

Serial Transnational Nomination

LANDSCAPES of DAURIA

(THE RUSSIAN FEDERATION and MONGOLIA)

Proposal for Inscription on
THE UNESCO WORLD CULTURAL
AND NATURAL HERITAGE LIST

Additional Materials Submitted in Accordance with the Decision of the
39th Session of UNESCO World Heritage Committee
(Decision: 39 COM 8B.4)

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- Steppe Project of UNDP/GEF/Ministry of Natural Resources and Environment of Russian Federation

Contents:

<u>Decision:</u> 39 COM 8B.4. Criterion (ix).....	3
Draft Statement of Outstanding Universal Value.....	8
<u>Decision:</u> 39 COM 8B.4. 2a)	10
Chuh-Nuur Lake	15
Forest steppe part of Daursky Reserve.....	19
Ugtam Nature Refuge.....	24
<u>Decision:</u> 39 COM 8B.4. 2b)	34
<u>Decision:</u> 39 COM 8B.4. 3a)	36
<u>Decision:</u> 39 COM 8B.4. 3b)	40
<u>Decision:</u> 39 COM 8B.4. 3c)	43
<u>Decision:</u> 39 COM 8B.4. 3d).....	46
<u>Decision:</u> 39 COM 8B.4. 4)	48



Landscapes of Ugtam Nature
Reserve: pine-aspen association
and hilly steppe.
(Photo G. Shalikov).

Decision: 39 COM 8B.4 *Criterion (ix)*

The World Heritage Committee,

1. Having examined Documents WHC-15/39.COM/8B and WHC-15/39.COM/INF.8B2,

2. Refers the nomination of Landscapes of Dauria, Mongolia and Russian Federation back to the States Parties, noting the potential for a nomination in the wider Daurian Steppes Ecoregion to meet natural criterion (x), in order to allow the States Parties to provide supplementary information, taking into account the need to (a, b):

The State Parties deem nominating the site “Landscapes of Dauria” justified in accordance with the natural criterion (ix) and ask the Committee to reconsider their decision on this criterion.

The Draft Statement of Outstanding Universal Value has been amended, but essentially remains the same, since the nomination has been significantly broadened due to inclusion of new, forest-steppe areas to support the validity of the initial formulation, as recommended by Committee decision “...to include areas important for the protection of forest steppe ecosystems which are an essential component to demonstrate OUV”.

However, the parties deem it necessary to refine understanding of criterion (ix) and add information for this criterion, which is also important for making amendments to the justification of criterion (x).

Additional information on justification and presentation of criterion (ix)

The Russian-Mongolian transnational property “Landscapes of Dauria” (with the total area of 912,624 ha) includes several protected natural areas in the northern part of the Daurian steppe ecoregion that is recognized as one of the key ecoregions for conservation of planet’s biodiversity in accordance with the GLOBAL 200 initiative of WWF and other organizations.

The Daurian ecoregion occupies the extensive territories between the taiga and desert Asian zones, including forest-steppe, steppe, and dry steppe ecosystems. As it stretches from north to south for over 1,000 km, the ecoregion lies on the territories with different physico-geographic characteristics that generally exist under conditions of extreme continental climate. However, the northern part of the region located at the junction of the Russian, Mongolian, and Chinese borders significantly differs from the remaining area due to greater biodiversity and variation of local physico-geographic conditions and the number of ecosystems presented here (various variants of steppe and wetlands ecosystems, as well as forest-steppe ecosystems formed by both coniferous (pine trees) and deciduous trees (birch, poplar, aspen, and elm trees)) that have been insignificantly disturbed during anthropogenic development of the territory.

It should be emphasized that the nominated property lies in the contact zone of three floristic provinces belonging to three different floristic regions: Transbaikalian Province of the Circumboreal Region, Manchurian Province of the Eastern Asiatic Region, and Mongolian Province of the Irano-Turanian Region (Takhtajan, 1978; Takhtajan, 1986). The former two provinces belong to the Boreal Subkingdom, while the third one belongs to the Ancient Mediterranean, or Tethyan, Subkingdom of the Holarctic Kingdom. It is a sufficiently rare case at the global scale. Mutual penetration of the elements of three floras of so different origin results in a unique combination of phytocenoses.

The differences are seen when comparing the property even to the nearest strictly protected areas located in the Daurian ecoregion. Table shows the differences in botanico-geographic belonging of the nominated property and the two closest Mongolian nature reserves, The Eastern Mongolian Steppe (Dornod Mongol) SPA and Numrug SPA. We used the fundamental studies of world-known researchers for the comparison. The nominated property often belongs to the same botanico-geographical region as one of the nature reserves, but the nominated property turns out to be more diverse according to almost all the zoning schemes (floristic, geobotanical, and complex botanico-geographical zoning).



Fig. 1. Landscapes of Ugtam
NR: pine savannah.
(Photo A. Butorin).

Table 1. Botanico-geographical comparison of the property and other Strictly Protected Natural Areas

Criterion	Nominated property	Dornod Mongol SPA	Numrug SPA
Floristic zoning according to A.L. Takhtajan (1978; 1986)	The contact zone of three floristic provinces belonging to three different floristic regions: Transbaikalian Province of the Circum-boreal Region, Manchurian Province of the Eastern Asiatic Region, and Mongolian Province of the Irano-Turanian Region (Takhtajan, 1978; Takhtajan, 1986). The first two provinces refer to the Boreal Subkingdom, while the latter one refers to the Ancient Mediterranean, or Tethyan, Subkingdom	Mongolian Province of the Irano-Turanian Region, Ancient Mediterranean, or Tethyan, Subkingdom	The contact zone of two floristic provinces belonging to three different floristic regions: Manchurian Province of the Eastern Asiatic Region and Mongolian Province of the Irano-Turanian Region (Takhtajan, 1978; Takhtajan, 1986). The former one refers to the Boreal Subkingdom, while the latter one refers to the Ancient Mediterranean, or Tethyan, Subkingdom
Botanico-geographical zoning according to E.M. Lavrenko (1970)	Khangai-Daurian forest-steppe Province (Daurian forest-steppe Subprovince) and Mongolian steppe (Eastern Mongolian steppe Subprovince)	Mongolian steppe Province (Eastern Mongolian steppe Subprovince)	Khangai-Daurian forest-steppe Province (Daurian forest-steppe Subprovince) on the border with the Mongolian steppe Province
Botanico-geographical zoning of Mongolia according to V.I. Grubov (1982)	The contact zone of three regions: the Mongol-Daurian, the Middle Khalkha, and the Eastern Mongolian Regions	Eastern Mongolian Region	Eastern Mongolian Region
Geobotanical zoning of Mongolia according to A.A. Yunatov (1950)	Daurian-Mongolian steppe Province; districts: Uldz mountain-steppe, Eastern Mongolian steppe, and Khingan mountain-steppe districts	Daurian-Mongolian steppe Province; districts: Eastern Mongolian steppe and Khingan mountain-steppe districts	Daurian-Mongolian steppe Province, Khingan mountain-steppe district

The distinctive feature of the nominated cluster of the ecoregion is the pronounced variability of the natural complexes that depends on cyclic climate variations of different duration. The variations related to the ~30-year-long climate cycles are the most significant and well-pronounced. The regular alteration of the moist and dry phases of these cycles changes the appearance of the biotope (first of all, wetland, semi-aquatic, and nearest with them), thus ensuring alteration of the conditions that are favorable for species of different natural complexes in different seasons within the same territories. Hence, the composition of natural complexes, and primarily the fauna, is rather dynamic. The significance of different types of ecosystems for habitats of certain species (including the rare ones, such as White-naped Crane or Great Bustard) also changes during different phases of the climate cycles.

Meanwhile, many species (with some of them being endemic species in Dauria or Central Asia) have developed remarkable adaptation mechanisms for living under cyclic climate variations that manifest themselves as changes in habitat boundaries and location of breeding grounds and migration routes, presence of the strategy of having long pauses in development (for several years) under unfavorable conditions, partial change in food objects, etc.

As one moves away from the nominated property towards the outer boundaries of the ecoregion, the variability of the ecosystems that depends on cyclic climate variations (first of all, the 30-year-long ones) is pronounced significantly less.

Hence, the use of criterion (ix) is justified not because there is a natural well-preserved transition from taiga to desert (which actually characterizes the entire ecoregion rather than its northern part only) but because of the diversity of transition-zone ecosystems and biotopes that have been formed under cyclic climate variations, are significantly altered by them, and demonstrate the diversity of the evolutionary adaptation mechanisms developed by the biota in order to exist under these conditions.

Given the above, the parties propose the following wording to the

Draft Statement of Outstanding Universal Value

a) Brief synthesis

The Russian–Mongolian transnational property “Landscapes of Dauria” (with total area of 912,923 ha) includes several protected natural areas in the northern part of the Daurian steppe ecoregion that is considered to be one of the most significant ecoregions for conservation of the planet’s biodiversity.

The Daurian ecoregion is the only region in the world where the transition of the ecosystem complex from the circumboreal taiga forest biome to the temperate continental grassland biome remained completely under natural conditions. The nominated property lies in the northern part of the Daurian steppe ecoregion, different from the rest of the ecoregion specific diversity of species, communities and ecosystems. This territory is a rich complex of well-preserved natural ecosystems that include various forest-steppe, steppe, and wetland natural complexes formed and existing at the boundary between several biogeographic zones under permanent cyclic climate variations. The diversity and natural variability of ecosystems provide habitat conditions for species of different origin and different ecological complexes within the same territory, thus demonstrating the diversity of mechanisms of environmental adaptation to the changing habitat conditions.

b) Justification for Criteria

Criterion (ix)

Cyclic climate changes of wet and dry periods are the reason for extreme changes of water supply in the closed Torey Lakes basin and surrounded territories as well as extreme changes of life conditions for plants and animals. The adaptation of ecosystems and species populations in the ecotone is an on-going biological and ecological process of global importance.

Criterion (x)

The nominated property which comprises grassland steppes, forest-steppes and intrazonal wetlands, includes natural communities formed at the junction of different biogeographic zones. It is extremely important habitats for wide range of animals and plants including a number of rare and endangered species (first of all birds). It also a major stopover place for migratory birds on the Asian-Australasian Flyway. The territory is of key importance for conservation of natural massive transboundary migration routes of dzeren, which is the last grandiose phenomenon of this type in Central Asia.

c) Statement of Integrity

The nominated property contains major elements necessary for justification of its Outstanding Universal Value, including undisturbed steppe and forest-steppe landscapes as the key habitats for steppe biota (among those, endemic and rare species) and wetlands, rivers and lakes as important breeding and resting grounds for migratory bird species.

The natural ecosystems of the “Landscapes of Dauria” are well-preserved due to a number of reasons; in particular, the extremely small population size in this territory. Different human activities (cattle grazing, grass cutting, plowing) that had been existing here before foundation of the specially protected areas, caused limited effect on ecosystems and did not result in serious damage. Within the nominated territory the complete spectrum of species common to this natural and climatic zone has been preserved or built back. Biophysical processes and natural landscapes’ elements of the nominated property have been preserved.

e) Requirements for protection and management

Nowadays the status of the State Reserve and Strictly Protected Area (which meets the requirements of the Ia IUCN category) and the status of Federal Nature Refuge (IV IUCN) ensure the conservation and further natural development of the unique ecosystem complex. Any economical or business activities are prohibited on the territory of the SPAs and restricted within their buffer zones. Such activities as hunting, application of chemicals, mining operations, commercial building and transport routes construction are prohibited. Thus, territorial and functional integrity is achieved within such a vast territory of the natural complexes.

Existing since 1994, China-Mongolia-Russian “DAURIA” International Protected Area (CMRDIPA), which includes the nominated territory, provides additional guarantees of its safety.

All special protected areas within the nominated territory possess enough financial and administrative resources for long-term conservation of the property’s Outstanding Universal Value.



Landscapes of Ugtam NR.
(Photo A. Butorin).

Decision: 39 COM 8B.4 2a)

2a) Review, with the support of IUCN, the boundaries of the nominated area and buffer zones to include areas important for the protection of forest steppe ecosystems which are an essential component to demonstrate Outstanding Universal Value, and are currently poorly represented within the nominated property and to ensure the property is designed with boundaries that better support the critical habitat of migratory birds and habitat associated with the migration of Mongolian Gazelle;

In accordance with the Committee's decision, during consultations with the IUCN, the Parties have considered possible options of changing the nomination boundaries and adding new cluster areas to it for a greater representation of the forest-steppe territories, as well as the areas important for preserving migratory birds and the Mongolian Gazelle (dzeren) migration paths.

Having discussed the possible options of changing the nomination boundaries and including the new cluster areas in it, having conducted field research and discussions jointly with the IUCN consultant Doctor W. Strahm, the Parties have made the following decision:

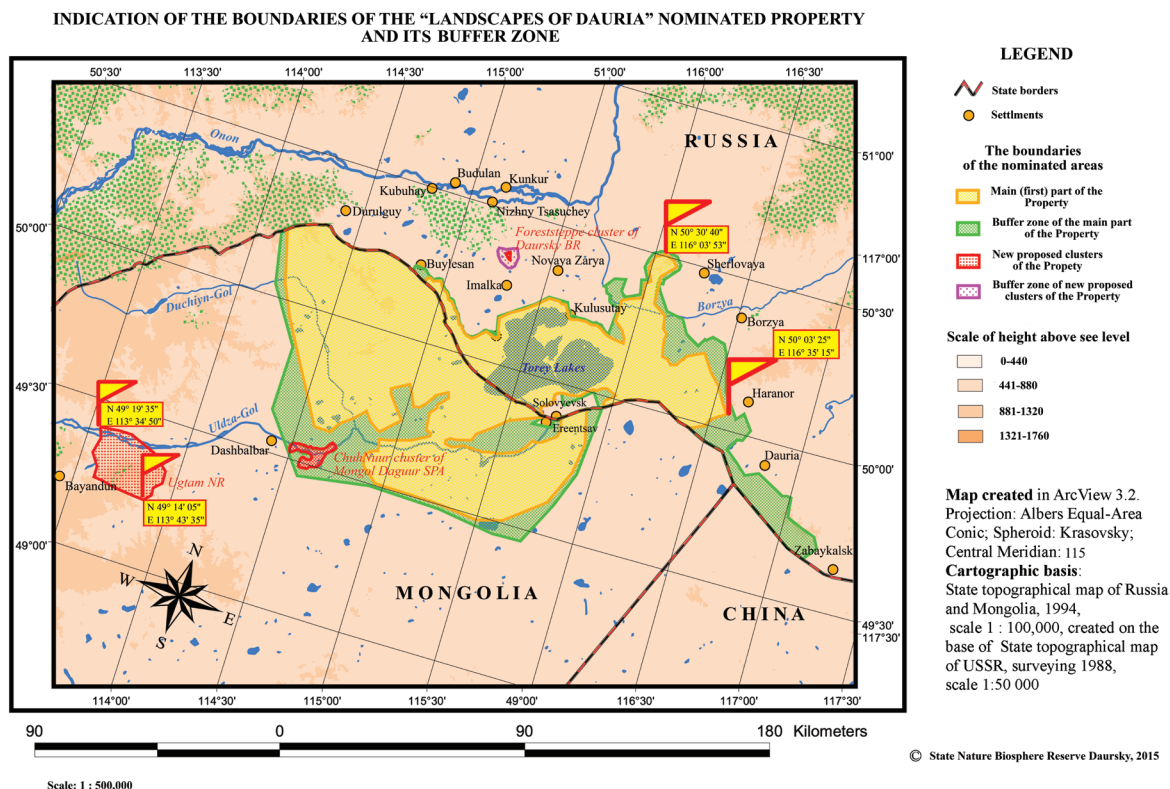
- to include two forest-steppe clusters in the nomination: the Forest-steppe cluster of Daursky State Nature Biosphere Reserve located in the southern skirts of Tsasucheytsky pinery and formed by the endemic form of the Scots pine – Krylov pine and the Ugtam Nature Refuge located primarily on the right bank of the River Uldza and comprising inundated, steppe and wooded steppe areas, including tracts of pine, birch and aspen communities. Both territories are located within the boundaries of Dauro-Mongolian Mountain - Forest-Steppe Province.

