



A HOME FOR THE DAURIA'S RARE CREATURES

Securing steppe fauna in the Daursky Biosphere Reserve

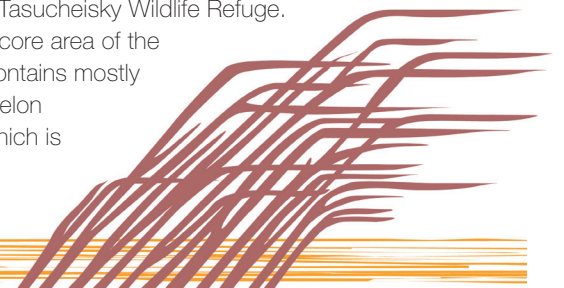


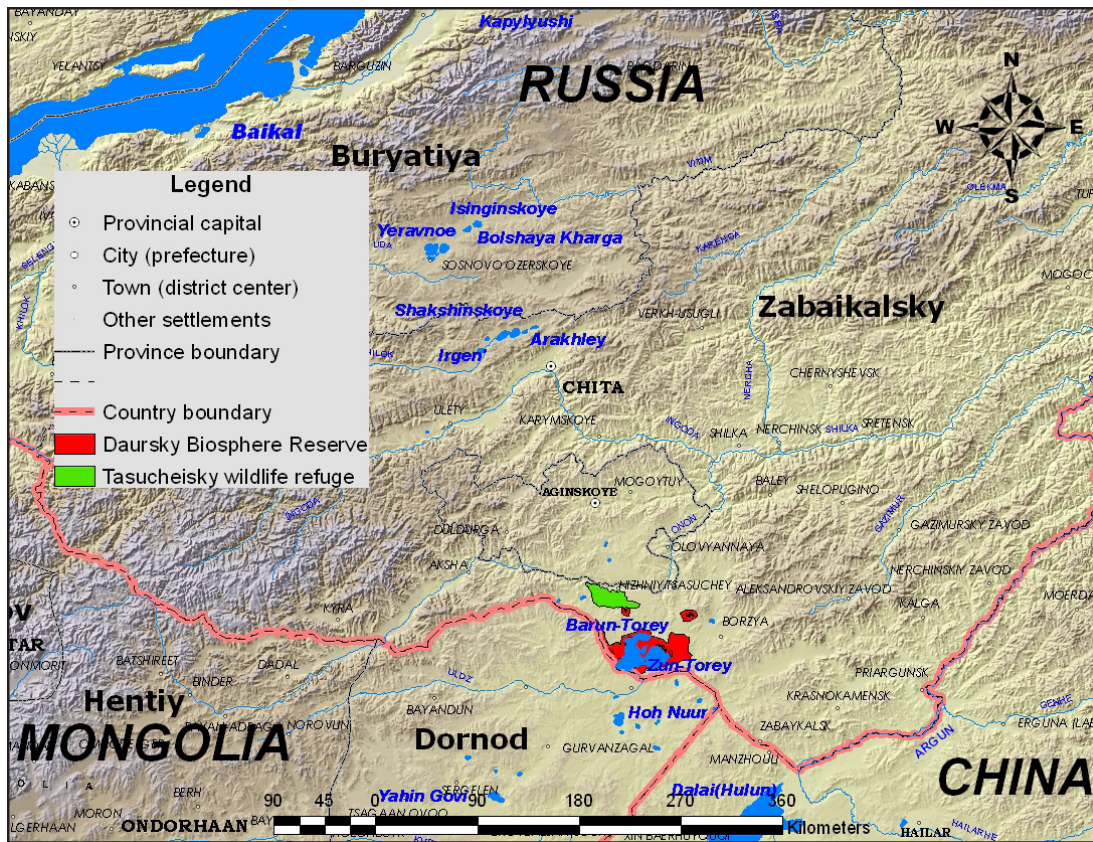
Photo: Vadim Kiriliuk
Adon-Chelon, 'The Herd of Stone Horses'
– a site targeted for Argali Sheep reintroduction
Torey Lakes - Russian

The Dauria Steppe Ecoregion

The transboundary Dauria steppe ecoregion occurs across Mongolia, Russia and China. Within Russia, the Dauria steppe spreads across the Zabaikalsky Province in Russia's Far East. It is renowned for its high diversity of fauna including the Great Bustard, Daurian Crane, Swan Goose, Mongolian Gazelle, Argali Sheep, Siberian Marmot, and Pallas Cat. The high zoological diversity of the region has been attributed to a number of factors including a large range of habitat types and dispersion corridors, the overlap of several zoogeographic zones, and extreme variations in climatic conditions which triggers widespread migrations in many species.

