


## Decline of the Critically Endangered Tonkin snub-nosed monkey in Quan Ba forest, Vietnam

Vietnam is a stronghold for threatened and endemic primate species, including the Critically Endangered Tonkin snub-nosed monkey *Rhinopithecus avunculus*. This species is confined to a few areas of north-east Vietnam and its distribution has declined markedly as a result of extensive deforestation, cardamom farming within forested areas and intensive hunting. The Tonkin snub-nosed monkey is now known from only two small forest patches in Ha Giang province (Khu Ca and Quan Ba forests).

The Fauna & Flora Vietnam Programme, with financial support from the Critical Ecosystem Partnership Fund and the Nando and Elsa Peretti Foundation, has been supporting community conservation teams for over a decade in both forests. These efforts focus on forest protection and reducing illegal wildlife trade. In Quan Ba, despite regular patrols, the species has not been sighted since 22 June 2020, although there have been anecdotal reports of the species from local community members. To determine its current status in Quan Ba, we initially gathered direct and indirect evidence from local communities, followed by a systematic 2 × 2 km grid-based survey during 17–21 April 2024. Each grid cell, except those heavily impacted by agriculture or human habitation, was searched by pairs of observers, including experienced biologists and community conservation team members. A total of 32 surveyors traversed a total of 731 km, searching for any evidence of the Tonkin snub-nosed monkey, but we did not record any significant signs of the species.

The decline of the Tonkin snub-nosed monkey in Quan Ba is of great concern, and underscores the urgent need for a protected area designation for this forest, focusing on zonation, habitat restoration and an expansion programme for the Khu Ca forest. Khu Ca is a National Park, providing protection specifically for the Tonkin snub-nosed monkey and its habitat. Quan Ba, however, does not have a conservation designation and therefore does not receive comparable protection. Monitoring and management plans need to be implemented to ensure the survival of this species and to preserve the ecological integrity of the region. Additionally, intensive research is required to prevent any cascading effects on the population in Khu Ca.

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## Saving the Ryukyu rabbit tick *Haemaphysalis pentalagi*

The metazoan parasites of vertebrates are important components of global biodiversity but although many parasite species are threatened with extinction, their conservation has been largely neglected. However, recent interest has culminated in the emergence of the nascent field of parasite conservation biology and the establishment of the IUCN Species Survival Commission Parasite Specialist Group (Hopkins & Kwak, 2023, *Oryx*, 57, 283). Until now, parasite conservation biology has been largely aspirational, with few practical efforts to protect threatened parasites. As far as we are aware, the conservation programme for the Ryukyu rabbit tick *Haemaphysalis pentalagi* is the first for a globally threatened parasite species.

The Ryukyu rabbit tick is a co-threatened parasite of the Amami rabbit *Pentalagus furnessi*, both endemic to the Amami archipelago in southern Japan. The population of *P. furnessi* (and presumably also *H. pentalagi*) declined markedly following the introduction of the small Indian mongoose *Urva auropunctata* in the 1970s. In 2022, a conservation project, partly funded by the Mohamed bin Zayed Species Conservation Fund, was launched to safeguard the Ryukyu rabbit tick from extinction, through both in situ and ex situ actions. On Amamioshima, in situ monitoring of *H. pentalagi* is ongoing. The aim is to collect baseline abundance data on *H. pentalagi* and to then assess the impacts of conservation actions taken to control introduced predators (mongooses, feral cats and dogs) and wildlife diseases (e.g. toxoplasmosis, rabbit haemorrhagic disease) that threaten *H. pentalagi* and its host *P. furnessi*.




An ex situ insurance population of *H. pentalagi* has been established at Hokkaido University from individuals collected on Amamioshima. This population has successfully reproduced in captivity and had completed one full life cycle as of May 2024, with the second captive-bred generation now maturing. A husbandry manual for this



Adult male Ryukyu rabbit tick *Haemaphysalis pentalagi*. Photo copyright: Takamasa Nemoto (all rights reserved).

threatened tick species is in development and additional ex situ insurance populations may be established at other universities and zoos.

The success of the ongoing Ryukyu rabbit tick conservation programme demonstrates that both in situ and ex situ parasite conservation are achievable. This programme also highlights the importance of collaboration between philanthropic organizations, government ministries and conservation biologists to safeguard threatened parasites against extinction.

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## IUCN Species Survival Commission Wild Tulip Specialist Group established

In April 2024, the IUCN Species Survival Commission (SSC) established a new Wild Tulip Specialist Group. This new group will help raise the profile of non-tree plant conservation and highlight the need for conservation in often overlooked regions such as Central Asia.

This international group of scientists, practitioners and science communicators will assess, plan and act for the conservation of tulip species. The group will strive to assess all wild tulip species for the IUCN Red List, plan and implement projects to alleviate threats and monitor wild populations, build networks and partnerships to ensure effective ex situ collections, build and share capacity, and develop communication pieces to engage with local communities, the public and policy makers.

There are an estimated 90–100 species of tulips distributed across the semi-deserts, steppes, grasslands and mountain meadows of large parts of temperate Eurasia, from western China and Mongolia to the Balkans, with a single species in Iberia and north Africa. The majority of species occur in two diversity hotspots, with one centred on western Iran, Turkey and the Caucasus, and the other in Central Asia, where over 60% of species occur. Currently > 50% of wild tulips assessed on the IUCN Red List are categorized as threatened, with many others Near Threatened or unassessed. Research has shown that climate change and other anthropogenic stressors such as livestock overgrazing, mining, urbanization, overcollection and illegal trade threaten many tulip populations.

The Wild Tulip Specialist Group will focus on the entire distribution of wild tulips, encompassing a range of cultures, ecosystems and varying amounts of previous research. The group proposes to use its combined expertise to build an evidence base to inform decision-making and science-based conservation for wild tulips. The group is diverse both geographically and technically, with 35 members from 14 countries (Albania, Azerbaijan, Denmark, Finland, Iran, Kazakhstan, Kosovo, Kyrgyzstan, the Netherlands, Tajikistan, Türkiye, Turkmenistan, the UK and Uzbekistan). Addressing global, regional and local challenges to conserve wild tulips will require innovative and diverse perspectives, knowledge and skills. The new group will also collaborate with other SSC taxonomic, national and species-based groups, and invites researchers, practitioners and communication experts with a passion for wild tulips, particularly those from the Caucasus, Türkiye, Iran and China, to contact us for further information on engaging with this new community of experts.

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## IUCN Species Survival Commission Amphibian Specialist Group launches Eastern Asian Salamander Task Force

The IUCN Species Survival Commission Amphibian Specialist Group provides the scientific foundation for action to conserve amphibians. This is achieved through several approaches, including Task Forces, which are responsible for a specific taxonomic, regional or thematic focus.

Globally, 60% of the Caudata are threatened, in particular by invasive species, chytridiomycosis, habitat loss and degradation, exploitation and climate change. In eastern Asia, > 65% are threatened, with one species already extinct. In view of this, together with the likelihood of threats increasing and the need for taxonomic evaluations, the Amphibian Specialist Group established the Eastern Asian Salamander Task Force in May 2024.

The geographical scope of the Task Force ranges from easternmost Russia to westernmost Iran, and south to Thailand, an area that encompasses 187 species: all Hynobiidae (99 species), and subsets of Salamandridae (82), Cryptobranchidae (5) and Plethodontidae (1). Salamandrinae from western Asia are not included as they are more closely related to