Besides the forest steppe territories, according to the IUCN's recommendation given as a result of the experts' journey in September 2014, one more cluster was specified – an area in the protective (buffer) zone of the Strictly Protected Nature Area Mongol Daguur, which is situated along the River Uldza's bed, where Daurian and Gray cranes and whooper swans nest regularly, and also great numbers of aquatic and semi-aquatic birds are seen annually while overflying. Fig. 2 outlines the locations of new clusters.

It is necessary to add that the Ugtam Nature Refuge (according to the decision of the Mongolian Party delivered at the 6th Session of the Joint Committee on the DIPAs) is included in the Dauria International Protected Area, which ensures its coordinated development and united management of the territories that belong to the Mongolian part of The Dauria Landscapes nomination and all the territory of the nominated area as a whole.

The Yakhiin-Nuur Nature Refuge (Mongolia) was also considered as a territory important for supporting the dzeren migrations. However, the conducted field research of the Refuge, as well as the analysis of its present significance for supporting the migration paths have shown that this SPA is not feasible to be included in the nomination.

Fig. 2. Location of the new parts of proposed object of WH “Landscapes of Dauria” (marked by red color): Ugtam Nature Refuge; Forest-steppe part of Daursky Nature Biosphere Reserve; new part of Property in Mongol Daguur Strictly Protected Area Buffer zone.



Also, the Parties considered unjustified the IUCN’s suggestion about including the Onon-Balj National Park in the nomination due to the following reasons.

1. Most part of the park territory is located in another biogeographical region – Trans-Baikal Coniferous Forests (Fig. 3a). Or, according to another classification (Mongolia Atlas, 1990) – on the territory of Khentii Mountain and Taiga Province (Fig. 3b). Despite the fact that, according to Udvardy’s general classification (Udvardy, 1975), the park is located within the boundaries of Daurian ecoregion, and is mentioned in those relating to the Ecoregion protected areas in the WWF documents (<http://www.worldwildlife.org/ecoregions/pa0804>), most of its territory should be regarded as an example of near border or extrazonal areas of taiga ecosystems that are not typical for the forest steppe and steppe of the Daurian ecoregion.
2. Absence of a unified management and common development plans with the SPAs being included in the nomination, which does not conform to Clauses 114 and 137 of the Operational Guidelines for the Implementation of the World Heritage Convention, is the second substantial obstacle to include the park in the nomination.

Fig. 3a. Biogeographically zoning of Amur Basin and surrounding territories (after: Amur-Heilong..., 2008).

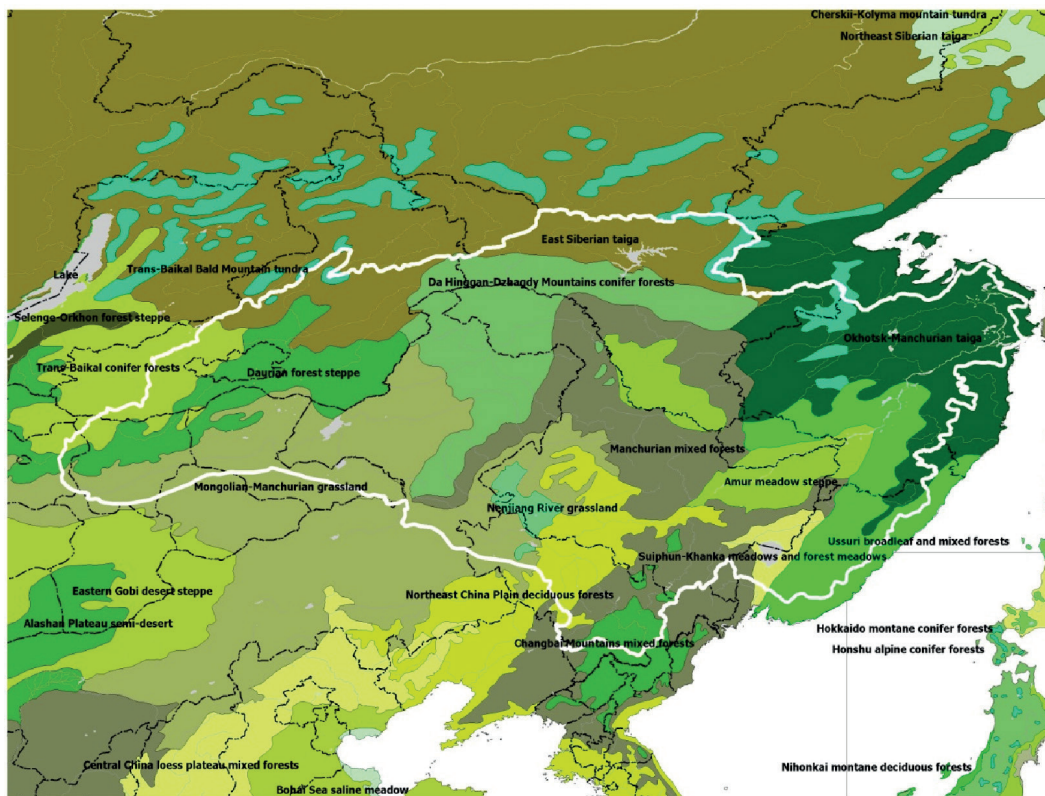


Fig. 3b. Botanical geographical regionalization of Mongolia (after: Atlas of Mongolia, 1990): 2. Khentei mountain-taiga province; 3. Daur-Mongolian mountain forest steppe province; 4. Mongolian steppe province.



Geographical coordinates of the nominated property:

The most easterly point - N 50° 03'25", E 116° 35'15"

The most southerly point - N 49° 14'05", E 113° 43'35"

The most westerly point - N 49° 19'35", E 113° 34'50"

The most northerly point - N 50° 30'40", E 116° 03'53"

Area of nominated property (ha) and proposed buffer zone (ha)

Hence, the total area of the nominated property is 912,624 ha, with 633,601 ha lying in Mongolia and 279,023 ha, in the Russian Federation. The areas are distributed over the individual nominated protected natural areas as follows:

Table 2. Area of nominated property and proposed buffer zone (ha)

№	Special Protected Area	Area, ha	
		Nominated property	Buffer zone
RUSSIAN FEDERATION			
1.	<i>Daursky</i> State Nature Biosphere Reserve	49,765	128,888
2.	Buffer zone of <i>Daursky</i> State Nature Biosphere Reserve	117,690	
3.	Federal Nature Refuge <i>The Valley of Dzeren</i>	111,568	
	Total Area in the Russian Federation:	279,023	
MONGOLIA			
4.	<i>Mongol Daguur</i> Strictly Protected Area part A	87,780	178,429
	<i>Mongol Daguur</i> Strictly Protected Area part A	15,236	
5.	Buffer zone of <i>Mongol Daguur</i> Strictly Protected Area	484,425	
6.	<i>Ugtam</i> Nature Refuge	46,160	
	Total Area in Mongolia:	633,601	
	Total:	912,624	307,317

A brief description of the new clusters included in the nomination “Landscapes of Dauria” is given below.

1. New part of Property in Mongol Daguur Strictly Protected Area Buffer zone: Chuh-Nuur Lake cluster.

The total area of the site: 7 361 ha.

Map: Annex 2.

The proposal to single out Chuh-Nuur Lake and the adjacent areas, including the Uldz River floodplain and the swampy lowlands around the spring lying southward from the lake as an individual cluster of the World Heritage site was discussed during the expert mission of IUCN in September 2014 and again in October 2015. The region is an important breeding ground for three crane species (White-naped Crane, Demoiselle Crane, and Common Crane) and plays a crucial role as an essential resting place for migratory semi-aquatic and waterfowl birds. This area is a part of communal land tenure zone and is a rational land management plot regulated by the families living there.

It is actually an unofficial protected natural area and a model sustainable development plot.

Fig. 4. Observing platform on Chuh-Nuur Lake
(Photo O. Kirilyuk).



Description of the Borders of Chuh-Nuur cluster

From the point N 49°35'56", E 114°42'14", the northern boundary of the cluster runs along the edge of the inundated portion of the floodplain for 17 km south-westwards and westwards. The western boundary crosses the Uldz River southwards, embraces the oxbow Dörgön Lake and the mouth of the Sebsul Gol River (the right tributary of the Uldz River) flowing into it, and turns eastward. The southern boundary of the cluster runs from this point along the edge of the floodplain for 7.5 km and then turns southward and westward, embraces Ulaan Nuur, Shogoi-Tsagaan Nuur lakes and the inundated fresh-water lowland that lies 7 km southwestward from it. The eastern boundary of the cluster runs 250 m away from the eastern shore of Shogoi-Tsagaan Nuur lake northwards until it reaches the Uldz River floodplain and further northeastwards along the floodplain edge until the point N 49°35'8", E 114°43'47", after going to northwest directly to point N.

Description of the natural features of the cluster

Types of landscapes and biotopes

- the wide floodplain of the Uldz River: moist and wet sedge-grass meadows with sparse willow shrubs; reed stands in the wet area;
- Chuh-Nuur Lake: ~1.9 km in diameter; brackish water, extensive underwater thickets of *Stuckenia pectinata* (important waterfowl forage), mostly shores with no vegetation or covered with moist near-shore sedge-grass meadows; a small swampy lake surrounded by moist meadows and reed stands is adjacent to the lake in its northern part;
- the wide swampy valley of the spring flowing into Chuh-Nuur Lake: moist and wet sedge-grass meadows, reed stands in the wet area, small swampy lakes;
- steppe areas: hilly dry bunchgrass steppe;
- rocky cliffs on the eastern shore of Chuh-Nuur Lake.

Fig. 5. Landscapes and biodiversity
of Chuh-Nuur cluster
(Photo O. Kirilyuk and V. Kirilyuk).



The value of the cluster for ornithofauna conservation:

Chuh-Nuur Lake cluster is one of the key sites for conservation of migratory, breeding, and moulting waterfowl and semi-aquatic bird species. It is of outstanding value for conservation of: 1) breeding White-naped Cranes; 2) transient and moulting ducks.

In 2010–2014, 7–10 breeding pairs of White-naped Cranes (*Grus vipio*) were recorded in the cluster (4–6 pairs in the spring valley, 1–3 pairs in the Uldz River floodplain, and one pair on Chuh-Nuur Lake). The main breeding grounds for this species are found in wet sedge meadows with reed stands in the valleys of the spring and the Uldz River.

During the migration period, up to 10 (and even more) thousand waterfowl and semi-aquatic birds stop at this site at the same time. Among them, ducks are the most numerous species, with Common Pochard (*Aythya ferina*), Common Goldeneye (*Bucephala clangula*), and Black-necked Grebe (*Podiceps nigricollis*) predominating. Thus, 11,742 ducks, sandpipers, cranes, and other waterfowl and semi-aquatic bird species (a total of 51 species) were counted within the cluster on September 19, 2014, including 8,280 Common Pochards. Due to the extensive underground meadows of *Potamogeton pectinatus*, the cluster has rich forage for many bird species (ducks, geese, swans, coots, etc.) For the very same reason, Chuh-Nuur Lake is the key moulting ground for ducks: males and non-breeding females or those that have lost their clutches gather here in June to replace flight feathers. For example, 9,686 birds were counted here on July 21, 2014 during the moulting season, including 8,291 Common Pochards. Eight globally endangered bird species were recorded within the cluster during the breeding and migration season (Table 3). Among these species, the White-naped Crane and the Swan Goose breed here every year. The Swan Goose breeds on Chuh-Nuur Lake (1–3 pairs) and in the Uldz River floodplain (3–6 pairs); moulting aggregations (consisting of as many as up to 50 birds) are recorded on the lake. The Yellow-breasted Bunting used to breed abundantly here in the 1990s, but subsequently disappeared as its global population number significantly decreased. In 2010, individual birds were recorded within the cluster. Other species were observed here either while passing or staying as summer aggregations (non-breeding birds during summer season).

Table 3. Globally endangered avian species recorded at the Chuh-Nuur Lake cluster

No.	Species	Conservation status
1	Swan Goose (<i>Cygnopsis cygnoides</i>)	IUCN (VU)
2	Greater Spotted Eagle (<i>Aquila clanga</i>)	IUCN (VU)
3	Saker Falcon (<i>Falco cherrug</i>)	IUCN (EN)
4	Siberian Crane (<i>Grus leucogeranus</i>)	IUCN (CR)
5	White-naped Crane (<i>Grus vipio</i>)	IUCN (VU)
6	Hooded Crane (<i>Grus monacha</i>)	IUCN (VU)
7	Far Eastern Curlew (<i>Numenius madagascariensis</i>)	IUCN (VU)
8	Yellow-breasted Bunting (<i>Emberiza aureola</i>)	IUCN (EN)

* Abbreviations: IUCN – IUCN Red List, as of December 18, 2015), CR – Critically Endangered (facing a very high risk of extinction), EN – Endangered, VU – Vulnerable.

2. New part of Property: Forest steppe part of Daursky State Nature Biosphere Reserve.

Area of the site - 300 ha, area of the buffer zone of the cluster – 3,958 ha.

Map: Annex 3.

The site includes one of the clusters of the Daursky State Nature Biosphere Reserve located on the southern margin of the Tsasucheisky pine forest. The pine forest consists of the endemic form of Scots Pine (*Pinus silvestris*) known as the Krylov pine being notable for its adaptation to the dry climate of Dauria. The cluster has been completely withdrawn from economic use and has a buffer zone. The nature protection regime in the reserve area and in its buffer zone is regulated by the General Regulations on nature reserve and its buffer zone presented in the nomination dossier.

Description of the cluster boundaries

Point H lies where there is a turn from the Nizhny Tsasuchei – Krasnaya Imalka settlement road towards Novaya Zarya settlement. Then the site boundary runs southeastwards at an angle of 8° along the road leading to Krasnaya Imalka settlement for 2,874 m, then northwestwards at an angle of 34° for 1,925 m, and subsequently northeastwards at an angle of 71° for 1,725 m until it reaches point H.

Description of the boundaries of the buffer zone

The northern boundary starts at point H (N 50°22'44", E 115°14'00"), which lies on the border with the Tsasucheisky Bor Refuge 1,300 m northeastward from the northeastern margin of Lake Bolshaya Yaksha. Then the boundary runs eastwards along the refuge border for 6,900 m (N 50°23'39", E 115°19'20").

The eastern boundary with the refuge border runs from this point southeastwards at an angle of 20° for 3,400 m until it meets the Novaya Zarya – Nizhny Tsasuchei road; then it runs southwestwards at an angle of 7° for 3,400 m (N 50°20'00", E 115°20'50").

The southern boundary runs from this point southwestwards at an angle of 53° for 1,700 m until it intersects the road leading to Krasnaya Imalka settlement; the intersection with the road lies 3,000 m southeastwards from the southeastern corner of the Forest-steppe area of the Daursky Reserve; then the boundary runs southwestwards at an angle of 75° for 1,300 m (N 50°19'15" E 115°7'55"), subsequently, northwestwards at an angle of 63° for 3,400 m (N 50°20'40" E 115°15'28"), and then northwestwards at an angle of 43° for 2,450 m until it reaches the altitude of 693.6 m.

The western boundary runs from the altitude 693.6 m runs north-northwestwards along the eastern shore of Lake Bolshaya Yaksha for 1,900 m until it intersects the field road and then runs northeastwards at an angle of 14° for 1,000 m until it reaches point H.

Description of the natural features of the cluster

The forest-steppe site was included in the nomination to enhance the forest-steppe component, since the IUCN expert evaluation and the decision adopted at the 39th Session of the World Heritage Committee specified that this component was represented insufficiently. No improvement cutting or any other interventions into the ecosystem condition are carried out within the cluster, so only the natural processes occur here. In 2012, a wildfire swept through the site and significantly thinned stands. Under strictly protected conditions of a nature reserve, the pine forest at this site is a reference object for monitoring the existence of steppe-zone pine forest outliers under pyrogenic cyclicity. Natural reforestation currently takes place at the site.

Fig. 6. Forest-steppe part (cluster)
of Daursky State
Nature Biosphere Reserve
(Photo V. Kirilyuk).



