

dismantled, drinking water points established, rubbish sorting and collection stations provided, and habitat corridors developed. In the short term, supplementary forage should be provided in winter, but to avoid any dependence of the gazelle there needs to be a reduction of domestic animals in its habitat. Disease prevention and surveillance of livestock should also be carried out in the gazelle's range. In view of the variation in numbers between isolated populations, the genetic diversity of Przewalski's gazelle needs to be assessed, to guide the establishment of priority conservation areas and to avoid gene loss. Herdsmen, as key stakeholders, need to be involved in the development and implementation of any programme to protect the gazelle.

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Using the precautionary principle to halt mining and save the Endangered Andean cat in Chile

Mining provides economic opportunities but can also lead to biodiversity loss as a result of the modification of native habitats. The ecosystems of the Andes mountains are threatened by the discovery of significant reservoirs of metal ores, including iron, gold and copper. Mining pits and associated infrastructure have reduced and degraded pristine Andean habitats, resulted in increased road kills, the introduction of invasive species such as domestic dogs, pollution and overuse of water, and negatively affected the survival of multiple Andean species, including the elusive and low-density Endangered Andean cat *Leopardus jacobita*. As the mining industry continues to expand across the Andes, short-term environmental assessments may have limited effect in preventing biodiversity loss. Scientific knowledge may, however, provide complementary information for making precautionary decisions.

In March 2022, the Chilean Environmental Supreme Tribunal promulgated the first verdict to halt mining

activities to protect the Andean cat and its habitat. The decision was made according to the precautionary principle of the 1992 Rio Declaration on Environment and Development. This principle states: 'In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.'

The complaint raised before the Chilean Environmental Supreme Tribunal was presented by local NGOs with the support of a local carnivore specialist group, Seeking the Andean Cat, against the multinational Canadian mega-mining company Vizcachitas. The complaint was based on the widespread presence of the main prey of the Andean cat, the vizcacha *Lagidium viscacia*, and the previously confirmed presence of the Andean cat in the mining area (Silva et al., 2021, *Oryx*, 51, 331). Seeking the Andean Cat analysed rocky outcrops, the main habitat of the Andean cat and the vizcacha, using the kernel method for examining the density of vizcacha latrines as a proxy of its presence around the mining project. The rocky outcrop habitat in the Andes mountains is used by both species for reproduction, feeding and as a refuge. These ecological concepts are recognized by Chilean law, and this verdict lays the groundwork to prevent impacts on biodiversity by using scientific knowledge and precautionary principles.

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