Despite the high biodiversity values of the region, Zabaikalsky Province has the lowest protected areas coverage amongst Russia's eastern provinces. One of the few protected areas in the region is the exceptional Daursky Biosphere Reserve, situated near the Mongolian and China border, which unites a cluster of reserves including the Tasucheisky Wildlife Refuge. Representing the majority of major landscape types of the Dauria, the 45,790 hectare core area of the Daursky consists of wetlands and rocky hills, while the 163,530 hectare buffer zone contains mostly grassland and pine stands. The reserve also includes the significant rocks of Adon-Chelon ('The Herd of Stone Horses' in Buryat language), and a stand of the rare Krylov pine which is uniquely adapted to survive the conditions of the dry steppes.





The Zabaykalsky province of Russia and its protected areas

The Challenge and Opportunity to Make a Difference

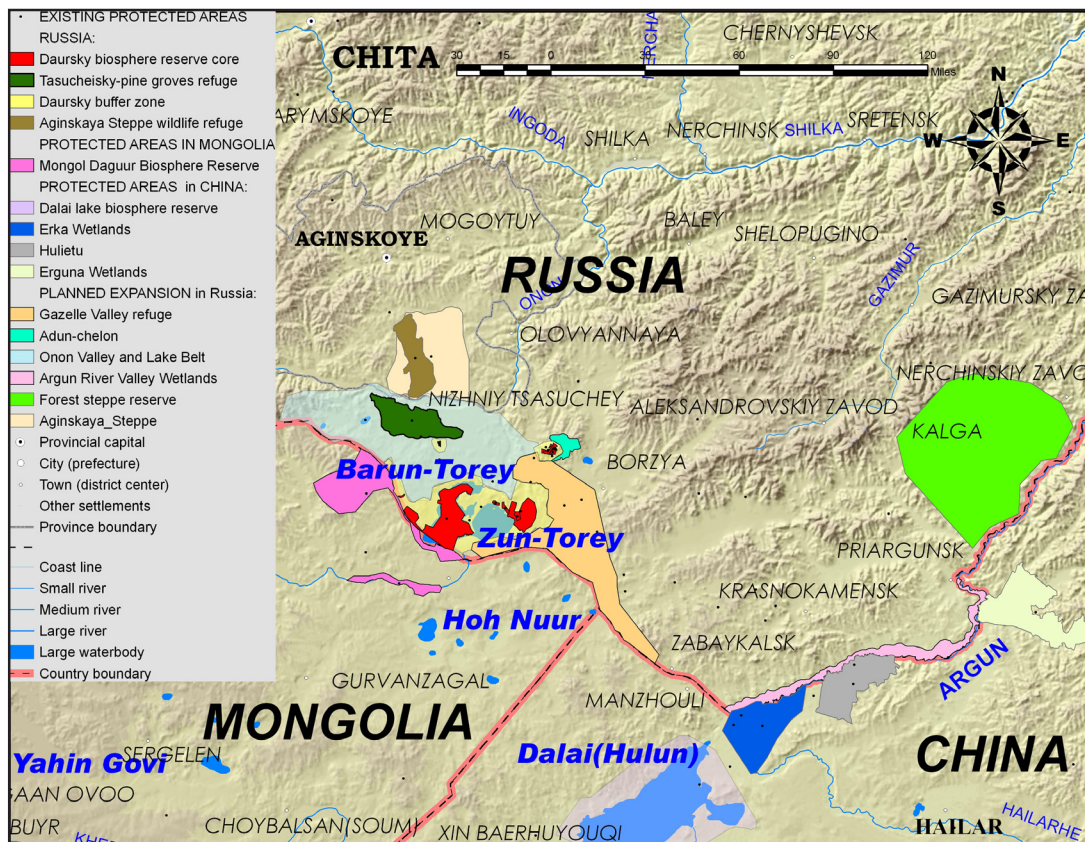
Within the reserve and its buffer zone there are over 800 plant and animal species, including more than 20 rare plants, four mammals and 42 bird species that are listed on the IUCN Red List of Threatened Species for Russia. The grasslands are rich in small mammals such as the scilly shrew, harvest mouse, and long-tailed souslik as well as being a haven for predators including the wolf, fox, corsac, polecat, Eurasian Badger, and Pallas Cat. In the past, the territory was habitat for a range of large herbivores such as the Wild Horse, Wild Ass, Argali Sheep and others, but these are all now locally extinct due to the actions of hunters and herders. The Mongolian Gazelle became extinct in Russia in the early 1970's, but through conservation efforts coordinated by the Daurian Biosphere Reserve, a population was successfully reestablished and the gazelle now outnumbers domestic cattle in the Daurian surroundings. With its location along major flyways, and an abundance of steppe wetlands and lakes, the Daurian is a globally important stop-over site for millions of birds.

