



© Adiya Yadamsuren, Wild Camel Protection Foundation

Wild Camel: Great Gobi A Strictly Protected Area, Mongolia

Migration Description

Wild camels used to be found throughout the vast deserts of Central Asia, but today they survive in just four isolated populations in China and Mongolia. Fewer than 700 camels remain in the Great Gobi A Strictly Protected Area (SPA). Living in one of the harshest desert environments on earth, they depend on the ability to migrate vast distances to exploit ephemeral water sources and forage. Satellite telemetry and GPS tracking data from a limited sample revealed that wild camels can move enormous distances and inhabit extremely large home ranges. Wild camels' movements are generally considered nomadic, but research suggests some seasonally driven patterns. Wild camels may move to take advantage of rare precipitation events (such as early snows in the winter) and travel long distances to locate water and vegetation around spring oases, as well as to circumnavigate steep slopes. Some studies suggest that the space use of camels is restricted to core areas in spring, summer and autumn, but their distribution can vary greatly during winter, presumably in response to winter severity. Because the animals are rare and highly sensitive to human disturbance, much remains unknown about their movement patterns and behavior.

Threats to Migration

Classified as Critically Endangered in 2002, wild camels are genetically distinct from domestic Bactrian camels. Captive

breeding facilities in the Gobi have allowed for several releases into the wild population. However, wild camels in the Great Gobi A SPA face a myriad of threats. Recently developed linear infrastructure — a 378 km long border fence — restricts this population's ability to intermingle with other wild camel populations in China, potentially impairing their genetic diversity. Historically, wild camels were known to migrate across the border into China. However, the enhancement of the border fence between Mongolia and China prevents most movement. Camera trap surveys have detected wild camels near the border, suggesting that some potential crossing points may still exist. Additionally, there are plans to construct a road running south along the border fence within the protected area, which would further intensify the barrier effect. Illegal mining in and around the protected area also threatens camel movements, potentially preventing them from accessing core areas needed in this harsh environment. As climate change leads to increased drought, camels will need to migrate even further to locate water sources. Pastoral activity near and sometimes in the protected area may also impact the camels, heightening competition between livestock and wildlife, and increasing the risk of disease transmission and hybridization between the wild population and domestic Bactrian camels.

