Commentary

The elusive snow leopard *Panthera uncia*

Charudutt Mishra

The elusive snow leopard remains an enigma—highly threatened yet difficult to study. Even dedicated snow leopard researchers rarely, if ever, glimpse the species other than in camera-trap photographs. Despite this—or perhaps in part because of it—the species is a conservation flagship for Asia's high mountains.

Yet despite the challenges of studying such a rare felid in a harsh environment, a growing body of research, much of it published in *Oryx*, is improving our knowledge of this apex predator (e.g. Hussain, 2003; Mishra & Fitzherbert, 2004; Ale et al., 2007; Xu et al., 2008; Jumabay-Uulu et al., 2014; Alexander et al., 2016a,b; Taubmann et al., 2016; Tumursukh et al., 2016). Five articles in this issue further examine the species' distribution and conservation status.

Circa 60% of the global snow leopard habitat lies in China. In the high altitudes of Yunnan, at the edge of the species' range, herders and reserve officials report snow leopards are present, but if they are they are extremely rare, as camera-trapping failed to find them despite the presence of suitable prey (Buzzard et al., 2017b). In contrast, in Qomolangma National Nature Reserve (Chen et al., 2017) and in the Tienshan Mountains (Buzzard et al., 2017a), snow leopards appear to be more common.

Community-based trophy hunting for prey species such as ibex and argali is a potential conservation initiative for the snow leopard. A comparison of the densities of the snow leopard and its prey in a hunting concession and an otherwise comparable unmanaged area, in Tajikistan, revealed higher levels of ungulates in the concession (Kachel et al., 2017), although the subject needs further investigation.

Not content with being elusive, the snow leopard is also controversial. Mallon & Jackson (2017) suggest, based on a compilation of research, that the status of the snow leopard is less dire than previously thought. They outline a case for changing the species' IUCN Red List status to a lower category of threat, from Endangered to Vulnerable. They also note this has met with opposition amongst some researchers. This is unsurprising, as only an insignificant proportion of the species' vast range has as yet been surveyed using scientifically acceptable techniques.

Despite its fame, the snow leopard is a victim of intensifying poaching and illegal trade, and retaliation as a result of livestock predation. Sitting on the roof of the world, the species is also threatened by climate change. New studies are throwing light on this enigmatic species but, to use a hackneyed phrase—further research is still needed.

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Charudutt Mishra. Snow Leopard Trust and Nature Conservation Foundation, 3076/5, 4th Cross Gokulam Park, Mysore, India
E-mail charu@ncf-india.org

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