BGCI committed to mentoring and supporting the network's development, with an emphasis on resource mobilization once the working practices of the network are established. Members of the national network were encouraged to join BGCI's membership and accreditation schemes, to become part of the global botanic garden community. Future opportunities for the network include developing accredited courses, joint publications, staff exchange, sharing successful conservation and education approaches, and influencing policy through shared knowledge. The participants also highlighted other potential areas for collective engagement, emphasizing interactions with diverse stakeholders, the role of gardens in promoting understanding of native species and ecological habitats, and participation in ecological restoration initiatives. In the first instance, the network secretariat will be based at Auroville Botanical Gardens.

The inception of the Indian Botanical Gardens Network marks an important step towards collaboration, a cornerstone in the sustainable conservation of India's diverse plant life.

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Rewilding of black softshell turtles in Brahmaputra landscape, India

Turtle Survival Alliance Foundation India and Assam Forest Department, with financial support from the Disney Conservation Fund and Turtle Survival Alliance, rewilded hatchlings of the Critically Endangered black softshell turtle *Nilssonia nigricans* in the Brahmaputra River within Kaziranga Tiger Reserve, Assam, from late November 2023 to mid January 2024. The hatchlings were approximately 5 months old. They were head-started from 368 eggs sourced from 27 nests protected at Nagshankar temple, Biswanath district, Assam.

The black softshell turtle is threatened by overexploitation and fisheries bycatch. Endemic to Brahmaputra basin, the species was thought to be extinct in the wild and confined to Bostami shrine in Bangladesh until recent sightings in the Brahmaputra River drainage and records from a few temple ponds in north-east and east India.

Assam's temple ponds are known to hold a number of threatened turtle species. The ponds have recently gained prominence as semi-captive conservation facilities, and the Turtle Survival Alliance Foundation India project team has been helping two temple ponds with husbandry improvements, nest protection and rear and release programmes since 2018. Artificial incubation of the eggs of the black softshell turtle at optimum temperature and humidity conditions resulted in 64% hatching success in 2023. The newly emerged hatchlings were fed live fish fingerlings, maintained in a heated indoor environment and regularly moved into the sun for basking.

Pre-release habitat suitability surveys were conducted at eight potential sites in the Brahmaputra floodplains. Two sites were chosen that would allow released turtles to acclimatize over the winter before dispersing into the mainstream as the river floods during the monsoon. After primary health screening, a total of 150 black softshell turtle hatchlings were released on three occasions in the two locations. Approximately 35 hatchlings from 2023 have been retained in the semi-captive facility until they weigh 1 kg, to allow them to be fitted with acoustic telemetry devices prior to release. This will allow us to investigate their survival and dispersal after release.

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Rediscovery of the Critically Endangered *Plantago fengdouensis* in Sichuan, China

In April 2023, a group of *Plantago* plants with unusal leaf morphology was found on a cobblestone beach at 245–255 m altitude on an island in the Yangtze River in Jiang'an County, Yibin City, Sichuan Province. The species was identified as *Plantago fengdouensis* (Z.E. Chao & Yong Wang) Yong Wang & Z. Yu Li (Plantaginaceae), a National Class II Protected and Critically Endangered plant in China. This was the first record of *P. fengdouensis* in Sichuan.

Plantago fengdouensis is endemic to the Yangtze River Basin and was originally known only from three islands in the Yangtze River. In 2001, before the impoundment of the river to form the Three Gorges Reservoir, Wang Yong and Wu Jinqing of Wuhan Institute of Botany, Chinese Academy of Sciences, first discovered the species on the island of Fengwei Dam in the Yangtze River, Fengdu County, Chongqing, which is below the inundation line of the reservoir. In 2004, the type specimen was collected in Chongqing and preserved in the herbarium of Wuhan Botanical Garden (holotype HIB 0151258), and the species was named. But by 2006, there were less than 30 of the original 290 plants remaining. After the completion of the Three Gorges Dam Project in 2009, the wild habitat of the species was submerged, and the species was declared extinct in the wild. *Plantago fengdouensis*

Plantago fengdouensis (Z.E. Chao & Yong Wang) Yong Wang & Z. Yu Li in Jiangan County. Photo: Xuyan Chen.

was considered the only herb that became extinct as a result of the construction of the Three Gorges Dam. The Shenzhou XIII manned spacecraft carried seeds of the species for mutation breeding in November 2021, but the seeds returned from space had a low germination rate.

In January 2024, we discovered two previously unknown populations of *P. fengdouensis*, comprising a total of c. 100 individuals, on two islands 5 km apart in the Yangtze River, in Jiang'an County. Local authorities need to protect these two small populations, and further surveys are needed to locate any other wild populations.

We collected 400 seeds from the two islands and planted them in a greenhouse at Yibin University, for ex situ conservation. We have also collected DNA material from both populations, for genetic investigation, and we will perform propagation experiments to support potential reintroduction.

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Alliance of protected areas for better landscape conservation outcomes in northern Saudi Arabia

Managing vast arid and sparsely populated landscapes for multiple objectives such as wildlife conservation and nature-based tourism presents unique challenges. Five organizations in northern Saudi Arabia manage a single or several large protected areas totalling c. 298,000 km²: Imam Turki Bin Abdullah Royal Nature Reserve Development Authority, King Salman Bin Abdulaziz Royal Reserve, NEOM, Prince Mohammed Bin Salman Royal Reserve and the Royal Commission for AlUla. A network of the protected area managers of these big five reserves (B5R) was formed to exchange ideas on management and explore collaborations in rewilding initiatives, habitat restoration, transboundary conservation planning, research and law enforcement. Several of the protected areas have rewilding plans involving large ungulates, birds (e.g. Asian houbara *Chlamydotis macqueenii*) and apex predators (e.g. Arabian leopard *Panthera pardus nimr*).

The first B5R meeting, hosted by the Royal Commission for AlUla, was held in September 2022 and the second meeting on 29–30 November 2023 in Sharma, Tabuk Province, hosted by NEOM. On the first day of the recent meeting, the c. 30 participants were updated on the planning/approval frameworks, conservation programmes and tourism initiatives of the reserves. Breakout groups reviewed key alignment issues such as compliance, ecological connectivity between the five reserves, protected area zoning and tour operator engagement. The day finished with a visit to various NEOM initiatives: a re-greening site, a plant nursery, and a large pre-release enclosure holding various species of free-roaming ungulates and common ostriches *Struthio camelus*.

On the second day, to ensure a consistent approach to conservation management across the five reserves, there was discussion of global certification instruments for protected areas such as the IUCN Green List of Protected and Conserved Areas, The Global Biodiversity Standard and Dark Sky certification. Research, data collection and long-term ecological monitoring were also deliberated, and consensus reached with regard to research priorities and data collection methods.

Finally, there was an agreement to establish working groups on climate change, law enforcement and compliance, research, habitat restoration and rewilding. Each B5R member will take turns to host future meetings and the group is open to additional nature reserves joining the network, to share best practices in protected area management involving arid landscapes.

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