

Ease conflict in Asia with snow leopard peace parks

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LETTERS

Protecting the snow leopard's habitat, which crosses the boundaries of multiple countries, could have positive effects on both biodiversity and geopolitics.

Edited by Jennifer Sills

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The Himalayas, the mountains of central Asia, and the mountains of southwest China—3 of the world's 34 biodiversity hotspots (1)—have suffered severe biodiversity loss as a result of war and related military activities (1, 2). The tense political status in these areas, which share boundaries with multiple countries, hampers research into the losses and efforts to mitigate them. Establishing a peace park in this region to protect a proven flagship species for the mountain ecosystem in these countries—the snow leopard (*Panthera uncia*) (3)—could be an effective solution.

Peace parks are transboundary areas that promote cooperation and protect biological diversity and natural and cultural resources. Designating peace parks in central and south Asia would allow tourism, environmental restoration, and scientific research in the region (4). The demilitarization of the protected areas would serve as a geographic buffer zone that reinforces the existing cease-fire by physically separating the belligerents in the mountainous areas of the Himalayas, central Asia, and southwest China. (1). Transboundary peace parks have been established or proposed to conserve biodiversity and aid conflict resolution in several disputed and trans-border areas within the snow leopard range, including the Karakoram range (India and Pakistan), Khangchendzonga Conservation Area (India, China, and Nepal),

Qomolangma/Sagarmatha Region (China and Nepal), Pamir Wakhan (Afghanistan, Pakistan, Tajikistan, and Kyrgyzstan), and Altai Mountains (Russia, China, Mongolia, and Kazakhstan) (4, 5).

The demilitarized zone (DMZ) between North and South Korea, uninhabited for decades, has created a de facto 4-km-wide nature reserve spanning the Korean peninsula and harboring various endangered species (6). Khunjerab National Park, on Pakistan's northern border with China, serves as a good example of a transboundary protected area that already exists in the snow leopard range. The park promotes research, ecotourism, and livelihoods for local communities (7), and it has allowed scientists to document globally threatened biodiversity such as mountain ungulates and snow leopards in the Karakoram mountain range (8, 9).

The snow leopard, which has been identified and endorsed as a flagship species by 12 range countries and the International Union for Conservation of Nature and World Commission on Protected Areas (3), could become an important symbol representing fragile transboundary mountain ecosystems. Transboundary habitats are multidimensional efforts with many stakeholders and joint governance. Creating snow leopard peace parks in central and south Asia could initiate a better dialogue among south Asian countries and contribute to the resolution of long-standing international conflict. Moreover, designating a protected area for the snow leopard would preserve other species in this unique high-mountain ecosystem as well. A landscape conservation approach that extends beyond the country-specific protected area network could be the

way forward in this politically sensitive and ecologically fragile region.

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Mass mortality of migratory birds in Iran

Since 22 January 2020, over 20,000 of an estimated more than 250,000 aquatic migratory birds have been found dead in Miankaleh International Wetland (MIW) in Iran's Mazandaran Province, and the number of mortalities is increasing (1–4). The head of the Iran Veterinary Organization has announced botulinum toxin (produced by the bacterium *Clostridium botulinum*) as the birds' cause of death (5). However,