

*Ulmus elongata*: (a) inflorescence, (b) seeds, (c) seed collection in its natural habitat, (d) germinated seedlings, (e) planting stock, (f) planting activities, and (g) following reintroduction. Photos: Yali Li.

to the species' natural range (an orchard at Bapi Mountain in Zhenping County, near the former primary school in Hongxing Village, Niutoudian Town, the Qinling National Botanical Garden, and Zhashui County in Shangluo City, Shaanxi Province), establishing new populations of *U. elongata*. Monitoring of seedling survival is ongoing.

DI CHEN<sup>1</sup>, YALI LI<sup>1</sup> (chairsh@126.com) and XIANGYING WEN<sup>2,3</sup>

<sup>1</sup>Qinling National Botanical Garden, Xi'an, China. <sup>2</sup>South China National Botanical Garden, Guangzhou, China. <sup>3</sup>Botanic Gardens Conservation International China Office, Guangzhou, China

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## Ex situ planting movement for Indonesia's threatened trees

A recent IUCN press release (bit.ly/4ioZaJr) revealed that 16,425 of 47,282 assessed tree species are now categorized as threatened, comprising > 25% of species assessed on the IUCN Red List. The number of threatened trees surpasses that of all threatened birds, mammals, reptiles and amphibians, and spans 192 countries.

Indonesia is home to c. 5,918 tree species (*BGCI*, 2024, bit.ly/3D41zcz). A total of 5,261 (> 88%) of Indonesia's tree species have been assessed for the IUCN Red List, with 1,178 (22%) categorized as threatened. Based on the ex situ collection database of botanic gardens in Indonesia, managed by the National Research and Innovation Agency (makoyana.brin.go.id), only 180 (c. 15%) of threatened Indonesian tree species are represented in these ex situ collections.

To support the ex situ conservation of threatened Indonesian trees, Forum Pohon Langka Indonesia has developed the Ex-Situ Network Program, which is dedicated solely to providing seedlings of threatened tree species. The network currently consists of 15 local nurseries across nine provinces. Utilizing the seedlings available in these nurseries, we organized a simultaneous tree-planting movement on Indonesia's National Tree Planting Day, 28 November 2024. We successfully planted 402 individuals of 41 species, including eight Critically Endangered, seven Endangered and 17 Vulnerable species. A total of 21 institutions participated, representing 11 provinces from Sumatra to Papua.

We hope this movement, to be repeated annually, will ensure greater representation of threatened tree species in ex situ collections. We will coordinate with all participants to ensure proper maintenance of the seedlings planted in their institutions, and work to expand the ex situ network to guarantee the availability of threatened Indonesian trees seedlings for future planting initiatives.

Mokhamad Nur Zaman<sup>1</sup> , Arief Hamidi and Iyan Robiansyah<sup>1,2</sup> (iyan.robiansyah@brin.go.id)

<sup>1</sup>Forum Pohon Langka Indonesia, Bogor, Indonesia.

<sup>2</sup>Research Center for Ecology and Ethnobiology, National Research and Innovation Agency, Cibinong, Indonesia

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## The last remaining southern muriquis *Brachyteles* arachnoides from the interior of São Paulo state, Brazil

The southern muriqui *Brachyteles arachnoides*, one of the largest primates in the Americas, is categorized as Critically Endangered on the IUCN Red List. It is endemic

to the Brazilian Atlantic Forest, where it is restricted to the states of Paraná, São Paulo, Rio de Janeiro and the extreme south of Minas Gerais. The most north-western population in São Paulo state occurs in the Barreiro Rico Environmental Protection Area, a 30,142-ha area including the Barreiro Rico Ecological Station and seven other fragments with a total of 3,818 ha of forest. Intensive agricultural activities (sugar cane, eucalyptus, citrus) and pasture have significantly altered the landscape between the Tietê and Piracicaba Rivers, causing forest fragmentation. Yet despite these environmental changes, the Protection Area has a rich biodiversity and is home to five sympatric primates: the buffy tufted-ear marmoset Callithrix aurita, the brown-howler monkey Alouatta guariba, the black-fronted titi monkey Callicebus nigrifrons, the black-horned capuchin Sapajus nigritus and the southern muriqui Brachyteles arachnoides.

