

Identification, Monitoring, and Protection of IUCN Red Listed and Nationally Protected Species in Ayer Hitam Forest Reserve (SISFEC) UPM

The Ayer Hitam Forest Reserve, managed by Universiti Putra Malaysia through the Sultan Idris Shah Forestry Education Centre (SISFEC), serves as an important site for biodiversity conservation and research. Continuous wildlife inventories and monitoring have identified several species that are listed under both the **IUCN Red List** and the **Wildlife Conservation (Protected Species) Order 2012** under the **Wildlife Conservation Act 2010 (Act 716)**.

Key findings from recent biodiversity surveys:

● Primates (5 species)

1. Pig-tailed macaque (*Macaca nemestrina*)
2. Long-tailed macaque (*Macaca fascicularis*) – *Protected*
3. White-handed gibbon (*Hylobates lar*) – *Endangered & Protected*
4. Dusky leaf monkey (*Trachypithecus obscurus*) – *Endangered & Protected*
5. White-thighed surili (*Presbytis siamensis*) – *Near Threatened & Protected*

● Amphibians (Anurans – 39 species)

- i. Includes one **endemic species** to Peninsular Malaysia: *Kalophrynus palmatissimus* (Lowland sticky frog)
- ii. Four species are listed as *Protected* under national legislation

● Fish (27 species)

- i. Several species recorded are *Protected* under the **Wildlife Conservation (Protected Species) Order 2012** (PERHILITAN).

● Small mammals (2 protected species)

1. Lesser mousedeer (*Tragulus kanchil*) – *Protected*
2. Sunda flying lemur (*Galeopterus variegatus*) – *Protected*

● Other mammals

1. Sunda pangolin (*Manis javanica*) – *Critically Endangered & Protected*
2. Malayan porcupine (*Hystrix brachyura*) – *Protected*

These findings demonstrate that UPM, through SISFEC, actively identifies, monitors, and safeguards species of conservation concern in accordance with **national conservation laws** and **IUCN Red List categories**. The data form part of ongoing biodiversity monitoring and educational programmes under UPM's commitment to sustainable forest management and **Sustainable Development Goal (SDG) 15: Life on Land**.