Fig. 6. Forest-steppe part (cluster)
of Daursky State
Nature Biosphere Reserve
(Photo A. Kirilyuk).



Biodiversity data

A total of 187 species of vascular plants typical of the Tsasucheysky pine forest and the adjacent steppes have been found within the cluster, which makes over 40% of the flora of vascular plants in the Tsasucheysky pine forest. The fauna is represented by 30 mammal species, including such forest- or predominantly forest-dwelling species as the Eurasian red squirrel (*Sciurus vulgaris*) and the Siberian roe deer (*Capreolus pygargus*); 171 bird species with more than one-third of those being predominantly forest-dwelling species (grouse, Black Stork, Black Kite, Amur Falcon, Oriental Turtle-Dove, Common Cuckoo, Ural Owl, Black Woodpecker, Spotted Woodpecker, Eurasian Jay, Azure-winged Magpie, etc.); over 800 insect species.

Fig. 7. In Forest-steppe part of DSNBR. (Photo V. Kirilyuk).



Table 4 lists the animal species included in the Red Data Book of the Russian Federation and the IUCN Red List that have been recorded within the cluster.

Table 4. Vertebrate species recorded at the Forest-steppe site of the Daurisky Reserve and included in the Red Data Book of the Russian Federation and the IUCN Red List (2015)

No.	Name		Population status		Conservation status	
	English	Latin	Breeds or occurs during the breeding season	Occurs during migration or the wintering season	Red Data Book of the Russian Federation	IUCN Red List
	MAMMALIA					
1	Daurian hedgehog	<i>Mesechinus dauuricus</i>	V		V	
2	Pallas's cat (manul)	<i>Felis manul</i>	V		V	
3	Dzeren	<i>Procapra gutturosa</i>		V	V	
	AVES					
	Black Stork	<i>Ciconia nigra</i>	V		V	
	Tawny Eagle	<i>Aquila rapax</i>		V	V	
	Greater Spotted Eagle	<i>Aquila clanga</i>		V	V	IUCN (VU),
	Eastern Imperial Eagle	<i>Aquila heliaca</i>		V	V	IUCN (VU),
	Golden Eagle	<i>Aquila chrysaetos</i>		V	V	
	Cinereous Vulture	<i>Aegypius monachus</i>		V	V	
	Gyr Falcon	<i>Falco rusticolus</i>		V	V	
	Saker Falcon	<i>Falco cherrug</i>	V		V	IUCN (EN),
	Peregrine Falcon	<i>Falco peregrinus</i>		V	V	
	Demoiselle Crane	<i>Anthropoides virgo</i>	V		V	
	Great Bustard	<i>Otis tarda</i>	V		V	IUCN (VU),
	Far Eastern Curlew	<i>Numenius madagascariensis</i>		V	V	IUCN (VU),
	Eurasian Eagle-Owl	<i>Bubo bubo</i>	V		V	
	Mongolian Lark	<i>Melanocorypha mongolica</i>	V		V	
	INSECTA					
		<i>Neolycaena davidi</i>	V		V	

3. New part of Property: Ugtam Nature Refuge cluster.

Total square: 46 160 ha

Map: Annex 4.

The Ugtam Nature Refuge is located in Bayandun and Dashbalbar soums in Dornod aimag and controlled by the Administration of Strictly Protected Nature Areas of the Eastern Mongolian Province. Identically to the Mongol Daguur Strictly Protected Area, the refuge has been included in the general management plan for the development of the territories controlled by the Administration presented in the summary of the property nomination. The refuge lies within the Daurian forest-steppe province (subregion 'Daurian forest-steppe' - PA 0804 according to the classification under the Global 200 Initiative of the World Wildlife Fund). Inclusion of the SPA in the nomination increases the representation of Daurian forest-steppe ecosystems and the places crucial for conservation of the species included in the national Red Data Books of the state parties and the IUCN Red List. The refuge territory has been included in the IBA List IBA (IBA NAME: Ugtam Mountain Nature Reserve, Criteria A1, A4i, IBA CODE: MN065): <http://www.wgcc.org.mn/iba.html>. Secondary migration routes of dzereen also run through the refuge. The refuge has been meticulously surveyed by several expeditions and individual experts. The survey results were presented in the reports and taken into account in management plans developed under various projects. In particular, they were taken into account in the management plan prepared under the Eastern Steppe Biodiversity Project of GEF (1998-2005). The final thorough survey of the territory was organized and carried out by the WCS of Mongolia upon request and jointly with the experts of the Administration of the Dornod Province SPA in 2007. The report was presented by the WCS in 2008.

The data obtained in a number of surveys and documents were used to describe the cluster and supplemented with up-to-date proprietary data.

Description of the cluster boundaries

The NR boundary was approved by the Appendix to the Government Decision № 9 on January 12, 1994. The appendix states: "Khoh Chuluu" (point 1099.2), and then in the northwest the point 965.8, and then to west Baruun Suuj spring head, and then to the north the point 908.5, and then to the west the point 863.4, and then to the north along the Khairkhan Tsagaan Lake western bank to the point 855.2, and then to the northwest crossing Ulz river to the Uvuljoot Mountain (point 924.7), and then to the east to the Ovgodiin Tsagaan Lake (point 772.6), and then to the point 764.6, and then to the southeast crossing Ulz river to the points 840.8 and 966.8 and then to the southeast to the point 923.3, and then to the southwest to the point 882.5, and then to the southeast to the point 937.0, and then to the southwest to the point 838.1 and then to the west to the point 930.3 and to the Khoh Chuluu (point 1099.2)".

Description of the natural features of the cluster

At the southern edge of mixed forests, where pine, birch, and aspen/ poplar grow, in Mongolia and the northern edge of Stipa steppe that is rarely found elsewhere in the world, the Ugtam NR is of a vital importance of the conservation, use, monitoring, research and training site (ESBP, 2004).

Regarding its natural zones the NR represents low mountains in Ulz river catchment, steppe with depressed areas, dry grassland steppe meadow, and steppe region distributed with pine patches. There are the medium and low mountainous forest steppe landscape dominated and valleys' landscape with meadow, woody and shrubbery patches commonly found in this region. There is Ulz River along the northern boundary of the NR, and some parts of floodplains of the river included inside the NR boundary. In comparing to the steppe region in the country the NR has higher diversity of vegetation and is distributed by a number of fauna species i.e. Red Deer, Roe Deer, Wild Pig, Gray Wolf, and Red Fox and representatives of the both Palaearctic and Daurian assemblages i.e. Raccoon Dog, Wolverine, the abundance of predator birds, and the occurrence of rare species of cranes (ESBP, 2004).

Physical Features

(according to the management plan developed by the ESBP in 2004)

Relief

Ugtam NR on the south and east side of the Ulz River lies 700 – 1200 m above the mean sea level. The highest mountains are Ugtam Uul (1,210 m) and Baruun Khokh Chuluu (1,236.4m). From the west to the east in the NR its elevation (plateau) becomes gradually lower and the topography is turned out to rolling hills and meets with flat grass steppe. The highest point in the NR is Baruun Khoh Chuluu (1,236.4 m) and the lowest point is Uvgud Khar Lake (elevated point 764.6).

Climate

The climatic conditions in the refuge are similar to those on the rest of the nominated property. The mean annual temperature in the NR vicinity is 10° C, and 22° C in January and + 21° C in July. The mean maximum and minimum monthly temperature is +40.1° C and -46.7° C in January respectively.

The mean minimum temperature in January is 40 -46° C and in July 37-39° C. Although the Dornod aimag territory is entirely included in the zone with moderately dry climate, Ugtam NR has higher level of precipitation due to its situation in the forest steppe region in comparing to other parts of the Aimag. The annual precipitation is 300-400 mm and the NR is included in the region that has the abundance of water resources in particular groundwater resources. The mean snow cover depth is 6 cm. There is 2850 hours of sunshine per year, a mean of 7.8 hours per day. The prevailing wind is the west or northwest and mean wind speed is 4-6 m/s. The highest wind speed is 18m/sec and the frequency of the west wind is 40 %. There are 9-29 days per year when winds reach over 15 m/s.

Geology and soils

The vicinity of Ugtam Mountain is distributed by granites, granodiorite of Mesozoic period, effusive rocks of Permian period as well as sand and stones, alivrolit, argillite, slate and granite and granodiorite of Cenozoic period. Additionally, the mountain bottom and valleys are distributed by Quaternary sedimentary rocks.

Forested areas in the NR are distributed by mountain meadow-forest and mountain forest dark soil. Upland areas (i.e., higher than 1,100 – 1,200m) are mostly distributed by black dirt soil and other areas by black brown soil. However, the distribution of black dirt soil is being expanded towards to mountain slopes and bottoms due to influential backside or slopes factors. The black dirt soil also occurs in Ulz river basin and low rolling hills. Most of the black dirt soil found in the NR is less humus contained powdery carbonated. The black brown soil in the Ulz River valley and other parts of the NR is mostly light sandy. The surrounding areas of Ugtam NR are distributed by sandy and light brown soils and mountain bottoms and valleys are distributed by meadow and meadow marshy soils, and meadow brown soil.

Hydrology

There are many valleys with springs (e.g., Baruun and Zuun Suuj, Argalant, Jimger, dangai, Del, and Tavniin) and numerous small lakes, ponds and streams (e.g., Toli Lake, Khairkhanii Tsagaan Lake, Ovgodiin Khar and Tsagaan Lakes) in Ugtam Uul NR. The Ulz River, the largest river in the NR, starts in Norovlin *soum* of Khentii *aimag*, flows across Mongol Daguur SPA and international border and inflows to Torey Lake. The length of the river is 420 km, of which 20 km flows through Ugtam NR. River catchment area is 27,500km². Mean annual water flow is 7.68 cubic m/sec and 575 cubic m/sec at most during the heavy precipitation season. The bottom of the riverbed is sandy and loamy. The Ulz River valley and floodplain are quite swampy and the river floodplain covers 1.5 - 2.0 km wide area containing remnant saline lakes and marshy areas.

There are some saline lakes (e.g., Ovgodiin Tsagaan Lake, Ovgodiin Khar Lake, and Khairkhanii Tsagaan Lake) and a freshwater lake, Toli Lake in the NR.

Ovgodiin Tsagaan Lake is a mineralized lake located 733 m behind the Chingisiin Dalan in Bayandun *soum* of Dornod *aimag*. The lake area is 0.5km², length 0.9km, width 0.6km and the length of the riverbank boundary is 2.4km.

Ovgodiin Khar Lake is a mineralized lake located at 765 m a.s.l. in Bayandun *soum* of Dornod *aimag*. The lake area is 0.5 km, length 1.0 km, width 0.5 km and the length of the riverbank boundary is 2.4 km.

Biological Features

The Ugtam NR is specific with its flora and fauna types that contain representatives of Daguur-Manchurian forest steppe zones, which is the northern edge of Central Asia. Fauna species from the Palaearctic especially Manchu-Chinese assemblages are abundant in the NR. Additionally there are animals and plants of Khentii mountain ranges widely found in the area. For instance, some hoofed animals i.e. Red Deer, Roe Deer, and Wild Boars are found in a few numbers in willow patches on mountain backsides and valleys, as well as the Lynx, Gray Wolf, forest steppe and taiga region species, on mountain tops and slopes, where rocks and cliffs are widely distributed. Rarely spotted Wolverine also occurs in the NR and there are occasional reports of Brown Bear visiting the area. Moreover, the Mongolian Gazelle populations are found (graze) in the Ugtam Mountain northern valley and on rolling hills in the southern valley of the mountain. Cliffs and forests and forest patches in the NR provide an important nesting ground for birds of prey i.e. Saker Falcon and many other migratory species.

Landscape diversity and ecosystem dynamics

According to different evaluations, the territory of the reserve comprises 8 to 11 main landscape types. They can be combined into the following five groups:

- Mountain steppe
Mainly *Stipa* steppe on the upper hillsides and stony areas, with *Filifolium sibiricum*, *Leymus chinensis* (couch grass) and *Stipa baicalensis* communities in the upper valleys.
- Mountain meadow
Patches of pine (*Pinus sylvestris*) forest on sandy slopes in the western part of Ugtam NR and *Filifolium sibiricum* and various feather grass communities abundant on the plateau.
- Meadow steppe
Forb-feather grass communities including *Stipa* spp. with *Polygonum divaricatum* and *Iris* (*Iris dichotoma*), *Veratrum nigrum*, peonies (*Paeonia lactiflora*), Grandmother's slipper (*Dictamnus dasycarpus*) common in the wide valleys and sagebrush *Artemisia frigida*, couch grass (*Leymus chinensis*) and *Filifolium sibiricum* communities on the lowest slopes.
- Meadow
Typical Manchurian flora consisting of tall forbs and groves of sparse birch (*Betula* spp.) and shrubs along the riverbed. Japanese elm (*Ulmus japonicus*), aspen (*Populus* spp.), *Padus asiatica*, and wild apple (*Malus baccata*) occur along the river valleys with shrubs such as *Dasiphora fruticosa*, forbs such as *Calamagrostis purpurea*, the horsetail, *Equisetum pratense*, grasses such as *Bromus inermis* and sedges such as *Carex* spp. and *Cyperus* spp.
- Forests
The main forest communities now are birch (*Betula manshurica*) and shrubs (*Rhododendron dahuricum*, *Spiraea media*), birch forest with willow (*Salix microstachya*), larch forest (*Larix sibirica*) with a rich forb layer, aspen forest (*Populus tremula*, *P. suaveolens*) with shrubs (*Spiraea flexuosa*, *Rhododendron dahuricum*), and pine forest (*Pinus sylvestris*).

Fig. 8. Landscapes of Ugtam
Nature Refuge
(Photo G. Shalikov, O. Kirilyuk)



Mountain steppe, forests, Stipa steppe, Filifolium sibiricum steppe and meadow are dominant in Ugtam NR.

The ecosystem dynamics is similar to that in the main part of the nominated property and directly depends on cyclic climate variations.

Flora

In Ugtam NR 236 species of 35 families are registered. The families with the largest number of species are listed below: Gramineae (77 species), Rosaceae (37 species), Asteraceae (32 species), Liliaceae (19 species) and Polygonaceae (14 species). One endemic species: *Polygonum valerii* A.Sworts are registered in Ugtam NR.

The greatest flora diversity was observed in the steppe ecosystems (103 species), meadow communities (95 species), and in deciduous forests (74 species).

Fauna

Although studies of Mongolian fauna have been conducted since the latter half of the 19th century, detailed studies have not been made in the Ugtam area. Vertebrates are the best known. Ugtam contains a variety of habitats and the presence of water gives it more diverse mega-fauna than the surrounding steppe. There are Siberian Roe Deer (*Capreolus pygargus*), Red Deer (*Cervus elaphus*), Wild Boar (*Sus scrofa*), Mongolian gazelle (*Procapra gutturosa*), Hare (*Lepus tolail*), Eurasian Lynx (*Lynx lynx*), Siberian Weasel (*Mustela sibirica*), Daurian Hedgehog (*Erinaceus dauuricus*), Daurian Souslik (*Spermophilus dauricus*), Red Fox (*Vulus vulpes*), Corsac Fox (*Vulpes corsac*), Eurasian Badger (*Meles meles*), Raccoon Dog (*Nyctereutes procyonoides*), Manul Cat (*Otocolobus manul*), and Wolf (*Canis lupus*) in the NR. Additionally, the NR provides an important stopover point for forest and migratory bird species that are recorded in Eastern Mongolia. Thousands of herds of Mongolian gazelle migrate through this area in autumn and spring. The northeast and southeast parts of the NR are used by Mongolian gazelles for rutting in winter and for giving birth in summer. (ESBP, 2004).

In general, a total of 34 mammal species, 266 bird species, 3 amphibian species, and 7 bird species have been recorded in the refuge in different years. The invertebrate fauna has been studied insufficiently.

The refuge territory plays a significant role for conservation of some species included in the IUCN Red List (Table 5).

