Largest known cat geoglyph in Chile identified as the Endangered Andean cat

Prehistoric art is one of the earliest ways in which early humans transmitted messages. Geoglyphs are believed to represent important beliefs in ancient cultures. With respect to Andean cultures, however, colonization often erased evidence of traditions, hindering interpretation.

In February 2023, the largest known geoglyph depicting a felid was discovered in in the Atacama Desert in northern Chile. This geoglyph is located at a site known as Cerro Unitas, an important ceremonial site that includes the so-called Atacama giant, an anthropomorphic geoglyph (Briones & Alvarez, 1984, *Estudios Atacameños*, 7, 296–305). First recorded in a drone video, the felid geoglyph most likely re-emerged as a result of the removal of sand by strong winds. A preliminary assessment dates the site to c. 500 B.C. The geoglyph has a total length of 62 m from the head to the termination of the tail. For comparison, the so-called Nazca cat geoglyph discovered in Peru in 2020 is 37 m long.

The characteristics of the geoglyph suggest that it represents the Endangered Andean cat *Leopardus jacobita* rather than either of the other sympatric felid species in northern Chile (the puma *Puma concolor* and Pampas cat *Leopardus colocolo*). The long, broad, wide-ringed and uniform tail that does not taper towards the end differentiates the Andean cat from the Pampas cat, and the body shape and proportions, especially the legs and width of the tail, and spots on the flank, differentiate it from the Puma.

In the Andean worldview, the Andean cat has a role related to fertility and water, typically rainfall. Various modern ceremonies performed with desiccated but otherwise whole Andean cats decorated with brightly dyed llama wool are still performed in all four range countries of the Andean cat (Argentina, Bolivia, Chile and Peru), to ensure favourable harvests. The lines emanating from the head and forelegs of the Andean cat geoglyph probably depict the mediator between heaven and earth through the water and rain.

Although the subject of numerous research projects and despite threat reduction actions throughout its range, the Andean cat remains threatened. Our discovery connects the species to ancient sacred beliefs that endure today, and reinforces the importance of the Andean cat for ancient but persistent Andean cultures and of conservation action to ensure it remains extant for future generations.

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Plate1 - Colour online, B/W in print

The newly discovered Andean cat geoglyph in the Atacama Desert, Chile.

Conservation status and priorities for Sulawesi's unique small mammal fauna

The Indonesian island of Sulawesi is a hotspot of small mammal endemism. It is home to 76 native species of rodents (Muridae and Sciuridae) and shrews (Soricidae), 73 of which occur nowhere else. The majority of these are threatened, Data Deficient or newly described and thus little studied. To address these knowledge gaps, the IUCN Species Survival Commission (SSC) Small Mammal Specialist Group hosted a 3-day Sulawesi Small Mammal Workshop in West Java in May 2023. It was funded by Re:wild and an IUCN SSC Internal Grant, and attended by scientists and conservation practitioners familiar with Sulawesi's taxa, regions and communities.

The workshop first focused on updating Red List assessments for submission later this year. It is anticipated that c. 35 species will undergo a category change, including 18 that were previously categorized as Data Deficient. Many of these assessments relied on distribution data available from recent museum- and university-led surveys of unstudied mountains. Yet, most of Sulawesi's small mammals remain poorly known, with location, population and threat information largely lacking.

In line with the IUCN SSC's Assess–Plan–Act framework, participants also identified conservation and research needs. An important priority is to improve knowledge of the distribution and ecology of certain species, such as the Sulawesi water rat *Waiomys mamasae*, known to science from a single specimen (Rowe et al., 2014, *Zootaxa*, 3815, 541–546). Authors FF and MRTJPN are developing a project for this rodent.

Some species are imperiled by unquantified threats. For example, the two species of *Echiothrix* are thought to inhabit areas where the impacts of forest conversion for agriculture and expanding mining activities are undocumented and