

Conservation news

No longer Data Deficient: recategorizing the Annamite striped rabbit *Nesolagus timminsi* as Endangered

Approximately 15% of all mammal species are categorized as Data Deficient on the IUCN Red List (Schipper et al., 2008, *Science*, 322, 225–230), a status that potentially hampers conservation planning, prioritization and action (Bland et al., 2015, *Conservation Biology*, 29, 250–259). The Annamite striped rabbit *Nesolagus timminsi* is a forest-dwelling lagomorph restricted to the Annamite mountain range on the border of Viet Nam and Lao. The species was discovered by science just over 20 years ago (SurrIDGE et al., *Nature*, 1999, 400, 726) and, until recently, little was known about its ecology or population status. It was thus categorized as Data Deficient in 2002 and 2008 (Abramov et al., 2008, *The IUCN Red List of Threatened Species: e.T41209A10412274*) although, like all terrestrial mammals in the Annamites, this species has probably declined as a result of the snaring prevalent in the region (Gray et al., 2018, *Biodiversity & Conservation*, 27, 1031–1037).

Recent studies, in particular using camera trapping, have provided new insights into the status of the Annamite striped rabbit across much of its range. Although some studies in Viet Nam have detected the species, mostly at only a small per cent ($\leq 5\%$) of camera-trap stations, others have failed to record it, despite considerable camera-trapping effort. Many of these studies have also failed to record other species known to be highly susceptible to snaring, suggesting these results are a consequence of snaring-driven declines rather than naturally low densities. Landscape-scale camera trapping across a protected area complex in central Viet Nam has recorded low Annamite striped rabbit occupancies, with most detections in the less accessible and better patrolled parts of the surveyed area (Tilker et al., 2018, *Oryx*, 54, 178–187). The species appears to be approaching local extinction in one protected area where snaring has probably been more intensive, providing further evidence for snaring-driven declines.

Together, this body of information indicates that Annamite striped rabbit populations have almost certainly declined by $> 50\%$ over the past 10 years and, given increasing levels of snaring, will probably decline by a similar rate over the next decade, triggering a categorization as Endangered based on criteria A2d + 3d + 4d (Tilker et al., 2019, *The IUCN Red List of Threatened Species: e.T41209A45181925*). Without effective conservation actions this species is in danger of extinction. In addition to underscoring the tenuous existence of the Annamite striped rabbit, the new categorization is a cautionary lesson highlighting the risk of silent extinction that many Data

Deficient species face (Howard & Bickford, 2014, *Diversity and Distributions*, 20, 837–846).

What will it take to save the Annamite striped rabbit? As with most threatened Annamite mammals, the highest priority action is to reduce snaring, especially within strategic core areas. This will be a difficult undertaking as most protected areas in Viet Nam and Lao fail to provide effective protection for ground-dwelling mammal species (Corbet, 2008, IUCN, lad.nafri.org.la/fulltext/2142-o.pdf). Given the difficulties of halting snaring, it may be prudent to start a captive population of the Annamite striped rabbit as it is not currently held in captivity.

Conservation stakeholders must act quickly to protect this little-known lagomorph. There is little doubt that, with continued extensive snaring across the Annamites, the species could drift silently into extinction.

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New collaborations for conservation leadership development

Over the past decade an increasing number of institutions have initiated programmes designed to enhance conservation leadership capacity, but they have lacked coordination and opportunities to share learning and ideas. To address this, conservation leadership practitioners and institutions came together in June 2019 for a symposium on New Directions of Conservation Leadership in Cambridge, UK. The gathering involved programmes tailored to a range of audiences in the conservation profession: from those just starting their

careers to executive-level leaders well-versed in environmental challenges. Some programmes are still in the early stages of development and eager to gather insights from those more established, whereas others have evolved over time and aspire to expand and coordinate their offerings. Although symposium participants represented diverse views and experiences gained from teaching and training, all who gathered were united by their belief in the value of leadership for conservation.

The symposium generated discussion on why and how conservation leadership can be taught, including through programmes providing pragmatic, real-world learning opportunities. Development of personal and professional leadership skills is needed for addressing increasingly complex and challenging conservation problems. In addition to fostering structured learning environments at individual, team and organizational scales, conservation practitioners and educators can increase their impact by drawing on leadership development tools and frameworks from the business and social sectors.

Participants noted that professionals at all levels in conservation organizations must be versed in leadership skills to serve the collective conservation mission. This could be facilitated by integrating complementary programmes in which, for example, more senior leaders participating in short-term training could mentor younger leaders enrolled in postgraduate courses—the intergenerational leadership approach. Shared training modules could be developed so that learning can continue more rapidly. Alumni networks, collective training, or learning exchange events could also facilitate leadership at different scales. As the number of programmes expands, participants agreed that cross-organizational mentoring relationships should be established and maintained to share skills across sectors, professional experiences and generations of graduates.

The symposium also recognized the need for tailored programmes that reach a greater constituency of environmental workers. An important new direction for conservation leadership training is the inclusion of diverse leaders and context-specific skills that reflect diversity in gender, age, generation, language, indigeneity, culture and process. Participants noted the value of leadership learning communities that are connected for professional lifetimes, in which investments of personal and paid time are rewarded with relationships that provide acquisition and sharing of skills and support for career-long leadership development. Empowerment, especially for marginalized communities and those in traditional modes of governance, is of particular importance to achieve diverse leadership and effective outcomes. As leadership programmes are often utilized by participants who have a combination of English language skills, access to funding streams, and prior leadership training experiences, we recommend increased and diversified training opportunities for greater impact.

Although this symposium highlighted several established conservation leadership programmes, the current array of

learning opportunities, particularly in terms of the content they provide and the audiences they serve, is insufficient to prepare the conservation sector for a demanding future. We see an urgent need for innovation and partnerships, oriented around a collaborative model (such as agreeing to share course materials and lessons learned), as an essential response to the biodiversity crisis.

The symposium gave us the chance to share our vision of new pathways for building leadership in conservation. We believe offering leadership training that is timely, targeted and long-term will allow us to achieve conservation sooner, more efficiently and more effectively than in its absence. Given the limitations of geographical, cultural and linguistic participation in the symposium, we welcome greater collaboration with a diversity of stakeholders as we continue exploring insights on programmatic design, impact, evaluation and new directions for conservation leadership.

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Taita Mountain dwarf galago is extant in the Taita Hills of Kenya

The Taita Mountain dwarf galago *Paragalago sp.* was reported in 2002 from the Taita Hills, Kenya (Perkin et al., 2002, *Journal of East African Natural History*, 91, 1–13). Identification was not possible, but it appeared to represent an undescribed taxon. The Taita Hills are part of the Eastern Arc Mountains, which support many endemic animal and plant species. As 98% of moist montane forests of the Taita Hills have been destroyed by conversion to agricultural lands, the fate of this unidentified dwarf galago has hitherto been unknown. We searched for dwarf galagos during January–March and June–August 2019 in the five largest forest fragments of the Taita Hills, but found them only in Ngangao (1 km²) and Mbololo (2 km²) Forests.

In Ngangao Forest we found only one group of dwarf galagos, comprising < 10 individuals. We saw African wood owls *Strix woodfordii* hunting dwarf galagos on three occasions, one