Species	Breeding	Migratory	IUCN Red List status
Swan Goose (<i>Cygnus cygnoides</i>)	+	+	Vu
Saker Falcon (<i>Falco cherrug</i>)	+		En
Greater Spotted Eagle (<i>Aquila clanga</i>)		+	Vu
White-naped Crane (<i>Grus vipio</i>)	+	+	Vu
Great Bustard (<i>Otis tarda</i>)	+	+	Vu
Pallas's Fish or Sea Eagle (<i>Haliaeetus leucorhynchus</i>)	+	+	Vu

Besides there are 25 species listed in CITIES Appendices I and II.

Degree of development of the territory

22 people of 5 households of Dashbalbar and Bayandun soum live in the Ugtam Nature Reserve boundaries. Most of the employees raise private livestock. Totally near 5200 heads of livestock are grazed in the NR and of which near 1500 are big livestock (camels, horses, and cattle) and near 3700 small animals (sheep and goats). The surveys carried out in different years showed no signs of overgrazing or excessing haymaking in the refuge territory.

According to the unified land territory classification there is 36928 ha or 80 % of the total NR territory used for pastureland. The density of livestock per one sq. km area inside the NR varies; however, there are 0.14 heads of livestock per one ha area and it is regarded as ordinary. Currently, there is no overgrazed area inside the NR, though herder households seasonally move around not more than twice a year due to most of herder households have no spring and autumn settlements. Such conditions can adversely impact on the carrying capacity and restoration of the pastureland. If the pastureland is used under the proper management, there is plenty of its reserve available (ESBP, 2004).

Ugtam Temple (inside the NR boundary), of which erection was started in 1840, has been restored and running since 1992. Today, the temple is inactive. There are several more sacred places in the refuge, which are connected with religious or ethnical beliefs of local people. All of those are excursion sites to some extent (Fig. 9).

Fig.9. The monument of buryat national pedigree and old Buddhist Temple in Ugtam NR.
(Photo O. Kirilyuk and G.Shalikov).



Management and protection

The Ugtam Mountain area was granted state protection with Government Decision № 83 in 1993 and the boundaries approved by Government Decision № 9 issued January 12, 1994. Bayandun and Dashbalbar Soums were made responsible for the protected area conservation management according to Article 29 of the Mongolian Law on Special Protected Areas. Since the establishment of the Eastern Mongolian Protected Area Administration (EMPAA) in the region it has been appointing a ranger for the NR. The EMPAA in consultation with local administration engages in recruitment of rangers in charge of protected areas and provisions of management, salaries and other material resources necessary.

One ranger performing protective activities and monitoring is assigned to the refuge territory.

EMPAA experts also regularly work in the refuge carrying out research and raising environmental awareness among local residents. EMPAA also regularly invite the members of nonprofit environmental organizations and the Mongolian Academy of Sciences. According to the Law on Special Protected Areas the NR conservation is managed by local administrations, and therefore the EMPAA closely collaborates with other local self-governing organizations. In particular the recruitment of ranger(s) is mutually consulted and decided upon. The full-time ranger in charge of Ugtam NR and the state soum environmental inspector exchange information on inspection and patrolling routes and cooperate with each other.

Various initiatives on protection and development of the territory (including the international ones) are implemented in the refuge with participation of its staff.

According to the data presented in the ESBP technical report, ESBP, the EMPAA conducts various activities including public awareness raising activities focused on environmental laws (especially laws and regulations on special protected areas), biological species, categories of protected areas and prohibited and allowed activities in protected areas, distributes informative materials, and organises Open days, meetings, and seminars among local communities and school children. The ranger of the Ugtam NR at his own initiative has constructed a bulletin board. Coloured poster on Ugtam NR was published by the EMPAA and distributed by the ESBP National Community Volunteers to local people. Additionally, the EMPAA published leaflet on Ugtam NR and also distributed to local people via the NR ranger. A small project “Fauna and flora species conservation in Bayandun Soum” (with MNT 5,626,000 fund) is being implemented by the ESBP CCF that has been running since 2002 order to protect medicinal plants, and stop illegal hunting of Red Deer and Siberian Marmot in the NR.

Under the small project:

Volunteer patrolling teams were established and provided a motorbike (MNT 850,000) and a patrolling and inspection fund of MNT 552,000 was established to reduce and eliminate illegal actions of medicinal plant collection and poaching of Red Deer and Siberian Marmot in the NR.

Additionally, remodelling (with MNT 146,000) of a building as a Nature Conservation Centre in Bayandun soum centre, purchasing of some furniture and equipment i.e. desks, chairs, TV set, video cassette player, photo camera, stationery, white board, overhead projector, and small generator etc. for the centre (with MNT 1,337,000) have been planning by the project. Public awareness activities on the protection of medicinal plants, Red Deer, and Siberian Marmot in the NR and Natural Resource Cooperation Management are conducted and so far MNT 390,000 has been spent for this effort. Moreover, the project has planned and started some efforts on vegetable and medicinal plant growing (with MNT 281,500 for preparation of a plot, purchasing of seeds and seedlings and planting) and building of a vegetable store house with a volume of 20 tons (with MNT 1,600,000).

Threats

The major threats for the refuge territory are similar to those for other strictly protected areas in Mongolia: fires and illegal hunting. It should be mentioned that the experts who had surveyed the refuge believe that despite the obviously insufficient number of rangers, the level of illegal hunting within the refuge boundaries is lower than at the adjacent territories (WCS, 2008). The reasons are both the work performed by the ranger and by the fact that local residents treat the refuge as a sacred place.

Specific description of the measures undertaken to mitigate the threats is given below, in explanations to recommendations and remarks of the World Heritage Committee.

When surveying the territory together with Dr. Wendy Strahm, the IUCN expert, in October 2015 and subsequently analyzing the available data, special attention was paid to the possible threats from the mining complex. Hence, we would like to focus on them.

None of the currently existing Mining complex objects affects the refuge (see Annex 10). The uranium mining enterprise (Mardayn) that was shut down in the late 1990s lies over 20 km southeastwards from the nearest point on the refuge border in a different water catchment area. Taking into account the wind pattern, the relief and distance to the mine, the probability of it having an effect on the refuge is minor. The alluvial gold mining site upstream, along the left side of the Uldz River is another large mining object. The mining object does not drain into the Uldz River and is located more than 8.5 km away (along a straight line) from the nearest point on the refuge border. Currently there are no other mining objects near the refuge borders or the ones being planned near the refuge borders.



Forest-steppe part of DSNBR.
(Photo A. Kirilyuk).

Decision: 39 COM 8B.4 2b)

2b) Prepare a joint management plan for the property to ensure a strengthened approach to sustainable regional development, tourism planning, threatened species conservation actions, research, monitoring and environmental education. This plan should be developed consistent with the transboundary framework provided by the Joint Commission between the States Parties of the Russian Federation, Mongolia and China supporting the Dauria International Protected Area (DIPA) initiative.

As it was already noted in the nomination, the Agreement on Creating the Dauria International Reserve (China-Mongolia-Russia Dauria International Protected Area — CMR DIPA) prescribes that each of the parties manages the national part of the reserve in accordance with its internal regulations. That is why each part of the international reserve has its own management plan, which takes into account the Dauria Reserve' international status and provides for taking joint measures intended for implementing the Agreement. At its sessions, the Joint Commission on the International Reserve adopts a mid-term program of cooperation in and development of the DIPA, which actually plays the role of a brief common management plan. The last (6th) session of the Joint Commission was held in Hulunbuir (Inner Mongolia Autonomous Region, China) on December 1–3, 2015. The Minutes and the next mid-term program for the years 2016–2020 were adopted (Annex 6 and 7). The Program provides for cooperation in all the spheres that the Commission's decision states. Taking the aforesaid into account, the Parties deem it unfeasible to develop one more management plan. For successful cooperation and development, as demonstrates the experience of the International Reserve's activities that have lasted for many years, the existing mechanism of the joint management is the best one.

Besides the Joint Commission of the International Reserve, issues related to cooperation and joint development are also considered by high-level bilateral working groups. First of all, they pay their attention to problems that need to be solved with the participation of other authorities and intergovernmental structures. For example, the Minutes of the Joint Russian-Mongolian Commission on Environment Protection (Annex 8), the last session of which was held on October 26–27, 2016, in Ulaan Baatar (Mongolia), contains clauses aimed at optimizing interaction between the parties of Russian-Mongolian part of the DIPA. Among them there are issues related to simplified crossing the border for response groups of the International Reserve in order to suppress poaching and eliminate consequences of natural disasters.



Ugtam NR.
(Photo O. Kirilyuk).

Decision: 39 COM 8B.4 3a)

3. Requests the States Parties to strengthen transnational collaboration to mitigate threats and ensure consistent capacity and effectiveness in both the Russian Federation and Mongolian components of the nominated property, and specifically to:

a) develop strengthened, better coordinated policies, practices and action plans to combat the threat of fire;

The Parties note that firefighting is a priority direction within the International Reserve cooperation framework. The Cooperation Program for 2016–2021 provides for enhancing the coordination of the Parties' firefighting actions and measures:

Clause 3, paragraph 7:

- Collaboration in fighting transboundary fires: 1) organization of fast notification about threat of fire crossing the border; 2) help among three nature reserves by staff and equipment for firefighting; 3) cooperation with local people in fighting fires that threat the international protected area.

Besides this, decisions on the firefighting issues (the transboundary ones, first of all) have been taken at the level of the bilateral commissions and working groups. In addition to the decisions mentioned above, the subject was also addressed in the Minutes of the 19th Session of the Russian-Mongolian Intergovernmental Commission on Cooperation in the Areas of Trade, Economy, Science and Technology, which was held in Chita on November 24, 2015, with the participation of the International Reserve representatives (Annex 9).

9.1.2 The Parties reached an agreement on the matters related to the arrangement of information exchange concerning existing threats of transboundary fires propagation according to the approved form and also the arrangement of the 4th Russian–Mongolian Session Related to Implementation of the Forest Fire Protection Agreement signed by and between the Government of the Russian Federation and the Government of Mongolia in 2016 in Mongolia.

9.1.3 The Mongolian party mentioned the importance of performing the works to create forest and ground fire breaks and offered to continue cooperation on the prevention of steppe and forest fire breakovers on the territories adjacent to Mongolia–Russia state border.

Practical Actions on the Territory of the Planned Heritage Area

Under the auspices of the State support and international nature-preserving projects implemented in the DIPA territory, the fire-fighting groups have been equipped and prepared better. In the Daursky Reserve, several mobile fire-extinguishing groups have been created and fully equipped with efficient up-to-date fire-extinguishing tools: backpack extinguishers, airblowers, motorized pumps. 3 automobile fire-fighting complexes have been purchased. Training sessions on fire elimination and prevention techniques are conducted annually with the participation of representatives of the settlements situated in the vicinity of the protected territory. Mobile fire-fighting equipment (backpack sprinklers and airblowers) have been transferred to eight of the village administrations. The ignitions are extinguished jointly with volunteer teams from these settlements.

As a result of this, the number of ignitions and the territories affected by fires in the Russian part of the planned World Heritage site have reduced more than twice, while the area of the territories swept by fires has decreased by more than sevenfold (Fig. 10). Due to these measures, no events of fire transferring from the Russian territory of the heritage site to the Mongolian one and vice versa have been detected in 2015.

Fig. 10a. Total number of fires in the Daursky Biosphere Reserve and its Buffer zone.

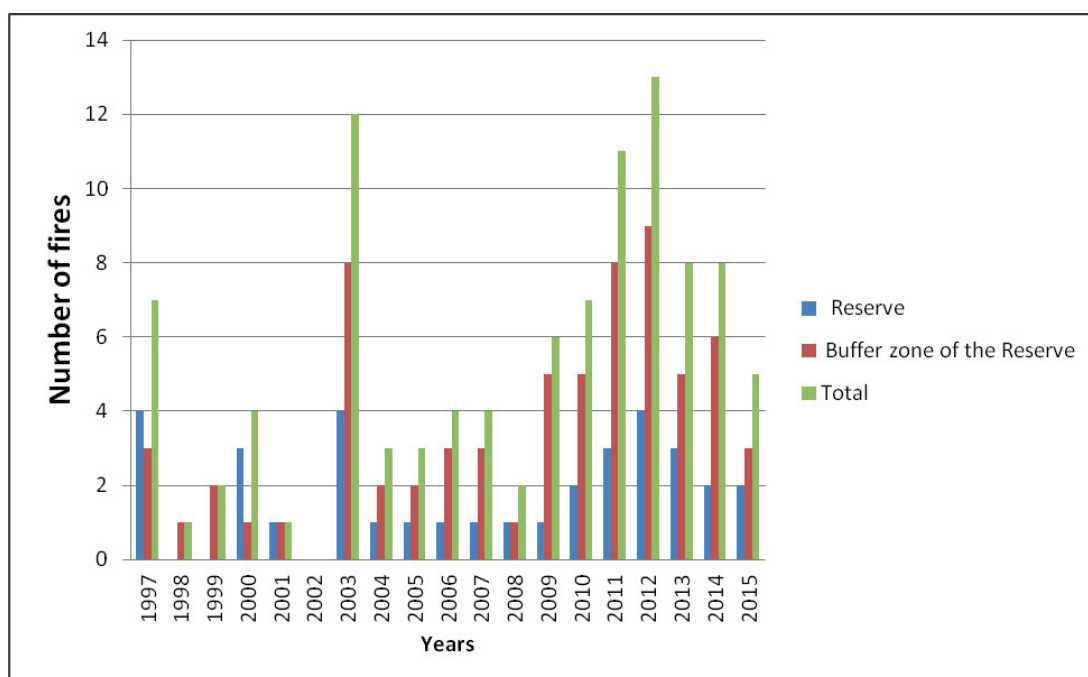
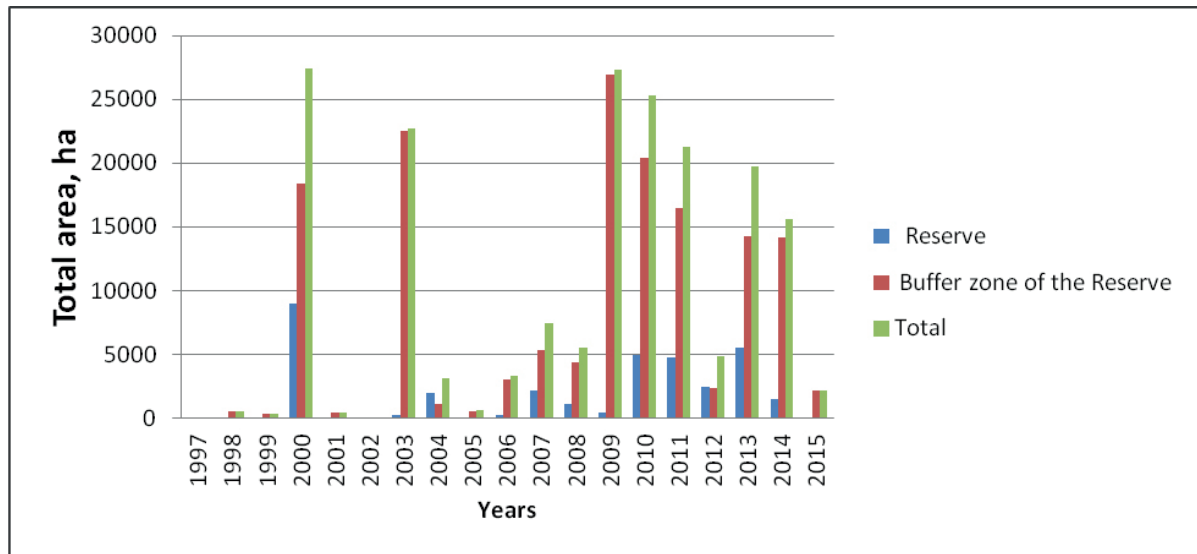


Fig. 10b. Total area of fires in the Daursky Biosphere Reserve and its Buffer zone.



In order to provide prompt assistance in extinguishing the fires in the sparsely populated territories of the Mongolian part of the nominated territory, the issue of the simplified crossing the border by the Daursky Reserve fire-fighting groups is being considered (as stated above).



