



BREAKING DOWN THE BARRIERS

Transboundary conservation of the Mongolian Gazelle



Photo: Vadim Kiriliuk
Mongolian gazelles at a boundary fence

The Dauria Region's Dzer

The Mongolian Gazelle, known as Dzer in the Mongolia language, is an emblematic species for the Dauria region. An endemic of Central Asia, the Mongolian Gazelle is the last large herbivore on the Eurasian continent that still migrates in herds consisting of thousands of animals. Occurring across China, Russia and Mongolia, around one million Mongolian Gazelles inhabit the Daurian steppe. The bulk of the population is located in eastern Mongolia, while a small resident herd (which numbered 700–900 animals in 2007) is found in Russia after the species was reintroduced in 2000 following its extinction in that area.

Population dynamics, migration and distribution of the Mongolian Gazelle are thought to relate to drought cycles and other climatic phenomena in the Dauria, and are affected by human activities including hunting, boundary fences, road-building, grazing and oil extraction.

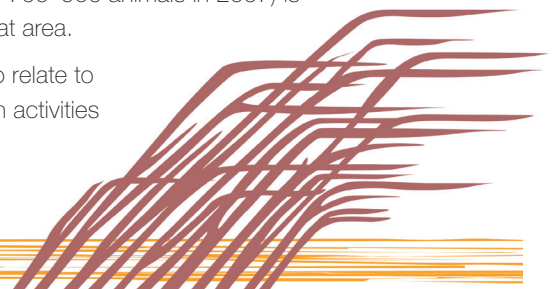


Photo: Oleg Goroshko
Baby gazelle



The Challenge and Opportunity to Make a Difference

There are 4–5 principal major herds of gazelle in Eastern Mongolia. They roam widely and intermix in winter, but in the summer calving season each herd concentrates in a particular calving ground. Gazelle calving grounds are particularly vulnerable to overgrazing, infrastructure development and other activities undertaken in their vicinity.

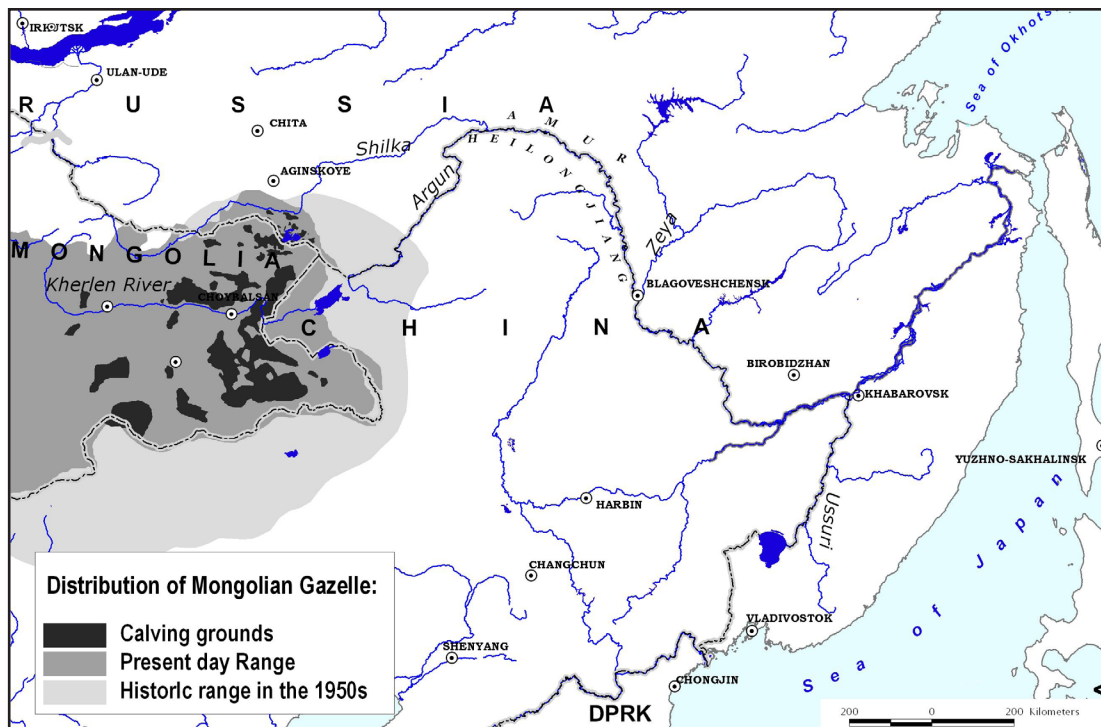
Herds south of the Kherlen River in Mongolia and China have lost most of their winter range due in part to construction of a China/Mongolia boundary fence, and their summer range has been further restricted by grassfires and livestock overgrazing. Some of their migration paths are blocked by mineral extraction activities and road construction, while within China most of the gazelles' habitat is fragmented by fences and herders' camps.

