Muntiacus* (Kamlar et al. 2020).

Forest fragmentation and degradation due to land clearing for agriculture, logging and road construction is leading to the extirpation of wildlife in large swaths of tropical forests (Kleinschroth & Healey 2017); however, secondary and selectively logged forests provide habitat for a variety of medium and large mammal species such as Leopard Cat *Prionailurus bengalensis*, Marbled Cat *Pardofelis marmorata*, Tiger, Sun Bear *Helarctos malayanus*, Malayan Porcupine *Hystrix brachyura*, Southern Pig-tailed Macaque *Macaca nemestrina*, Malayan Tapir, and Asian Elephant (Azlan 2006; Hambali et al. 2019).

Therefore, such forests outside the protected area network should be prioritised for wildlife conservation, particularly when they act as wildlife corridors. Continued monitoring is essential to generate necessary baseline knowledge for devising appropriate management measures.

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