The bottom of the dried-up lake.
Ugtam Nature Refuge
(Photo A. Butorin).

Decision: 39 COM 8B.4 3b

3b) develop strengthened, better coordinated management of buffer zones including with regard to grazing and cutting, in order to prevent overexploitation;

The Parties reiterate that the mentioned problem is not relevant for the nominated territory.

The total numbers of agricultural livestock in the Russian part does not exceed 6,000 heads, which is five times less than scientifically grounded capacity of pastures.

Total numbers of livestock in the 4 soums comprising the territory of the Mongol Daguur SPNA and its buffer zone were 378,675 heads (p.85 of nomination dossier). By the 2015 in the area of the three soums of Mongolia (Chuluunkhorot, Dashbalbar, Gurvanzagal), which is tens times larger than the property, according to official data 287,195 heads of livestock are kept. The numbers of livestock in soum Chuluunkhorot that occupies the most part of the property and the buffer zone amount to 49,104 heads.

The steppes of north-east Mongolia and the adjacent territories of Russia belong to the least damaged ones in the region. It is proved by researches of various authors.

Our investigations (on the basis of the data of remote sensing of Earth) show that in the Russian part of the property, more intensively used in the past, the total area of fallow lands and fields does not exceed 20%, the area of the parts subject to overgrazing at present (the area around cattle-breeding camps) does not exceed 0.13% of the total area of the property and 0.18% of the area of its buffer zone. Eroded lands occupy, according to the data of the RSE, not more than 0.1% of the area (including erosion of the road network, as well as ravine network). The Daurisky reserve has elaborated actions on facilitating natural restoration of the steppes.

Concerning hay cutting Sides note. In the buffer zone of the Reserves and territories of the Refuges there are no permanent haymaking fields, they are alternated every year, that is why mowing does not cause significant impact on the ecosystems. The total annual area of mowing does not exceed 1-3% of the aggregate area of the property and its buffer zone. Besides, mowing is considered by most of steppe researchers and specialists of steppe reserves as a factor maintaining the stable state of steppe when there are no or few large ungulates (Shaparenko, 2014). Of all anthropogenic impacts it is the least “traumatic” for steppe, as the soil is not damaged, dead grass and plant bunches remain, which saves the soil from erosion.

The Operational Guidelines (Paragraph 90) state that the area must be relatively undamaged, the nature use present in the area should be sustainable.

The situation does not seem to change fundamentally in the foreseeable future. The number of domestic animals cannot be increased due to the fact that in the vicinity of the nominated territory there are no processing industry enterprises, sufficient product market and population capable of maintaining a large number of the pastured animals. Furthermore, a significant population outflow from both the Mongolian and the Russian part of the nominated property and in the adjacent territories has been observed over the past 15 years.

Besides that, the employees of the International Reserve constantly monitor the state of the vegetation cover in the Reserve and adjacent territories. The Regulations of the Buffer Zone of the Daursky Reserve contains clauses (clauses 6, 7) that prohibit ploughing up the virgin and fallow lands aged 30 years or more, as well as exceeding the officially set cattle-pasturing norms. The Regulations on the Valley of Dzeren Refuge set similar norms (clauses 6 and 8 of the Regulations).



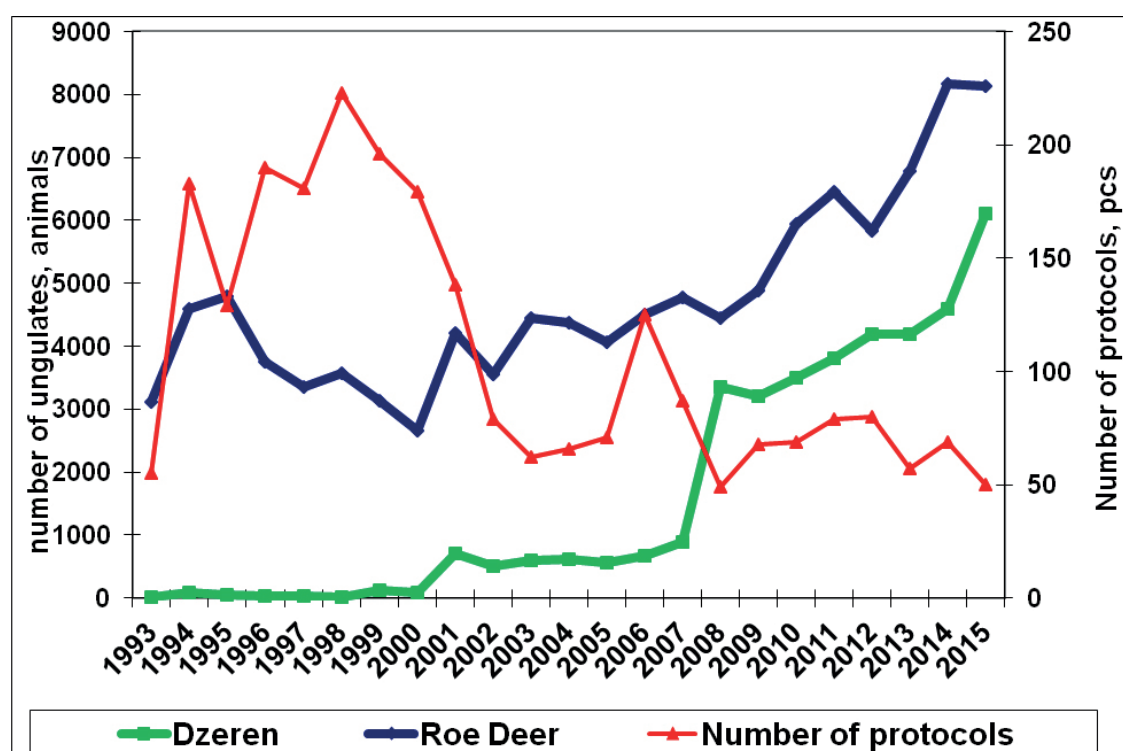
Birch forest in Ugtam NR
partially burned in 2009 in
restoration, October 2015
(Photo A. Butorin).

Decision: 39 COM 8B.4 3c)

3c) establish enhanced legal and other measures to reduce hunting and poaching pressures on the nominated property;

The problem of the illegal hunt is practically absent in the Russian part of the nominated territory. The increasing number of the species that are illegally hunted the most frequently, hoofed mammals first of all, is indicative of the protection efficiency. The increasing quantity of the hoofed animals is observed on the background of the yearly reduction in the number of detected breaches of the nature-protection regime (all the varieties), while the territory protection inspectorate is on duty, with the same frequency (Fig. 11).

Fig. 11. Number of protocols about violations of environmental regime and number of ungulates in the Russian part of the Property and its Buffer zone.



The data on the number of violation protocols shown in Fig. 9 refer to all types of violations recorded (including such minor violations as trespassing the nature reserve territory), while the share of serious violations such as poaching is extremely low. No more than 1–2 events of illegal hunting are annually recorded for the nominated property. Successful recovery of dzeren in the Daursky Nature Reserve and the refuge “Valley of Dzeren” is a vivid example of effective poaching control in Russia.

The level of the illegal hunt in the Mongolian part of the planned Heritage property is higher, but it is substantially lower than on the territories around the SPA.

The Minutes of the Russian-Mongolian Committee on the Environment Protection provides for a range of measures aimed at reducing the pressure of the illegal hunt. It mentions, in particular, necessity “to establish channels ensuring direct operational communication of bodies authorized to protect wildlife objects to inform about migrations of rare and endangered animal species for poaching prevention”, notes the necessity of “prohibiting spring hunt at key places of large gatherings of the species of aquatic and semi-aquatic birds of passage and the nesting places of globally endangered bird species. As it has been mentioned above, taking into account the lack of the inspectors in the Mongolian territory, the issue of rendering assistance by the Russian inspectors – employees of the Dauria International Reserve – to the local inspectors in suppressing and preventing poaching is being considered. The same Minutes note the need for a closer awareness-raising work with the local people (Annex 8).

The Minutes of the Joint Commission session and the DIPA Cooperation Program for 2016–2020 also pay special attention to deciding the hunting pressure problem, first of all in the territories adjacent to the nominated one, which would reduce probability of poaching in the nominated SPAs and their protective zones, too.

Clause 6 of the Minutes reads as follows:

6. The Parties suggested that the Ministry of Environment, Green Development and Tourism of Mongolia and the Ministry of Natural Resources and Environment of Russian Federation and regional governments of Zabaikalsky Kray (Russia) and Dornod Aimag (Mongolia) to stop spring hunting and bird electrocution on the territories neighboring to DIPA: Aginsky, Ononsky, Borzinsky and Zabaikalsky districts in Russian and Dashbalbar, Chuluunkhoroot and Gurvanzagal somons in Mongolia.

Also, specific measures to reduce other potential hazards to preserving the biodiversity are prescribed.



Ugtam Nature Refuge
(Photo A. Butorin).

Decision: 39 COM 8B.4 3d)

3d) provide the necessary long term resourcing and capacity to address imbalances and ensure effective management across the transnational nominated property as a whole.

The measures to raise additional financing of the activities and development of the International Reserve are also a priority direction (Clause 8 of the DIPA Program for 2016–2020, Annex 7).



Fig. 12. Forest-steppe landscapes of nomination. Neighborhood of Buylesan vill. and Huh-Ula mountain (Photo O. Kirilyuk).



Birch woodlands in the valley of
the brook. Ugtam Nature Refuge
(Photo A. Butorin).

Decision: 39 COM 8B.4 4)

4) Also requests the State Party of Mongolia, in line with the position of the World Heritage Committee on the incompatibility of mining with World Heritage site status, to confirm unequivocally that mining exploration and exploitation activities will not be permitted within the nominated property;

In June 2015, the IUCN was sent a letter signed by the Deputy Minister of Environment, Green Development and Tourism of Mongolia with assurances of complying with the requirements on absence of mining operations in the World Natural Heritage properties and their buffer zones.

The Mongolian Law on the protective zones of SPAs does not prohibit mining in the protective zone. However, the legislation of Mongolia recognizes the priority of international agreements together with conventions and programs ratified by the country over the national legislation. This guarantees the absence of mining operations on the territories that have the status of World Heritage properties.

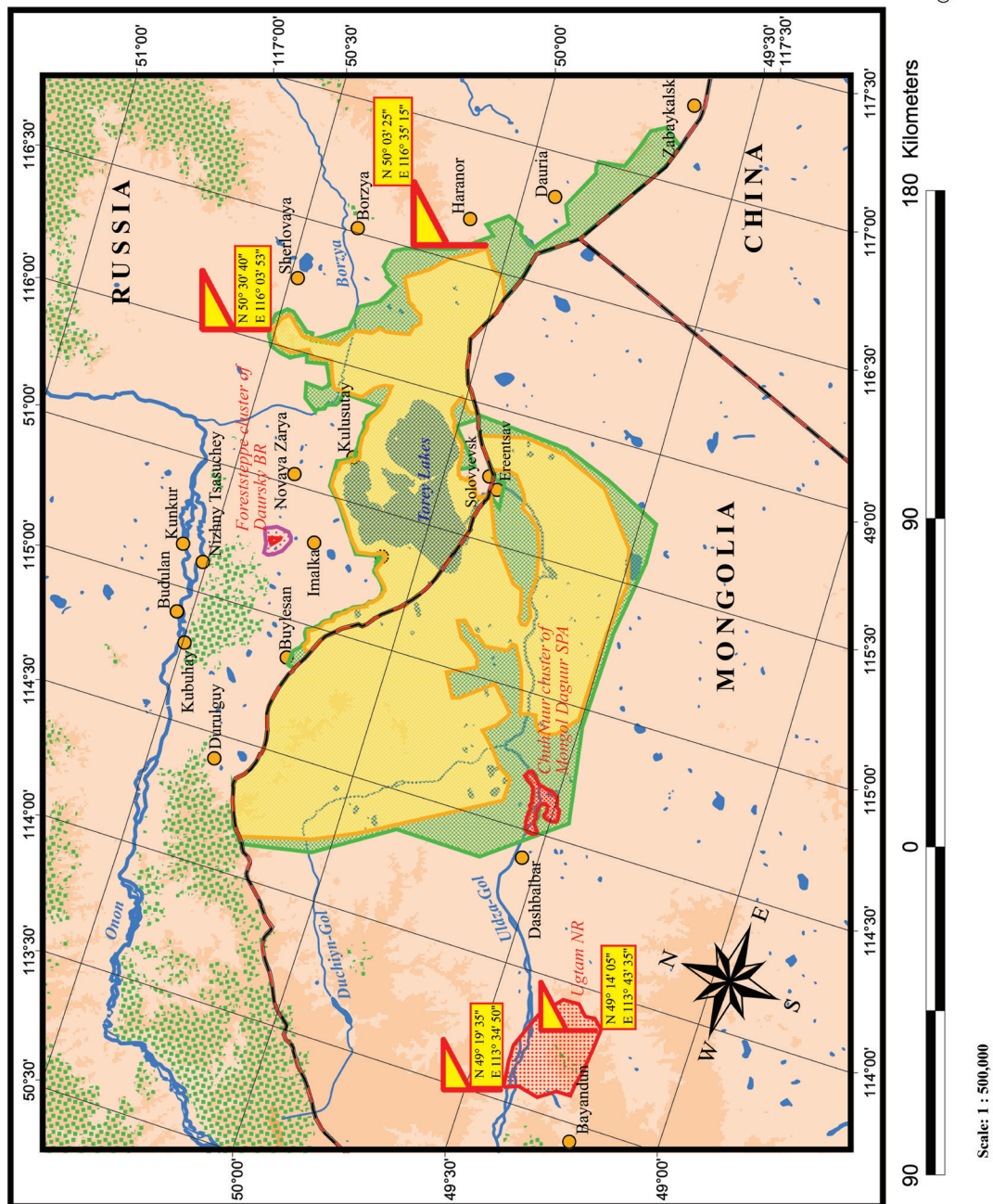


Fig. 13. Pine and bush woodland.
Ugtam Nature Refuge
(Photo A. Butorin).