Another large herd of 150–200,000 animals inhabits the north bank of the Kherlen River. Historically, during the autumn and spring migrations and in winter, gazelles were widely distributed and often penetrated into the Zabaikalsky Province of Russia. During the last 10 years, however, the distribution of Mongolian Gazelles has changed due to the combined influence of drought, redistribution of herders camps, overgrazing and accelerated oil drilling. In Mongolia many animals have moved to the most northeasterly area of Mongolia in the Dornod Province where a new large calving ground has formed, and all of the historical calving grounds have changed shape and location over the past decade. In Russia the range of the reintroduced gazelle population has shifted to extend eastward from the reintroduction site at Daursey Biosphere Reserve towards the Argun Wetlands.

The northeast Dornod, in Eastern Mongolia, is one of the areas least affected by human activities, but there is no formal protection of the new calving grounds, and their location adjacent to fortified border fences along the Russia–Mongolia and Russia–China borders places them at threat. With a change in feed availability or abrupt weather changes, a mass movement of animals could be triggered along migration paths blocked by border fences, leading to huge numbers of deaths from stress and injuries.

A convincing example of the level of transboundary cooperation needed to facilitate large scale gazelle migration took place in spring 2008. At this time a major drought occurred in the Dornod Province of Mongolia, meaning that food supplies for gazelles grew low and the animals moved to seek better grazing opportunities. Ongoing monitoring of herds meant that intervention was able to be undertaken to prevent animals from charging the Mongolian–Russian border fence. With cooperation between Daursey Reserve managers in Russia, local communities, and border guards, large sections of fence on the Mongolia–Russia border were temporarily removed and about 10,000 gazelle rushed into Russian territory where they found plentiful grass and water. Most animals later returned to Mongolia through the gap in the border fence within the Daursey Reserve. There is a critical need for formal international cooperation measures to be put in place to allow future migration events of the Mongolian Gazelle to be predicted and supported.

A coordinated transboundary conservation plan is required to protect the gazelle range in Russia, Mongolia, and China. In Mongolia, a management plan was drafted in the 1990's which proposed the establishment of a network of new gazelle nature reserves. Given the changes in gazelle migration and grazing areas in more recent times, this management plan now needs to be reviewed. In Russia, a technical document has been produced to guide the creation of a 213,000 hectare 'Gazelle Valley National Wildlife Refuge' extending from the Daursey Reserve to the Argun River. Local community stakeholder engagement on this document has been undertaken and it has been approved at the national level, and is now ready for implementation. Once implemented, it will bring about the biggest steppe grassland protected area in Russia and will provide refuge for the three to four thousand gazelle that remained in Russia after the dramatic breakthrough from Mongolia in 2008. With the coordinated protection of the gazelle range through implementation of both of these management plans, an uninterrupted habitat area will be established of a size large enough to restore viable gazelle populations in Russia and to sustain the main maternal populations in Mongolia.