The muriqui population at Barreiro Rico is considered a top priority for the species because of its extreme geographical location and isolation (Strier et al., 2017, PLOS One, 12, eo188922). The population was first estimated at 50-60 individuals by Aguirre (1971, Academia Brasileira de Letras) and subsequent estimates recorded population growth during the 1970s to the early 2000s (Milton, 1984, International Journal of Primatology, 5, 491-514; Martins, 2005, Biodiversity and Conservation, 14, 2321-2329). However, in 2012 and 2018, two large fires destroyed parts of three forest fragments and one entire fragment, reducing the size and quality of the forest. In a 2022 census commissioned by the Fundação Florestal (carried out by environmental consulting company Hileia Consultoria Ambiental) only 45 muriquis were estimated to remain, in an area of 2,250 ha. These results must be interpreted with caution because of the low rate of sightings.

With funding from the Fundação do Amparo à Pesquisa do Estado de Minas Gerais and Re:wild, and logistical support from the Fundação Florestal do Estado de São Paulo, we used a drone equipped with an infrared and a colour camera to search for southern muriquis in the Barreiro Rico Environmental Protection Area during January-August 2024. In 127 flight hours covering 2,947 km we recorded only 12 southern muriquis, in two groups in two fragments: the Barreiro Rico Ecological Station, a federal conservation unit of 293 ha, and a private property of 926 ha. We noted other primate species including the black-horned capuchin Sapajus nigritus and brown howler monkey Alouatta guariba in other fragments, suggesting that our failure to locate muriquis in these areas was not because of poor visibility or flight conditions. Our results highlight the precarious status of this unique Brachyteles arachnoides population and emphasize the urgent need for conservation and management actions to rescue it.

Beatriz Robbi (beatriz.robbi@ufv.br), Fabiano Rodrigues de Melo (b, Edson Montilha De Oliveira o and Karen B. Strier (b)

 <sup>1</sup>Universidade Federal de Viçosa, Viçosa, Minas Gerais, Brazil. <sup>2</sup>Fundação Florestal, São Paulo, São Paulo, Brazil.
 <sup>3</sup>University of Wisconsin-Madison, Madison, Wisconsin, USA

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## New record of *Leopardus guigna* in Chile expands its range northwards

The guiña Leopardus guigna is the smallest felid in the Americas. The species is categorized as Vulnerable on the IUCN Red List, with a restricted distribution limited to the central and southern regions of Chile, some offshore islands and some areas of south-west Argentina. Two subspecies are recognized: Leopardus guigna tigrillo (in central and north-central Chile) and Leopardus guigna guigna (in south Chile and south-west Argentina). It inhabits sclerophyll forests and Mediterranean matorral in its northern range, and temperate rainforest in its southern range in Chile (particularly Nothopagus spp. forest) and Andean Patagonia Forest in Argentina. Threats to the guiña include habitat loss and fragmentation, and direct persecution by people.

Although some individuals of the Chilean endemic *L. guigna tigrillo* have recently been reported in the Coquimbo region (Napolitano et al., 2020, *Revista Chilena de Historia Natural*, 93, 7), there are no previous records north of Cerro Palo Colorado.

On 21 May 2024, during camera-trap surveys to monitor carnivores, we recorded the species for the first time in Huentelauquén, in the Coquimbo region, in a native forest patch on the southern bank of the Choapa River. The site is close to agricultural crops and c. 300 m from the Ramsar site Las Salinas de Huentelauquén. Although the diverse coastal ecosystems of this Ramsar site support a range of biodiversity, there are no previous records of the species in the area and this new record extends the range of *L. guigna tigrillo* 



Camera-trap image of *Leopardus guigna* on 21 May 2024, expanding its known range northwards.