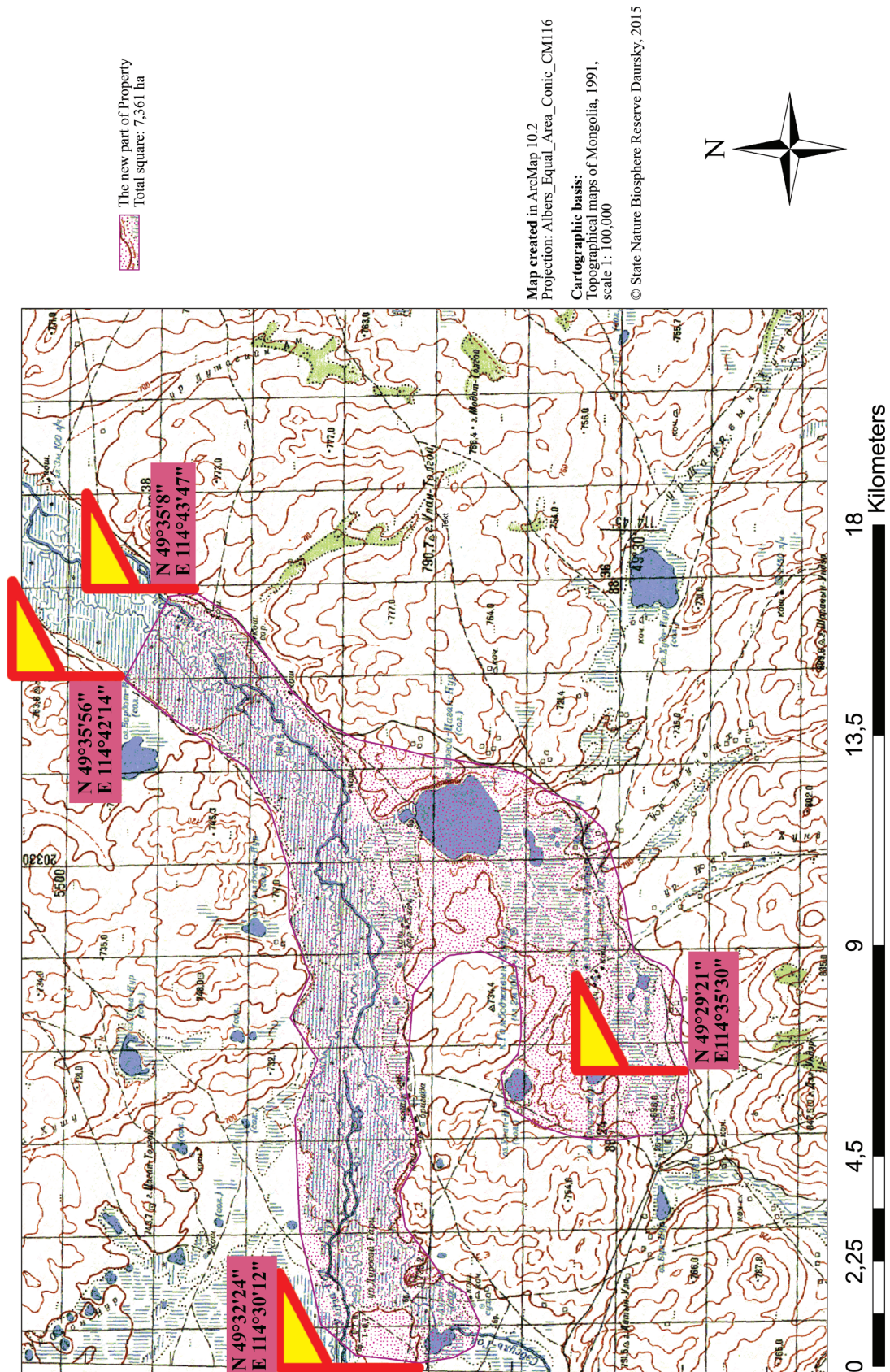
ANNEX

1. GENERAL MAP OF THE SITES ADDED, SCALE 1:500,000
2. GENERAL MAP OF THE CHUH-NUUR LAKE CLUSTER, SCALE 1: 45,000
3. GENERAL MAP OF THE FOREST-STEPPE CLUSTER, SCALE 1: 28,000
4. GENERAL MAP OF THE UGTAM REFUGE CLUSTER, SCALE 1:43,000
5. GENERAL MAP SHOWING THE AREAS OF THE NEW CONFIGURATION OF THE NOMINATED WORLD HERITAGE PROPERTY “LANDSCAPES OF DAURIA”, SCALE 1 : 500,000
6. PROTOCOL 6 FROM THE JOINT COMMISSION MEETING ON DIPA
7. PROGRAM OF COOPERATION WITHIN THE DAURIA INTERNATIONAL PROTECTED AREA (DIPA) FOR THE YEARS 2016-2020
8. PROTOCOL OF THE RUSSIAN-MONGOLIAN ENVIRONMENTAL PROTECTION COMMISSION
9. EXCERPTS FROM THE PROTOCOL OF THE MEETING OF THE RUSSIAN-MONGOLIAN COMMISSION ON TRADE AND ECONOMIC COLLABORATION
10. PRINT SCREENS OF THE MAPS AND SATELLITE IMAGES SHOWING THE LOCATION OF THE REFUGE WITH RESPECT TO THE EXISTING MINING OBJECTS

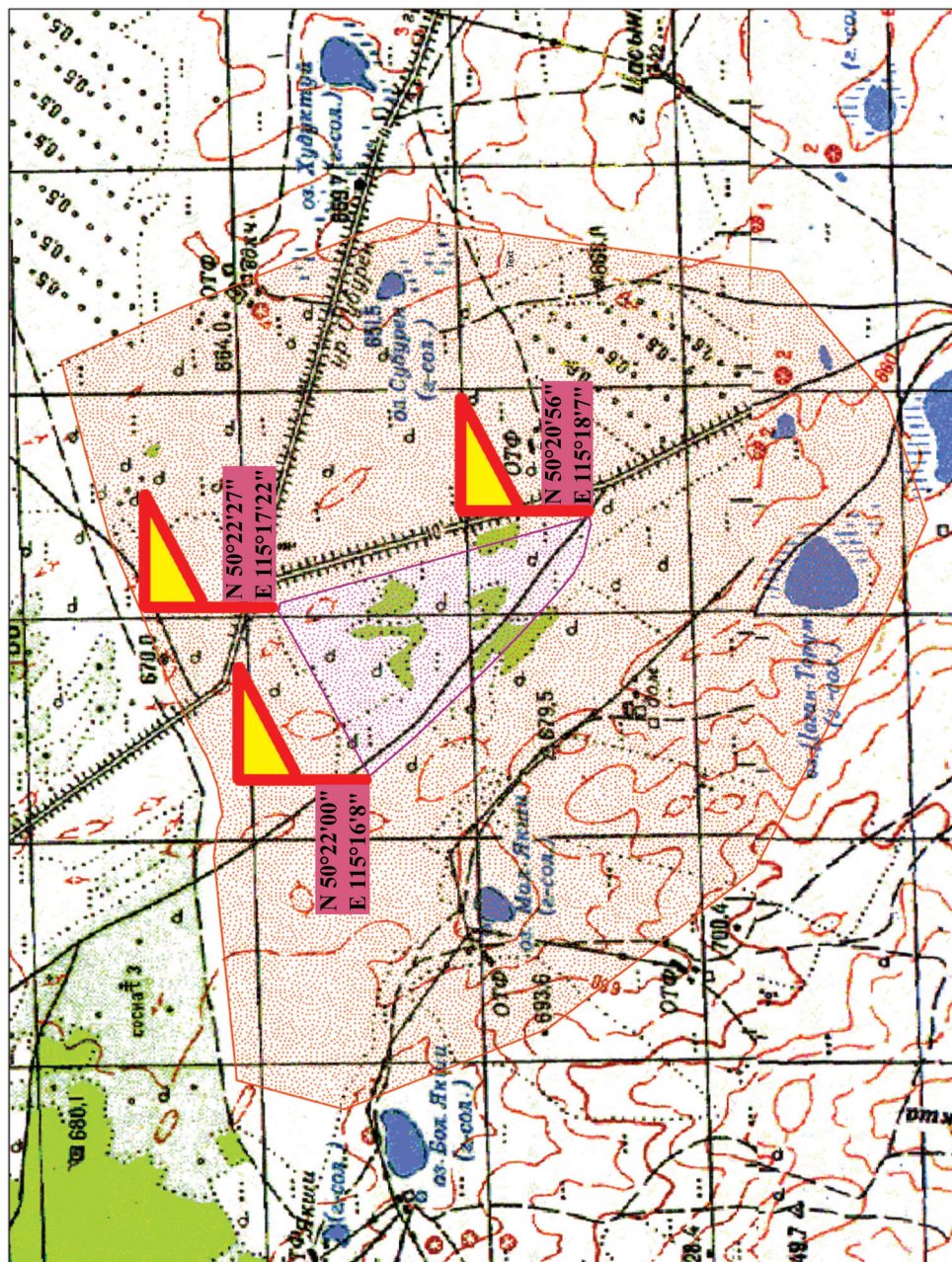
INDICATION OF THE BOUNDARIES OF THE “LANDSCAPES OF DAURIA” NOMINATED PROPERTY AND ITS BUFFER ZONE



LOCATION OF THE NEW PART OF PROPERTY IN THE BUFFER ZONE
OF MONGOL DAGUUR STRICTLY PROTECTED AREA



LOCATION OF THE FOREST STEPPE PART OF DAURSKY STATE NATURE BIOSPHERE RESERVE



**Territory of the Reserve
and new part of Heritage**
Total square: 300 ha

**Buffer zone of the Reserve
and new part of Heritage**
Total square: 3,958 ha

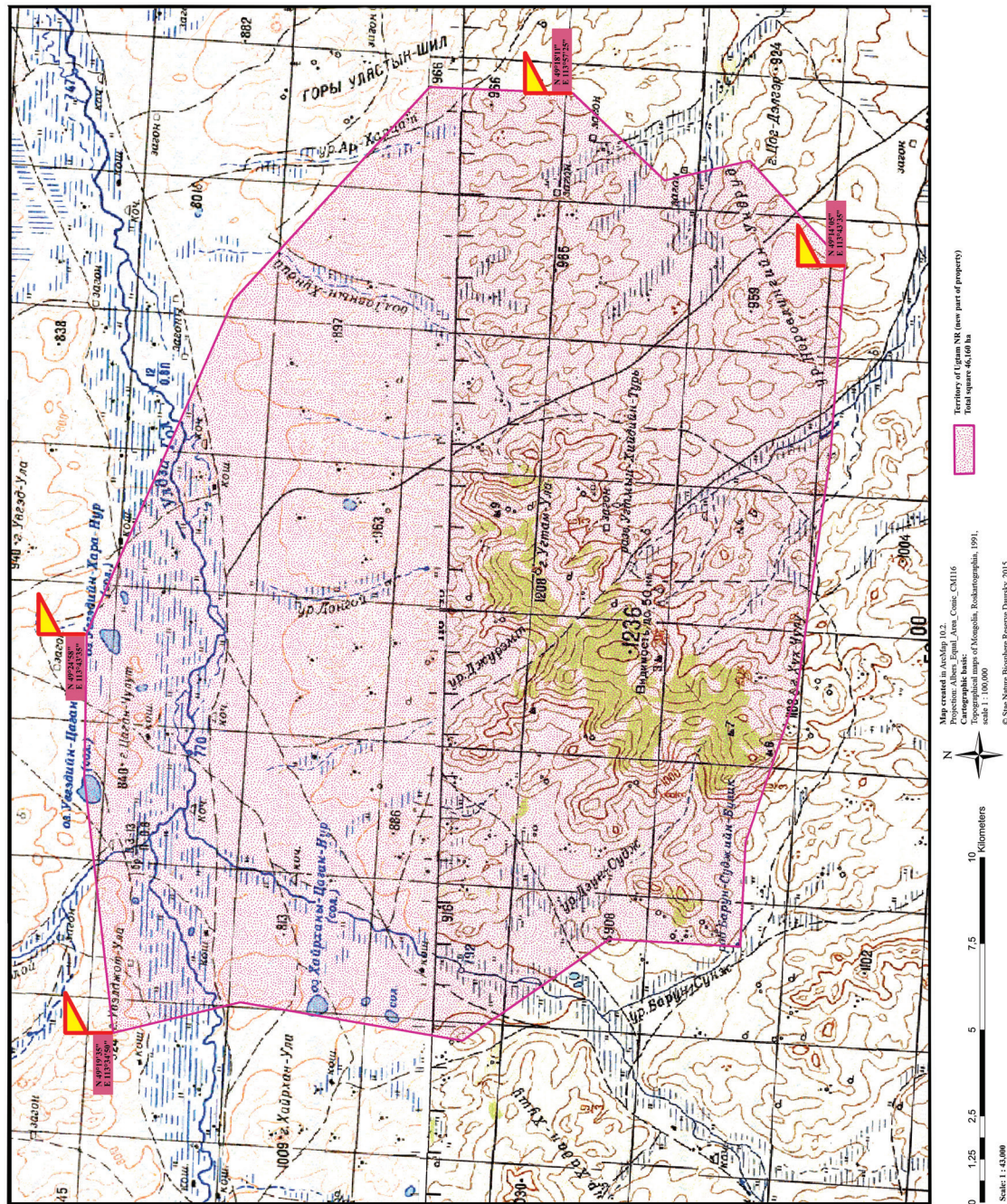
Map created in ArcMap 10.2
Projection: Albers_Equal_Area_Conic_CM116

Cartographic basis:
Topographical maps of Soviet Union, 1981,
scale 1: 100,000
© State Nature Biosphere Reserve Daursky, 2015

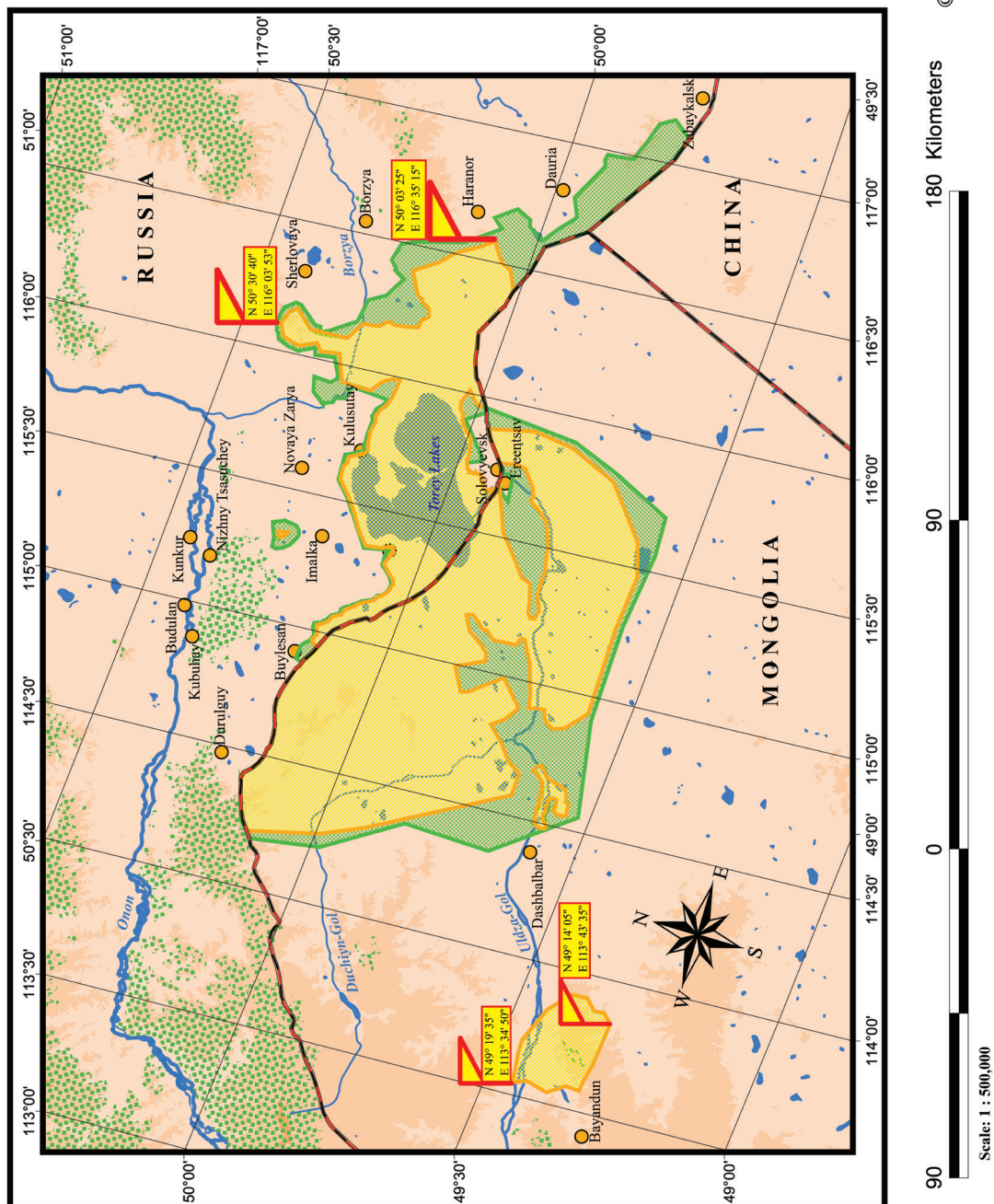


Scale: 1 : 28,000

LOCATION OF THE UGTAM NATURE RESERVE



INDICATION OF THE BOUNDARIES OF THE "LANDSCAPES OF DAURIA" NOMINATED PROPERTY
AND ITS BUFFER ZONE



**Minutes of the 6th Meeting of the Joint Commission of
the Chinese-Mongolian-Russian Dauria International
Protected Area (DIPA)**

Hulunbuir, Inner Mongolia, P.R. China

3 December, 2015

Approved by the Ministry of Environmental Protection of People's Republic of China, Ministry of Environment, Green Development and Tourism of Mongolia and the Ministry of Natural Resources and Environment of Russian Federation and according to the Agreement among China, Mongolia and Russia on the creation of the joint Dauria protected area and the Regulations on Joint Commission, the 6th Meeting of the Joint Commission of the Chinese-Mongolian-Russian Dauria International Protected Area (DIPA) was held in Hulunbuir (Inner Mongolia Autonomous Region, China) between 1 to 3 December. Participants of this meeting include Chinese delegation (20 members), headed by Mr. Bai Chengshou, Deputy Director-General of the Department of Nature and Ecology Conservation, Ministry of Environmental Protection of China, Mongolian delegation (8 members), headed by Mr.