Local Population Facts

Migration

Nomadic 

Threats



Species Facts

Common name: Wild camel

Species name: *Camelus ferus*

Range: China and Mongolia

Diet: Herbivore

Global population: 1,400

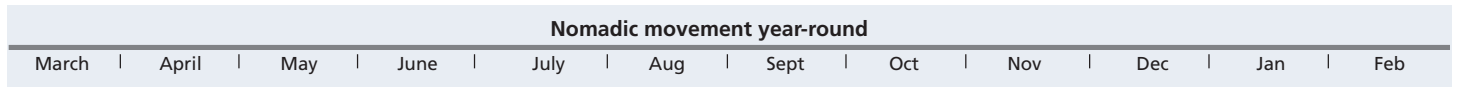
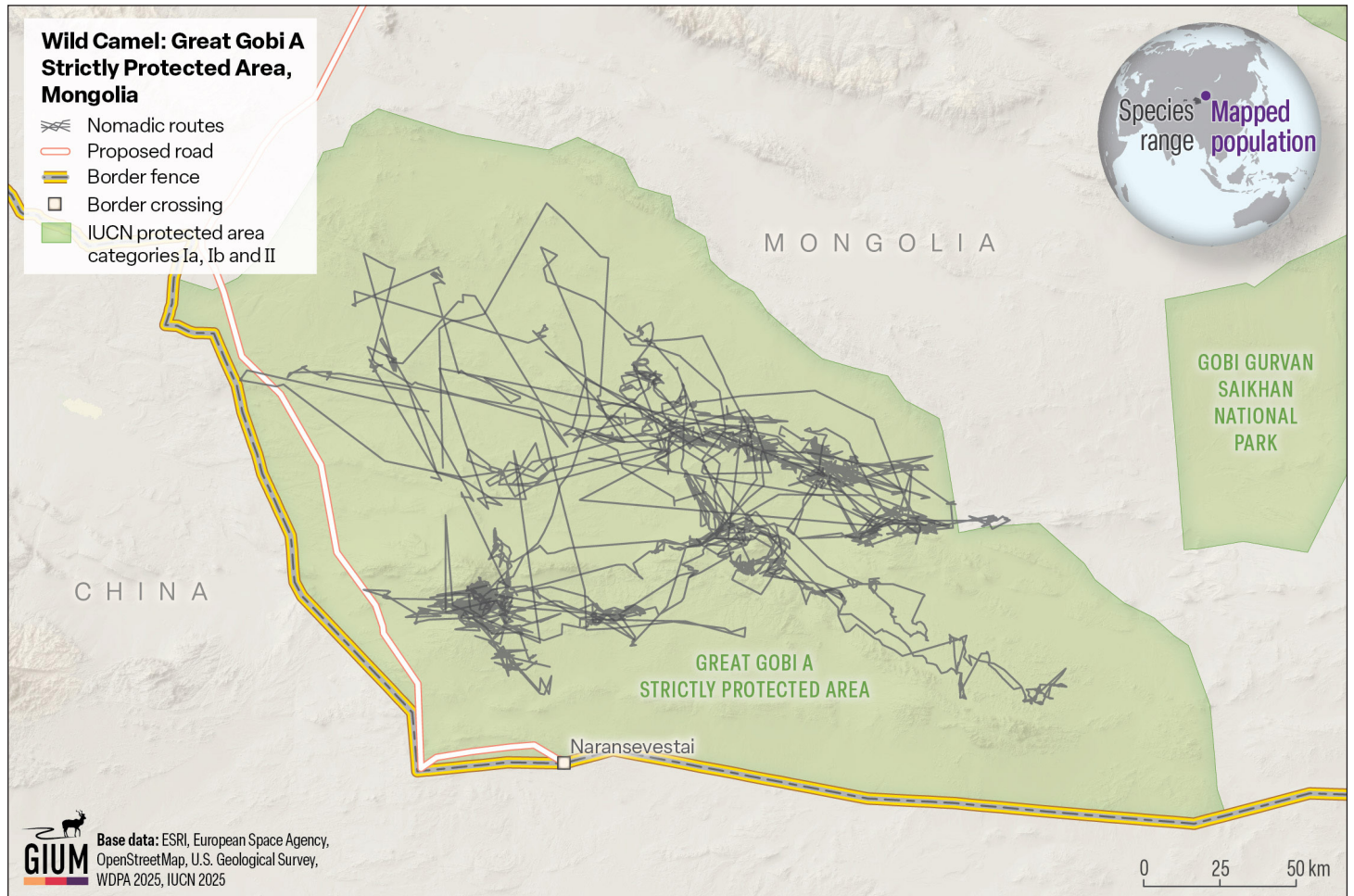
IUCN Conservation Status

CR Critically endangered

CMS Status

Appendix I Endangered migratory species

Wild Camel Movement



Study Information

Sample size

6 individuals

Relocation frequency

Daily (2002–2004), 8 to 12 hours (2007–2008)

Project duration

2002–2004 and 2007–2008

Route Summary

Much is yet unknown about the migrations of wild camels. Their movements are thought to be nomadic, i.e. irregular long-distance movements in which timing, direction and distance are largely unpredictable from year to year, though there is some evidence for seasonally driven movements. Researchers have observed consistently used trails that stretch for dozens of kilometers in some parts of the Great Gobi SPA, which may serve as migratory routes linking key seasonal habitats, refugia or water sources. While the average annual range area is about 12,000 km², the total maximum cumulative distance moved within a year was 2,821 km, indicating wild camels' capacity for long-distance travel.



© Adiya Yadamsuren, Wild Camel Protection Foundation

Data Providers

Data were collected through the efforts of Adiya Yadamsuren with the Wild Camel Protection Foundation, Petra Kaczensky with the University of Inland Norway Department of Forestry and Wildlife Management, and Richard P. Reading with the Butterfly Pavilion, Denver, USA.

In partnership with:

Wild Camel



Protection Foundation



Inland Norway
University of
Applied Sciences



CMS www.cms.int

The Convention on the Conservation of Migratory Species of Wild Animals (CMS), also known as the Bonn Convention, is an environmental treaty of the United Nations that provides a global platform for the conservation and sustainable use of terrestrial, aquatic and avian migratory animals and their habitats.



GIUM www.cms.int/gium

The Global Initiative on Ungulate Migration (GIUM) was created in 2020 to work collaboratively to: 1) create a Global Atlas of Ungulate Migration using tracking data and expert knowledge; and 2) stimulate research on drivers, mechanisms, threats and conservation solutions common to ungulate migration worldwide.



View and Download
Map Data from the
GIUM Migration Atlas

Yadamsuren, A., and P. Kaczensky. 2025. Wild camel: Great Gobi A Strictly Protected Area, Mongolia. Global Initiative on Ungulate Migration, editors. *Atlas of Ungulate Migration*. Convention on the Conservation of Migratory Species of Wild Animals.