Despite the important role that the Daurian Biosphere Reserve plays in conservation, most of the region's biodiversity is found within the buffer zone of the reserve or outside of the strictly protected territory. In spite of the lack of formal protection, pressure in these areas has somewhat lifted over the last few decades.

There has been a decline in livestock numbers and a steady decrease in human inhabitation of rural steppe areas, allowing huge areas of grassland to recover from grazing and human impacts.

Conversion of grassland to arable lands has also slowed due to drought and economic turmoil. Most grasslands that were converted to cropland in socialist times have since been abandoned and are gradually returning to a natural community.

As the threat of agriculture is abated, however, other existing and emerging threats continue to place pressure on grasslands, including mining, linear infrastructure development, climate change, wildfires and poaching. To help protect grasslands from these threats, there is an opportunity to increase the area of formal protection, as well as to enhance the sustainable use of grasslands beyond the boundaries of formally established nature reserves. These are critical actions required to sustain viable populations of key steppe fauna species.



Plan for the expansion of the Daursky Biosphere Reserve network

Scope of the Project

This project aims to advocate the strengthening and expansion of the Daursky Biosphere Reserve as a stronghold for securing and reviving populations of key steppe fauna including the Great Bustard, Daurian Crane, Swan Goose, Mongolian Gazelle, Argali Sheep, Siberian Marmot, Pallas Cat, and other key steppe fauna.

The project will seek to establish a strategic network of protected areas to cover the full gradient of ecosystem types, including plateau steppe, forest-steppe and floodplain wetlands. This is particularly important given that many Daurian fauna species use all three ecosystem types during different phases of their life-cycle and the climate cycle.

Following the completion of the project, it is envisaged that the amount of steppe area managed by or with the participation of the Daursky Biosphere Reserve will at least double. It is also hoped that co-management and cooperative arrangements with partners and local communities will have created useful problem-solving models across 200,000 hectares of steppe land, and that targeted groups throughout the Russian Dauria will be aware of the importance of protected areas and steppe conservation for human well being in this province.

Project Actions

The project involves three main components:

1. **Expansion of the reserve network and improvement of protected area management:** Government action will be advocated to strengthen the Daursky Biosphere Reserve through acquisition of adjoining land to expand the core protection zone, and through enhancement of the management of the formal reserve buffer zone. These actions will be undertaken by participating in and influencing the government planning process to incorporate a protected area component into the local planning scheme. Through the successful expansion of the protected area network and improvement of buffer zone management, this will ensure that a range of representative ecosystems are adequately protected, and will secure habitat key to the survival of steppe fauna species. It will also ensure that appropriate habitat has been protected to allow the potential reintroduction of core populations of flagship steppe fauna species.
2. **Co-management and local partnerships:** The management of areas outside of the Daursky Biosphere Reserve will be enhanced to conserve the biological values of the region while supporting the traditional lifestyles of rural communities and the development of low-impact tourism.