Batsansar Chilkhaajav, Director-General of Department of Protected Areas Management, Ministry of Environment, Green Development and Tourism of Mongolia and Russian delegation (6 members), headed by Mr. Vadim Kirilyuk, Director of Daursky State Nature Biosphere Reserve. The full list of the participants is attached (Annex I).

The meeting was chaired by Mr. Bai Chengshou, head of the Chinese delegation. The Parties discussed and agreed on following issues:

1. Having listened to the report presented by Mongolia on the summary of cooperation among three parties since the 5th Meeting of the Joint Commission (2010). The Parties agreed that great contributions have been made and fruitful results have been gained in the past 5 years. Gaps that still exist in the current cooperation among the three parties were identified and expectations on the future development and trilateral cooperation in the protected area were made.

2. Having discussed the draft of the cooperation program for the next 5 years. The Parties believed that in the next 5 years, scientific research and monitoring, publicity and education and technology exchange will remain to be the key areas of cooperation. Parties should improve the work that are

currently underway and make more efforts in relevant areas to fill the gaps. On the basis of the fully consideration of opinions from the Parties, the meeting reviewed and adopted the program of cooperation (Annex II) .

3. China informed Mongolia and Russia that Dalai Lake National Nature Reserve was renamed Hulun Lake National Nature Reserve. Parties suggested that the Ministry of Environmental Protection of China will notify the Ministry of Environment, Green Development and Tourism of Mongolia and the Ministry of Natural Resources and Environment of Russian Federation of the renaming of Dalai Lake National Nature Reserve through official letters.

4. The Parties agreed that support to DIPA should be strengthened and the platform of DIPA should be used to enhance cooperation and communication among the three parties in other sectors.

5. The Parties also discussed several other issues of concerns.

5.1 The Regulations on DIPA and the Rules on Joint Commission should be submitted to relevant departments in each country for approval first and then be signed in an appropriate manner soon because they have been revised in the

5th Meeting of the Joint Commission.

5.2 Mongolian side informed about the intention to include Numrug SPA and Ugtam NR in DIPA. Mongolian side will notify Russian and Chinese sides about it.

5.3 mass electrocution of rare species of birds of prey on electric power lines located around DIPA (on Russian and Mongolian territory);

5.4 great damage to waterbirds caused by spring hunting (on Russian and Mongolia territories of Dauria).

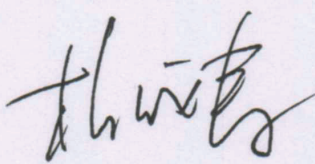
5.5 Chinese side inquired the Mongolian side about the hydraulic engineering project on Kherlen River. Mongolian side suggested that this matter can be discussed by Chinese-Mongolian Joint Commission on Water Resources.

6. The Parties suggested that the Ministry of Environment, Green Development and Tourism of Mongolia and the Ministry of Natural Resources and Environment of Russian Federation and regional governments of Zabaikalsky Kray (Russia) and Dornod Aimag (Mongolia) to stop spring hunting and bird electrocution on the territories neighboring to DIPA: Aginsky, Ononsky, Borzinsky and Zabaikalsky districts in Russian and Dashbalbar, Chuluunkhoroot and Gurvanzagal somons in Mongolia.

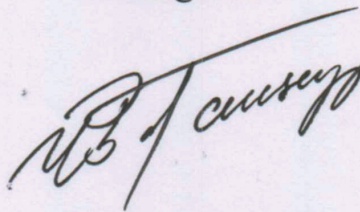
7. The Parties suggested to hold the 7th Meeting of the Joint Commission of the Chinese-Mongolian-Russian Dauria International Protected Area in the Russian Federation in the year of 2018.

Mongolian and Russian sides would like to appreciate China, the host country, for organizing the Joint Commission Meeting successfully.

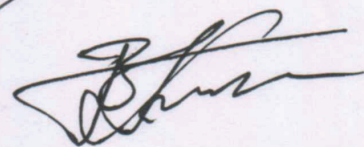
Delegation of the People's
Republic of China:



Delegation of
Mongolia:



Delegation of Russian
Federation:



PROGRAM OF COOPERATION WITHIN THE
DAURIA INTERNATIONAL PROTECTED AREA (DIPA)
FOR THE YEARS 2016-2020

The program is aimed at the development of nature-protecting cooperation between Russia, Mongolia, and China within the Dauria international protected area, and comprises the tasks and main activities of the trans-boundary reserve for the coming five-year period. Special attention is paid to the role of the protected area in realizing international nature-protecting initiatives including those in preservation of rare species and ecosystems, and in creating a network of protected nature areas providing conservation of ecology within Daurian eco-region.

Target: Conservation of biological and landscape diversity of the DIPA and trans-boundary Daurian ecological region and facilitation of the region's sustainable development.

Tasks:

1. To develop of scientific and nature-protecting cooperation between the Daursky, the Mongol Daguur, and the Dalai Lake reserves.
2. Monitoring the natural complexes' state under the influence of climate change and human activities at the Trans-boundary Network of Ecological Monitoring (TNEM).
3. Conservation and restoration of ecosystems and the populations of rare species. Finding out and preventing threats to them.
4. Optimization of function zoning or expansion of the DIPA territory for conservation of nature in Daurian ecoregion.
5. Raising the global nature-protecting status of the DIPA.
6. Environmental education of the local people in Daurian ecoregion. Popularization of the DIPA and Daurian ecoregion.

7. Development of cooperation between the DIPA and other organizations with the purpose of conserving the nature in Daurian ecoregion.
8. Searching and drawing additional funds for the development of nature-protecting activity in the DIPA and Daurian ecoregion.

Main activities:

1. To develop of scientific and nature-protecting cooperation between the Daurian, the Mongol Daguur, and the Dalai Lake reserves:
 - Joint research with the emphasis on inventory of the flora and fauna, of the plants' and animals' communities, not enough-studied species and groups of wildlife (first of all, anatidae, Passeriformes, owls, birds of prey, reptiles, amphibians, carnivore, chiroptera, insects), migration of animals, estimation of the state of ecosystems and the negative factors affecting them;
 - Conduct joint monitoring on birds and mammals in winter;
 - Elaborating the program of work of the International Biological Station (Utochi, Daurian) for studying and monitoring the ecosystems, and as a means of rising qualification and drawing outer researchers into studying the nature of Dauria;
 - Creation of GIS database: geobotanical maps, distribution of rare species, migration routes, ecosystems change depending on climate fluctuations, etc.;
 - Marking animals to study their migrations;
 - Experience exchange (organization personnel exchange, methodic exchange and organization of seminars and meetings)
 - Publish the lists of species of flora and fauna of the DIPA;
2. Monitoring the natural complexes' state under the influence of climate change and human activity at the Transboundary Network of Ecological Monitoring (TNEM):
 - Development and optimization of the network of monitoring plots (sites);
 - Specifying and improving the monitoring program and methods;

- Formation of the database for collecting and analyzing of the monitoring information;
 - Compiling periodical bulletin on monitoring results;
 - Organization of periodical workshops and training on monitoring.
3. Conservation and restoration of ecosystems and the populations of rare species. Finding out and preventing threats to them.
- Pushing forward the reintroduction of argali (*Ovis ammon ammon*) in Daursky Nature Reserve;
 - Conservation and restoration of the Great Bustard, the White-naped Crane, the Swan Goose, the Saker Falcon, the Steppe Eagle, the Siberian Marmot, the Mongolian Gazelle.
 - Prevention of birds death on the electric power transmission lines;
 - Prevention of large-scale damage to birds populations from spring hunting; limitation of hunting in nesting areas of the rare species and in key stop-over sites of migrating birds (first of all – in the Russian part of Daurian ecoregion);
 - Establish or expand migratory pass and reduce the damage from engineering constructions on the state border to the migrant species of mammals;
 - Investigation and prevention of threats to ecosystems from the developing mining industry, from building of engineering technical structures on the rivers (dams, channels, etc.), from polluting the waters with industrial waste.
 - Collaboration in fighting transboundary fires: 1) organization of fast notification about threat of fire crossing the border; 2) help among three nature reserves by staff and equipment for firefighting; 3) cooperation with local people in fighting fires that threat the international protected area.
4. Optimization of function zoning or expansion of the DIPA territory for conservation of nature in Daurian ecoregion.

- Improvement of protection on Lake Buir-Nur (China, Mongolia);
- Rising the protection status of Lake Khukh-Nur (Mongolia);
- Studying the issue of including Numrog SPA and Ugtam NR in DIPA;
- Identifying the most important sites for conservation of biodiversity in Daurian ecoregion;

5. Raising the global nature-protecting status of the DIPA:

- Nomination “Landscapes of Dauria” into the UNESCO World Heritage List (Russian and Mongolian sides).

6. Environmental education of the local people in Daurian ecoregion.

Popularization of the DIPA and Daurian ecoregion:

- Implementation of international environmental programs for children (creative contests, mobile exhibitions of children’s creative works, international environmental camps, exchange of schoolchildren’s research expeditions, and others);
- Organization of international university students’ practice work and camps on the basis of the DIPA;
- Publication of joint printed matter about the DIPA and Daurian ecoregion (books, brochures, sets of cards, calendars and posters, CDs about rare species and nature of the region in general, and others);
- Production of films and videoclips about the DIPA and Daurian ecoregion;
- Production of goods with symbols and elements of DIPA nature (crochery sets, t-shirts, badges, souvenirs, pictures, etc.);
- Development of ecological tourism (creation of transboundary tourist routes; development of infrastructure for ecological tourism).

7. Promoting cooperation between the DIPA and other organizations with the purpose of conserving the nature in Daurian ecoregion:

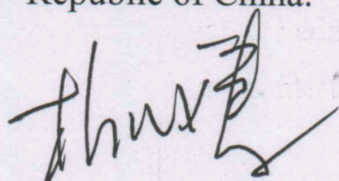
- Organizing and conducting joint environmental educational actions together with the other reserves of Daurian ecoregion (contests of children’s pictures, children’s summer camps, and others), and also

scientific research (study and census of the rare species of animals, joint programs for monitoring rare species of animals and ecosystems in Dauria, and others);

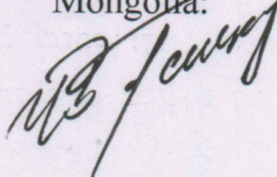
- Promoting cooperation between the DIPA and other protected areas, including wintering and passage sites of the birds nesting in Dauria.
 - Designing expositions about the DIPA and the nature of Dauria in museums;
 - Compiling sets of literature about the DIPA and the nature of Dauria in libraries;
 - Organizing joint environmental educational actions with universities, schools, libraries, etc.;
 - Facilitating development of scientific and educational contacts in the sphere of studying and protecting the environment between higher educational institutions and scientific research institutes of the region.
8. Searching and drawing additional funds for the development of nature-protecting activity in the DIPA and Daurian ecoregion.
- Joint search for additional finance (preparation of common applications for grants contests, attraction of international funds means, etc.).

The priority of implementing these activities will be determined by confirmed work plans of DIPA annually.

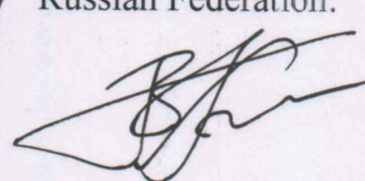
Delegation of the People's
Republic of China:



Delegation of
Mongolia:



Delegation of
Russian Federation:



Minutes

of the 5th Session of the Joint Russian-Mongolian Commission on Environment Protection (October 26–27, Ulan Bator)

The 5th Session of the Joint Russian-Mongolian Commission on Environment Protection (hereinafter referred to as the “Joint Commission”) established according to the Cooperation Agreement on Environment Protection signed by and between the Government of the Russian Federation and the Government of Mongolia on February 15, 1994 (hereinafter referred to as the “Agreement”) was held between October 26 and 27, 2015 in Ulan Bator (Mongolia).

The list of session participants is attached hereto (*Appendix No. 1*). They worked according to the agenda approved on Day 1 (*Appendix No. 2*).

During the session, a warm and friendly atmosphere was maintained. The delegation chairmen delivered their welcome speeches one after another. They stressed the importance of the Joint Commission activities and were hopeful of further cooperation in the field of the Agreement implementation. The Parties mentioned successful fulfillment of the tasks that had been set in the Minutes of the 4th Session of the Joint Commission. The Parties discussed the issues specified in the Agreement concerning 7 items of the agenda and came to an agreement with respect to the matters as follows.

As for the 2nd item on the agenda “Concerning the Development of Russian–Mongolian Transboundary Specially Protected Areas Network (hereinafter referred to as “SPAs”)

The Russian party stressed the necessity of signing the Agreement for the Establishment of Transboundary Reserve *Istoki Amura* by and between the Government of the Russian Federation and the Government of Mongolia at the 19th session of Russian–Mongolian Intergovernmental Commission on Cooperation in the Areas of Trade, Economy, Science and Technology (November 23–24, 2015, Chita, Russian Federation).

The Parties stressed the necessity of joint development of draft Agreement for the Establishment of Transboundary Reserve *Tunka Hubsugol* to be signed by and between the Government of the Russian Federation and the Government of Mongolia.

The Russian party made a proposal to consider the opportunity of establishing the transboundary reserve based on Saylyugemsky National Park (Russian Federation) and Siylkhem National Park (Mongolia). The Mongolian party expressed its readiness to consider the proposal made by the Russian party.

The Parties maintained cooperation within the framework of tree-party *Dauria* Russian-Mongolian-Chinese reserve. They discussed and encouraged the development of a transboundary network of environmental monitoring and international ecological station based on three-party *Dauria* Russian-Mongolian-Chinese reserve.

The Mongolian party came up with a proposal to create temporary checkpoints at the borders of transboundary reserves in the event of natural hazards and to prevent poaching in order to provide unimpeded access to response teams. The Parties stressed the necessity of allocating the additional funds in budgets of transboundary reserves.

As for the 3rd item on the agenda “The Issues of Joint Monitoring, Research and Control of Animals Migration Across State Borders”.

1. The Parties informed about the activities aimed at preservation of transboundary populations and clusters of rare and endangered wildlife species and mentioned a number of problems existing due to the location close to the border.
2. The Parties mentioned the following:
 - negative impact of engineering structures located at the border, necessity of free migration of species, advisability of finding a practical solution of the matter;
 - necessity to establish channels ensuring direct operational communication of bodies authorized to protect wildlife objects to inform about migrations of rare and endangered animal species for poaching prevention;
 - necessity to enhance control over relocations of derivatives and body parts being the objects of CITES across the state border;
 - necessity to timely evaluate and prevent the impact of projects aimed at linear infrastructure development (roads, pipelines) on the state of population of rare and endangered fauna and flora species and their habitats;
 - importance of raising awareness of the local population and officials with regard to wildlife species protection.
3. The Parties determined the following high-priority tasks:
 - analyzing the lists of rare and endangered wildlife objects;
 - developing the system for rare and endangered species condition joint monitoring;
 - developing the program to study black-tailed gazelles during epizootics of foot-and-mouth and other diseases;
 - developing a mechanism to coordinate the activities of transboundary SPAs related to species protection.

The Russian party represented a draft program aimed at monitoring the Altay argali sheep in transboundary areas of Russia and Mongolia. The Mongolian party agreed to consider the draft Program and provide its feedback till the end of September 2016. The Parties agreed to approve the improved version of the draft Program at the next session of the Joint Commission.

The Russian party provided information about the issues related to research and monitoring of transboundary clusters of snow leopards on the Chikhacheva and Tsagaan-Shuvut Ridges, which were extremely important to restore snow leopard clusters in Russia. The Parties agreed to combine their efforts when developing a joint program aimed at monitoring and preservation of transboundary clusters of snow leopards.

