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Integrating Javan leopard conservation into a UNESCO Biosphere Reserve in East Java, Indonesia

The Endangered Javan leopard *Panthera pardus melas* is endemic to Java, one of the most populated islands, where it occurs in 22 isolated forest patches that comprise < 9% (c. 1.2 million ha) of the island's total land area. Fewer than 400 adults remain in the wild; most of the extant subpopulations will not survive unless conservation actions for this subspecies are improved. One of the best opportunities to connect Javan leopard subpopulations are the UNESCO Biosphere Reserves, including the Belambangan Biosphere Reserve in East Java. The Reserve incorporates three National Parks and one Nature Reserve (Meru Betiri, Alas Purwo, Baluran and Kawah Ijen) as core areas that together secure c. 78,000 ha of forest. The adjacent buffer zones provide an additional 100,000 ha of terrestrial habitat suitable for the Javan leopard.

In July 2021, Sintas Indonesia Foundation facilitated a webinar for the Belambangan Biosphere Reserve's Forum to discuss the integration of Javan leopard conservation into the Belambangan Biosphere Reserve management plan. The webinar became the largest event ever held to promote Javan leopard conservation, with nearly 700 participants from various stakeholder groups, including provincial government officials, park managers, local NGOs, university scholars, the private sector and the public. The main outcomes of the webinar were the adoption of the Javan leopard as the Belambangan Biosphere Reserve's flagship species—now appearing in its logo—increased public recognition of and support for the Javan leopard and for biodiversity conservation in the Reserve, and a call for investment from

interested parties to support the implementation of the Reserve's management plan.

This initiative could potentially be replicated in the other UNESCO Biosphere Reserves in Java (Cibodas, Bromo–Tengger–Semeru–Arjuno, Merapi–Merbabu–Menoreh, and Karimun Jawa–Jepara–Muria). Together, these reserves secure more than 240,000 ha of core areas and provide > 300,000 ha of terrestrial buffer zone, and could greatly increase the chances for long-term survival of the Javan leopard.

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Dihing-Patkai and Raimona, Assam's new National Parks

Two new National Parks have been declared by the government of Assam, India, one through the upgrading of an existing protected area. The 111 km² Dihing-Patkai Wildlife Sanctuary in eastern Assam, established in 2004, was upgraded to a National Park on 15 June 2021, with a new total area of 234 km². In western Assam, a part of Ripu Reserved Forest was declared as Raimona National Park on 8 June 2021, covering a total of 422 km². Raimona is contiguous with Bhutan's Phibsoo Wildlife Sanctuary and West Bengal's Buxa Tiger Reserve, thus forming a large transboundary protected wilderness of 1,459 km². Raimona is also part of the buffer zone of Manas Tiger Reserve.

Dihing-Patkai is dominated by lofty hollong *Dipterocarpus macrocarpus* trees, and Raimona by tall sal *Shorea robusta* trees. Primates common to both new National Parks include the slow loris *Nycticebus bengalensis* and Assamese macaque *Macaca assamensis*. Raimona is home to the golden langur *Trachypithecus geei*, and Dihing-Patkai to the stump-tailed *Macaca arctoides* and pig-tailed *Macaca leonina* macaques, capped langur *Trachypithecus pileatus* and hoolock gibbon *Hoolock hoolock*. Other notable mammals occurring in both areas are the elephant *Elephas maximus*, black bear *Ursus thibetanus*, tiger *Panthera tigris*, clouded leopard *Neofelis nebulosa*, marbled cat *Pardofelis marmorata*, dhole *Cuon alpinus* and gaur *Bos gaurus*.