LETTERS

The road to wild yak protection in China

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China is home to about 22,000 wild yaks, which account for 90% of the global wild yak population (*1*). The International Union for Conservation of Nature (IUCN) categorizes the wild yak, a cold-tolerant herbivore, as a vulnerable species (*2*), mainly attributable to excessive hunting for food and trade. China's wild yak is also threatened by land-use change, disease, environmental pollution, genetic contamination, climate change, and resource competition (*1*, *3*, *4*). In recent decades, infrastructure construction in China has grown increasingly disruptive to remaining wild yak populations.

Most wild yaks live in or near the Tibetan Plateau (*1*). These regions are located in or adjacent to areas zoned for the Western Development Strategy (*5*), an ambitious plan proposed in 1999 to increase the economic level and quality of life of China's rural citizens. The plan's implementation has accelerated the construction of railways and roads. Railways in the central western region of China, which account for 76.6% of China's current rail traffic (*6*), expanded from 70,000 km in 2014 (*7*) to 95,000 km in 2016 (*6*). Meanwhile, highway density increased from 7.7 km/100 km^2 in 1999 to 20.6 km/100 km^2 in 2008 (*8*). The increasing density of railways and roads has fragmented the habitats of wild yaks and forced them to migrate to resource-limited areas to escape from predation and conflict with humans.

China's wild yaks are an important genetic resource for breeding new yak species in an effort to sustainably develop animal husbandry in the Tibetan area and enrich the region's biodiversity (*1*, *9*). Wild yaks are also an important component of biodiversity in nature (*9*). To protect China's wild yaks, the Chinese government has built several nature reserves (*10*, *11*), but even there, the yaks are threatened by illegal hunting (*10*). To ensure the safety of China's wild yaks, China must further expand the nature reserves and effectively enforce existing hunting bans. The government should also implement scientific management and protection policies that minimize habitat fragmentation, resource plunder, and predation.

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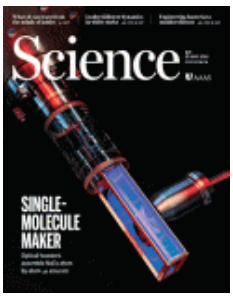

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Table of Contents
Print Table of Contents
Advertising (PDF)
Classified (PDF)
Masthead (PDF)