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An additional threat to the recently rediscovered Nubian flapshell turtle in South Sudan

The Nubian flapshell turtle *Cyclanorbis elegans* (Trionychidae) is one of the largest freshwater chelonians in Africa, formerly widespread across the waterbodies of the savannah regions of Ghana, Togo, Benin, Nigeria, Cameroon, Central African Republic, Chad, Sudan and South Sudan. *Cyclanorbis elegans* is categorized as Critically Endangered on the IUCN Red List, but no wild individuals had been recorded for decades until it was rediscovered in 2017 in South Sudan. Fishing bycatch and collection of eggs and nesting females for domestic subsistence appear to be the main threats to this species.

In 2020, along the White Nile River and its tributaries in Central Equatoria State of South Sudan, we interviewed > 300 local fishermen about this species. We obtained information (confirmed by photographs) that four *C. elegans*



Cyclanorbis elegans captured from the surroundings of Mongalla, South Sudan. Carapace length was 63.4 cm.

captured around Mongalla (three females captured on 11 and 15 September and 22 November 2020, and a male captured on 16 December 2020) were sold by local fishermen to expatriate Chinese residents, who appear to be the main market for this turtle, paying high prices (EUR 250–400 for large individuals) for food and, in one case, for ‘religious veneration’. These prices are a strong incentive for the impoverished fishing communities along the White Nile River to catch these turtles. Interviewees also suggested that expatriate Chinese may export the turtles to Asia for the food trade. Considering that the population size of this species is small, this additional threat could push the species towards extinction. The Nubian flapshell turtle appears to be extinct throughout the rest of its African range. We recommend the creation of a protected area for this species and monitoring and mitigating the potential detrimental effects that the Asian export market may have on this species.

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Call for holistic, interdisciplinary and multilateral management of human–wildlife conflict and coexistence

Conflicts over wildlife are becoming more frequent, widespread and increasingly relevant among conservation challenges and within the UN Convention on Biological Diversity’s 2050 Vision of ‘Living in harmony with nature’. Although the Post-2020 Global Biodiversity Framework envisages a world in which environmental conflicts are reduced, managing human–wildlife conflict and coexistence is an ongoing and complex challenge for communities and governments alike. Each situation is different, with its own history and unique complications, limiting the transferability of solutions. Effective methods to mitigate and manage these situations are elusive or are often not implemented in a socially or economically sustainable way.

Managing human–wildlife conflict and coexistence is a field of continuous learning that requires collaborative processes tailored to social and cultural contexts. To this end the IUCN Species Survival Commission Human–Wildlife Conflict Task Force has published an IUCN Position Statement on the Management of Human–Wildlife Conflict, urging governments, NGOs, researchers, practitioners, community leaders, environmental agencies and others to ensure that efforts to manage human–wildlife conflicts are pursued through well-informed, holistic and collaborative processes that take into account underlying social, cultural and economic contexts.

The statement outlines the typical characteristics and underlying dimensions of these conflicts and proposes five key considerations to guide efforts promoting human–wildlife coexistence: (1) interventions that focus only on reducing damage are not transferable from one case to another, (2) poorly informed human–wildlife conflict mitigation attempts can exacerbate the situation, (3) context awareness and understanding of social and political backgrounds are crucial, (4) conflict mitigation and damage reduction interventions must be designed and managed collaboratively, and (5) long-term solutions must incorporate landscape-scale ecological, economic and physical patterns.

Building on this, the Task Force is developing detailed practical guidelines to assist practitioners, researchers, communities, and decision makers in navigating human–wildlife interactions. The IUCN Species Survival Commission Guidelines on the Management of Human–Wildlife Conflict and Coexistence, which provide comprehensive practical advice, will be piloted in late 2021 with conservation projects around the globe.

The IUCN Position Statement is available in four languages at [iucn.org/theme/species/publications/policies-and-position-statements](https://www.iucn.org/theme/species/publications/policies-and-position-statements).

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Conserving *Dialium travancoricum*, a Critically Endangered endemic tree

Dialium travancoricum Bourd., an evergreen tree of the family Leguminosae (Dialioideae), endemic to the southern Western Ghats of Kerala, India, is the sole representative of its genus in India. This species was first collected by T.F. Bourdillon in 1898 in Ponmudi, Thiruvananthapuram district, and later from Aryankavu, Kollam district. The species had not been recorded since then and there was no ex situ conservation collection. The species was categorized as

Indeterminate and Possibly Extinct in the Red Data Book of Indian Plants in 1990, categorized as Critically Endangered on the IUCN Red List in 1998, and included in the national priority list of threatened plants in 2005.

While surveying for the rare tree *Buchanania barberi* in Ponmudi and Aryankavu during August 2019–March 2021, with support from The Mohamed Bin Zayed Species Conservation Fund (grant no. 180519970), we located one flowering individual of *D. travancoricum* in the evergreen tropical rainforest of Ponmudi, at 490 m altitude. We did not locate the species in Aryankavu. We conclude that the global population is small, with < 50 mature individuals in an area of < 1 km², and recommend that it continues to be categorized as Critically Endangered, but based on criteria B2ab(iii,v);D. Information from local people suggested that the potential threats to the species are: (1) habitat destruction caused by road construction, (2) increasing tourism in Ponmudi (a hill station), (3) low fruit set despite a high level of flowering, (4) few seedlings, and (5) former consumption of its fruits as a tamarind substitute (it is known locally as hill tamarind or *Malampuli*).

Action is required for the protection of this rare species. At Jawaharlal Nehru Tropical Botanic Garden and Research Institute seed germination and seedling establishment experiments are being carried out on seeds collected from Ponmudi, and trials are underway to raise seedlings using tissue culture. Further surveys across Ponmudi and Aryankavu are required, to determine if there are more individuals and, if so, to collect additional seeds for ex situ conservation.

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New guidelines allow companies to plan and monitor biodiversity performance at the corporate level

Businesses are striving to address their impacts on the environment and enhance their sustainability, but many find biodiversity daunting to deal with. Numerous indicators and metrics have been designed for businesses to measure corporate-level biodiversity performance, but none covers all types of business operations in all biomes. To address these challenges, in March 2021 IUCN published *Guidelines for Planning and Monitoring Corporate Biodiversity Performance* (P.J. Stephenson & G. Carbone, 2021, [dx.doi.org/10.2305/IUCN.CH.2021.05.en](https://doi.org/10.2305/IUCN.CH.2021.05.en)). The guidelines take