Measures will include:

- a) cooperation with herders to ensure appropriate grazing levels are implemented during different stages of the climate cycle, leading to sustainable grass yields for both herd animals and native fauna at all times;

Continued on page 4

Project Actions – continued

- b) resolution of human-wildlife conflicts in areas where migrating birds feed on croplands;
 - c) cooperation with local game managers and hunters to protect gazelle and bird species;
 - d) establishment of a showcase eco-tourism camp run by local staff and featuring wind/solar power generators and Mongolian yurts;
 - e) cooperation with Onon River fishermen to enhance fish conservation including conservation of the flagship Kaluga and Taimen fish species; and
 - f) cooperation with local communities whose livelihoods are gained from forest products to help improve fire prevention in Tasuichei pine groves.
- 3. Environmental education and communication program:**
The low level of protected area coverage in the Russian section of the Dauria region is partly due to a lack of awareness amongst the general public and decision makers regarding steppe and wetland ecosystem services and

biodiversity values and their relationship to climate fluctuations. A cutting-edge communication program will be undertaken to raise awareness amongst regional government and the local community regarding the role of the protected areas network in securing a safer and better future. This education program will include establishment of a joint Daurian Environmental Education Centre. Currently, each national-level nature reserve in the region employs environmental education staff, however the target audience is not easily reached as the reserves are located far from regional centres. In response to this need, a joint Daurian Environmental Education Centre to service all National Protected Areas will be established in Chita, the regional capital of Zabaikalsky Province. From this Centre a program will be run to educate the public, mass-media and decision-makers on the role of the ecological network in the sustainable development of Dauria. In addition, an educational camp facility will be established within the Daurian Biosphere Reserve to provide field training for students and to allow visitors to experience effective on-ground protected area management.

Implementing Agencies and Partners

The project will be a partnership between the Temperate Grasslands Conservation Initiative (TGCI) and the Daurian Biosphere Reserve in Russia.

Implementing Agency

- Daurian Biosphere Reserve

Potential Project Parties

Government:

- Ministry of Natural resources of Zabaikalsky Kray
- Ministry of Natural resources of Russia
- Zabaikalsky branch of National Service for Ecological Enforcement

Research Institutions and Protected Areas:

- Institute of Natural Resources and Cryology (RAS)
- Zabaikalie University
- Sokhondo Biosphere Reserve
- Alkhanai National Park

NGOs:

- Zapovedniki Centre (Moscow)
- WWF – Amur Branch
- Baikal Fund (Chita)

International Organizations

- IUCN Commissions – particularly the World Commission on Protected Areas (WCPA), the Commission on Education and Communication (CEC) and the Commission on Environmental, Economic and Social Policy (CEESP)
- IUCN Secretariat through the Asia Programme
- WWF – Amur Branch
- United Nations Development Programme – Global Environment Facility – Russian office



Photo: Vadim Kiriliuk
Mongolian Gazelle



Photo: Bart Wickel
Torey Lake, Daursky Biosphere Reserve,
Chitinskaya Province

Funding Requirements and Timetable

This project is envisaged to take a minimum of four years to fully implement, and requires \$624,000 US.

ACTIVITIES	YEARS				TOTAL (US\$)
	2010	2011	2012	2013	
1. Protected area expansion	30,000	100,000	50,000	20,000	200,000
2. Local partnerships	70,000	30,000	30,000	30,000	160,000
3. Education/communication program	40,000	40,000	20,000	20,000	120,000
Sub-total					480,000
Project Management and IUCN staff time					144,000
TOTAL BUDGET (US\$)	140,000	170,000	100,000	70,000	624,000



Temperate Grasslands Conservation Initiative

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

Contacts:

Temperate Grasslands Conservation Initiative (TGCI)

Peter Shadie

TGCI East Asia Regional Coordinator
Coordinator Regional Protected Areas Programme, Asia
International Union for Conservation of Nature (IUCN)
63 Sukhumvit Soi 39
Wattana, Bangkok 10110, Thailand
Tel: + 66 (0)2 662 4029 ext 302 Fax: + 66 (0)2 662 4387
Email: peter.shadie@iucn.org

Daursky Biosphere Reserve

A.P. Borodin

Director
Daursky Zapovednik
Nizhniy Tcasushech, Ononsky Rayon, Zabaikalsky Kray, Russia
Email: onondaur@mail.ru

Acknowledgements

The Temperate Grasslands Conservation Initiative and the progress that we have made would not be possible without the generous funding support of the J.M. Kaplan Fund.

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