Distribution of the Mongolian Gazelle

Scope of the Project

The aim of this project is to conserve the Mongolian Gazelle in the Dauria steppe ecoregion. It builds on the successful 2000-09 Russian project 'Reestablishment of Gazelle Population in Zabaikalie'. A key project objective is to develop a Mongolian Gazelle protected area system that links the Zabaikalie area of Russia with Eastern Mongolia, securing the habitat of at least 300,000 animals and ensuring gazelle can migrate freely throughout the region. Threats from new wells, road construction and mineral exploration will also be minimized.

In March 2006 the Joint Commission of the Dauria International Protected Area (DIPA) developed a vision for the protection of gazelle habitat in the Daurian steppe, which was presented to the governments of China, Russia and Mongolia in 2007. This blueprint proposed a number of measures to expand the protected area network and to protect the habitat and migration of gazelles outside of protected areas.

Project Actions

This proposed two-year project draws from the DIPA blueprint and has the following components:

- 1. Gazelle monitoring:** Monitoring and research will be undertaken on the spatial distribution, behavior, population structure and migration of Mongolian Gazelle in the Daurian steppe. This process will provide up to date information on the current status and locations of herds so that measures for facilitating migration can be planned and implemented.
- 2. Conservation action planning:** The interrelated impacts of climate fluctuations and human activities on the long-term well-being of gazelle populations will be researched and the information used to develop a conservation plan to deal with these challenges.
- 3. Dzer Watch – volunteer network and anti-poaching systems:** A network of volunteer observers ('Dzer Watch') consisting of local people will be established throughout the gazelle range to improve protection/anti-poaching activities and to increase local community support for the conservation of the gazelle.
- 4. Protected Areas expanded and management improved:** Scientific justification and legal documentation to expand protected areas in the Dauria region will be developed, and the sound management of newly established and existing protected areas will be supported.
- 5. Supporting transboundary migration:** A scheme for the early prediction of gazelle movements across national borders will be designed and promoted, allowing regular opening of boundary fences to facilitate migration.
- 6. International cooperation:** Transboundary cooperation on migration monitoring, species management, design of new protected areas and other cross-boundary issues will be enhanced. A feasibility study for the restoration of gazelle range on the China–Mongolia border will also be developed.

Implementing Agencies and Partners

The project will be a partnership between the Temperate Grasslands Conservation Initiative (TGCI) the Dauria International Protected Area (DIPA).

Implementing Agency

- Daursky and Mongol Daguur Biosphere Reserves (part of DIPA)

Potential Partner Agencies

- IUCN Commissions – particularly Species Survival Commission (SSC) Antelopes Specialist Group; WCPA Transboundary Conservation Specialist Group
- IUCN Secretariat through the Asia Programme
- Dornod Administration of protected areas
- Border Service and Game Management Agencies of respective countries
- Mongolian Academy of Science
- Institute of Zoology CAS
- Baikal Fund (Chita)
- Wildlife Conservation Society (WCS)
- The Nature Conservancy (TNC)
- Large Herbivore Foundation (LHF)
- WWF – Amur Branch

Funding Requirements and Timetable

ACTIVITIES	YEARS		TOTAL (US\$)
	2010	2011	
1. Gazelle monitoring	12,000	8,400	20,400
2. Conservation action planning	0	12,000	12,000
3. Dzer Watch – volunteer network and anti-poaching systems	18,000	6,000	24,000
4. Protected Areas expanded and management improved	12,000	12,000	24,000
5. Supporting transboundary migration	6,000	6,000	12,000
6. International cooperation	8,400	12,000	20,400
Project Management and IUCN staff time			48,000
TOTAL BUDGET (US\$)	56,400	56,400	160,800



Temperate Grasslands Conservation Initiative

http://www.iucn.org/about/union/commissions/wcpa/wcpa_what/wcpa_conserving/wcpa_grasslandstf/

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