The Russian party informed that a Program aimed at argali sheep reintroduction in Zabaykalsky Krai was being developed. The Mongolian party expressed its support for the Program and agreed to provide feedback within the shortest time possible.

The Russian party provided the information about the Russian participants of the Working group to develop a program aimed at the argali sheep preservation in the transboundary area of Russia and Mongolia. In return, the Mongolian party informed that it would build-up the Mongolian part of the Working group.

The Parties pointed to the extreme negative impact of spring hunt on the state of populations of aquatic and semi-aquatic birds, including globally endangered species especially in frontier steppe areas of Dauria.

The Parties paid attention to the necessity of introducing a ban on spring hunt at key locations with large gatherings of transient aquatic and semi-aquatic birds and at nesting places of globally endangered bird species (first of all, swan geese, white-naped cranes, bustards).

The Parties mentioned that it was necessary to develop and take prompt actions aimed at the research, preservation and recovery of bustard and white-naped crane populations.

The Parties endorsed the steps of Daursky Nature Reserve aimed at the prevention of massive bird kill on power transmission lines located in the vicinity of the reserve and pointed to the necessity of accelerated actions to be taken by environmental authorities to solve the problem on the remaining territory of both countries, primarily, steppe and border areas.

As for the 6th item on the agenda “Concerning Cooperation in the Field of Forest Management”

The Parties mentioned the activities being carried out within the framework of implementation of the Forest Fire Protection Agreement signed by and between the Government of the Russian Federation and the Government of Mongolia on September 3, 2014. The Parties agreed to continue their activities related to implementation of the Forest Fire Protection Agreement signed by and between the Government of the Russian Federation and the Government of Mongolia on September 3, 2014 as part of the annual Russian-Mongolian session related to forest fire protection. The Parties agreed to update the Cooperation Agreement in the Field of Forest Management signed by and between the Federal Forestry Service of the Russian Federation and the Ministry of Nature and Environment of Mongolia dd. April 5, 1995 and replace it with the Cooperation Agreement in the Field of Forest Management between the Ministry of Natural Resources and Environment of the Russian Federation and Ministry of the Environment, Green Development and Tourism of Mongolia and sign it in the near future.

The Mongolian party provided information about the developed project aimed at protection of forests from transboundary fires and their prevention. The Mongolian party informed about its interest in obtaining quotas for the purchase of 200.0 m3 of pinewood and 300.0 m3 of redwood per year.

As for the 7th item on the agenda “Discussing Other Matters which the Parties may Have”

The Parties mentioned successful completion of the international conference “Ecosystems of Central Asia under Current Conditions of Socio-Economic Development” held by the Mongolian Academy of Sciences and the Russian one in Mongolia in September 2015.

The Parties made a decision to develop a project aimed at taking a physical inventory of flora, fauna and ecosystem diversity and evaluating its current state on the territories of existing SPAs and the ones planned for the creation of Russian-Mongolian transboundary specially protected areas.

Members of the Russian delegation expressed their appreciation to the Mongolian party for the organization and arrangement of the Joint Commission session. The Parties made a decision to hold the next session of the Joint Commission in Russia, in Q3 2016.

The time and venue will be agreed in the regular course of business.

Signed on October 27, 2015 in Ulan Bator (Mongolia) in two copies: in Russian and Mongolian.

Also during the 5th Session of the Joint Commission, the Regulation on Joint Russian-Mongolian Commission on Environment Protection was signed.

CHAIRMAN OF THE JOINT
COMMISSION
(RUSSIAN PARTY)

A.M. AMIRKHANOV
Deputy Head, Federal Service
for Supervision of Nature Resources

CHAIRMAN OF THE JOINT
COMMISSION
(MONGOLIAN PARTY)

Ts. TSENGEL
State Secretary,
Ministry of the Environment, Green Development and Tourism of Mongolia

Minutes

of the 19th Session of Russian–Mongolian Intergovernmental Commission on Cooperation in the Areas of Trade, Economy, Science and Technology

Chita

November 24, 2015

The session participants were as follows:

Chairmen, members and experts of state parties of the Intergovernmental Russian–Mongolian Commission on Cooperation in the Areas of Trade, Economy, Science and Technology (hereinafter referred to as the “Commission”).

The Russian delegation was headed by S.E. Donskoy, Minister of Natural Resources and Environment of the Russian Federation, Chairman of the Russian party of the Commission.

The Mongolian delegation was headed by L. Purevsuren, Minister of Foreign Affairs of Mongolia, Chairman of the Mongolian party of the Commission.

Lists of delegates representing each Party are attached hereto (Appendix No.1 and Appendix No.2).

S.E. Donskoy acted as Chairman.

The Parties discussed and approved the agenda as follows:

1. Concerning implementation of resolutions and recommendations adopted at the 18th session of the Commission
2. Concerning the Matters Related to Russian–Mongolian Cooperation in the Areas of Trade and Economy
3. Concerning Measures Aimed to Promote Russian–Mongolian Cooperation in the Areas of Trade and Economy
4. Concerning Cooperation Related to Transport
5. Concerning Cooperation Related to Fuel and Energy Complex
6. Concerning Cooperation Related to Subsurface Resources Management
7. Concerning Cooperation in the Areas of Industry and Construction
8. Concerning Cooperation Related to Agriculture
9. Concerning Cooperation Related to Environment Protection
10. Concerning Cooperation in Humanitarian Area
11. Concerning Real Property Assets of the Russian Federation on the territory of Mongolia
12. Concerning Checkpoints at the Russian–Mongolian State Border
13. Concerning the Venue and Time of the 20th Session of the Commission

9. Concerning Cooperation Related to Environment Protection

9.1 Cooperation Related to Forest Management

9.1.1. The Parties expressed their intention to finalize approval of the Cooperation Agreement in the Field of Forest Management between the Ministry of Natural Resources and Environment of the Russian Federation and Ministry of the Environment, Green Development and Tourism of Mongolia drafted to replace the Cooperation Agreement in the Field of Forest Management signed by and between the Federal Forestry Service of the Russian Federation and the Ministry of Nature and Environment of Mongolia dd. April 5, 1995.

9.1.2 The Parties reached an agreement on the matters related to the arrangement of information exchange concerning existing threats of transboundary fires propagation according to the approved form and also the arrangement of the 4th Russian–Mongolian Session Related to Implementation of the Forest Fire Protection Agreement signed by and between the Government of the Russian Federation and the Government of Mongolia in 2016 in Mongolia.

9.1.3 The Mongolian party mentioned the importance of performing the works to create forest and ground fire breaks and offered to continue cooperation on the prevention of steppe and forest fire breakovers on the territories adjacent to Mongolia–Russia state border.

9.2 Concerning Cooperation Related to Specially Protected Areas (SPAs)

9.2.1 The Russian party stressed the necessity of signing the Agreement for the Establishment of Transboundary Reserve Istoki Amura by and between the Government of the Russian Federation and the Government of Mongolia before the next session of Russian–Mongolian Intergovernmental Commission on Cooperation in the Areas of Trade, Economy, Science and Technology.

The Mongolian party will address this issue.

9.2.2. The Parties stressed the necessity of joint development of draft Agreement for the Establishment of Transboundary Reserve Tunka Hubsugol to be signed by and between the Government of the Russian Federation and the Government of Mongolia.

9.2.3. The Russian party mentioned its readiness for joint development of draft Agreement for the Establishment of Transboundary Reserve based on Saylyugemsky National Park (Russian Federation) and Siylkhem National Park (Mongolia) between the Government of the Russian Federation and the Government of Mongolia. The Mongolian party expressed its readiness to consider the proposal made by the Russian party.

9.2.4 The parties mentioned successful cooperation related to the activity of Dauria three-party Russian-Mongolian-Chinese reserve.

9.2.5 The Parties stressed the importance of activities on establishing a transboundary Russian–Mongolian area of UNESCO World Heritage Site The Landscapes of Dauria and agreed to render bilateral assistance of every kind to promote including the property on the World Heritage List in 2016.

9.3 Issues Concerning Argali Sheep (Ovis Ammon) Reintroduction in Zabaykalsky Krai of the Russian Federation

The Russian party informed that a Program aimed at argali sheep reintroduction in Zabaykalsky Krai was being developed.

The Mongolian party expressed its support for the initiative and made a proposal to implement the Program using a comprehensive approach to this issue.

9.4 Concerning Cooperation Related to Water Management

9.4.1 Understanding the importance of the Agreement for the Protection and Use of Transboundary Waters signed by and between the Government of the Russian Federation and Government of Mongolia and also being aware of the necessity to preserve a unique ecosystem of Lake Baikal, laying implementation of Decision 39 COM 7B 76 of 2015 adopted by UNESCO World Heritage Commission as basis for their activities, both Parties expressed their readiness to fulfill recommendations given to the Russian Federation and Mongolia.

9.4.2 The Russian party declared that it was necessary to perform an overall assessment of impact caused by implementation of hydropower facilities' construction projects on the territory of Mongolia (Shuren, Eg River, Orkhon and other facilities), including their cumulative effect assessment.

9.4.3 The Russian party stated it was necessary to create a joint Working group to perform environmental impact assessment of scheduled projects related to HPP construction in the Selenga River basin as part of Intergovernmental Russian–Mongolian Commission on Cooperation in the Areas of Trade, Economy, Science and Technology.

The Mongolian party expressed its readiness to discuss the issues related to the implementation of projects involving hydraulic structures construction on the Selenga River as part of Joint Russian–Mongolian Commission on Environment Protection based on a comprehensive approach.

9.4.4 The Russian party pointed to the necessity of information exchange concerning performance of the works related to the environmental impact assessment of possible hydraulic structures construction on the Selenga River, including a unique ecosystem of Lake Baikal. To get further advice on the issue, the Parties agreed to arrange next regular expert consultations in Moscow, in H1 2016.

10. Concerning Cooperation in Humanitarian Area

10.1 According to the Agreement signed by and between the Government of the Russian Federation and Government of Mongolia related to temporary work performed by citizens of one country on the territory of the other, the Parties agreed to establish a joint Working group for implementation of the Agreement as soon as possible.

10.2 The Parties recognized that it was necessary to promote cooperation in the area of social welfare.

10.3 The Parties agreed to address the opportunity concerning the arrangement of joint cultural events as part of celebrations devoted to the 95th Anniversary of Russia-Mongolia Diplomatic Relations in 2016.

10.4 The Parties agreed to consider the opportunity of establishing a new general education school in Ulan Bator teaching students according to the curriculum of Russian secondary schools, with the opportunity of entrepreneur involvement in the project. The Mongolian party will consider the proposal of the Russian party related to the provision of the draft plan of the school development.

10.5 The Parties stressed the need of paying attention to implementation of the Agreement between the Government of Mongolia and Government of the Russian Federation related to mutual approval of diplomas and academic degrees as of 2003.

10.6 The Mongolian party offered the Russian one to address the issue related to establishing centers where the graduates of Mongolian secondary schools teaching students in Russian can pass their Unified State Exams and also centers to take a comprehensive exam in the Russian language for labor migration in the Russian Centre for Science and Culture.

The Russian party appealed to the Mongolian party to provide it with estimated data related to the number of secondary school graduates planning to take Unified State Exams in the intended exam centers.

10.7 The Mongolian party asked to consider the opportunity of updating the Agreement as of 2002 signed by and between the State Commission of the Russian Federation for Physical Culture, Sport and Tourism and Commission of Mongolia for Physical Culture and Sport by adopting a new Agreement between the RF Ministry of Sports and Ministry of Public Health and Sports of Mongolia.

10.8 The Parties agreed to further promote their sport cooperation by means of rendering assistance in enhancing the network of contacts between sports federations of Russia and Mongolia.

10.9 The Mongolian party offered the Russian party to consider the issue related to the construction of winter sports palace in Mongolia, its operation and also development of winter sports training center on its basis with the involvement of Russian coaching staff.

10.10 The Mongolian party will inform the Federal Customs Service (FCS) of Russia and Ministry of Education and Science of Russia about its intention to teach the staff of Main Customs Administration (MCA) of Mongolia in the Russian Customs Academy according to higher and supplementary professional education programs. The FCS of Russia and MCA of Mongolia will seek to sign a Memorandum on Cooperation in the Areas of Education and Staff Training in H1 2016.

10.11 The Parties agreed to facilitate consideration of draft Cooperation Agreement Related to Public Communications to be signed by and between the Russian Federation and Mongolia.

11. Concerning Real Property Assets of the Russian Federation on the territory of Mongolia

11.1 The Parties reported that there was a visible progress in the settlement of a key issue related to Russian real property assets in Mongolia, i.e. registration of rights owned by the Russian Federation to the use of land plots which had been previously allotted to the USSR for property construction. The first stage involving the approval of changes introduced to the intergovernmental Minutes dd. July 29, 1971 and Agreement dd. September 11, 1979 related to the intended purpose and mode of land plots application according to the applicable legislation of Mongolia and standards of international law is complete.

The Parties expressed their mutual interest in the approval of land issues as soon as possible, with an expectation that the developed expert solutions would serve as basis for undergoing domestic procedures in the nearest future and would be specified in the intergovernmental agreement in the form of respective exchange notices. This would serve as basis for further cooperation in the field of re-registering the rights of the Russian Federation to the remaining land plots subject to other Soviet and Mongolian intergovernmental acts.

11.2 The Russian party asked the Mongolian party to render its assistance in facilitating the review of documents submitted for re-registration of the asset portfolio owned by the former

V.I. Lenin Club in Ulan Bator and proposals related to the construction of an up-to-date multifunctional center to replace it. This would help remove existing invalid claims of third parties related to the use of Russian real property asset and pave the way for the construction of a new asset portfolio.

11.3 The Russian party expected to receive an answer to the merit of the issues specified in Notice No.59n submitted by the RF Embassy on March 2, 2015 related to the restoration of cancelled registration certificates for a number of Russian assets in Mongolia.

Due to this fact, the Parties agreed that Mongolian and Russian public authorities and organizations being involved would proceed with the settlement of these issues.

11.4 The Parties agreed to delegate the Russian–Mongolian Working group dealing with issues on real property assets to proceed with large-scale cooperation on the matters related to Russian real property assets in Mongolia.”

12. Concerning Checkpoints at the Russian–Mongolian State Border

12.1 Concerning the draft Minutes related to introducing changes and amendments in the Agreement on border checkpoints and facilitated procedure of Russian–Mongolian border passing signed by and between the Government of the Russian Federation and Government of Mongolia on August 10, 1994.

The Mongolian party informed that it considered the draft Minutes related to introducing changes and amendments in the Agreement on border checkpoints and facilitated procedure of Russian–Mongolian border passing signed by and between the Government of the Russian Federation and Government of Mongolia on August 10, 1994 developed by the Russian party and forwarded the improved version of the Minutes to the Russian party.

The Russian party informed that it considered the document as drafted by the Mongolian party and submitted the updated version of the Minutes to the Russian Ministry of Foreign Affairs in November 2015, taking into account all feedback provided by concerned federal government executive authorities for its subsequent transfer to the Mongolian party for consideration through the diplomatic channels.

To support extensive discussion of the draft Minutes and develop a unified text of the document, the Parties agreed to arrange expert consultations approximately in Q1 2016.

12.2 Concerning the Condition and Prospects for the Development of Checkpoints at the Russian–Mongolian State Border

The Russian party informed about the progress in reconstruction of Kyakhta vehicle checkpoint. The Parties agreed to continue their cooperation related to enhancing the traffic capacity of checkpoints at the Russian–Mongolian state border due to multistage construction (reconstruction, technical upgrade) and enhancement of core infrastructure available at the checkpoints.

13. Concerning the Venue and Time of the 20th Session of the Commission

The Parties mentioned that the events being part of the 19th session of the Commission had been organized at a high level.

The Parties agreed to hold the 20th session of the Commission in Ulan Bator, in H1 2016.

The venue, agenda and specific date of the session will be agreed in the regular course of business.

The Minutes was drafted on November 24, 2015 in Chita in Russian and Mongolian (2 copies of document in each language).

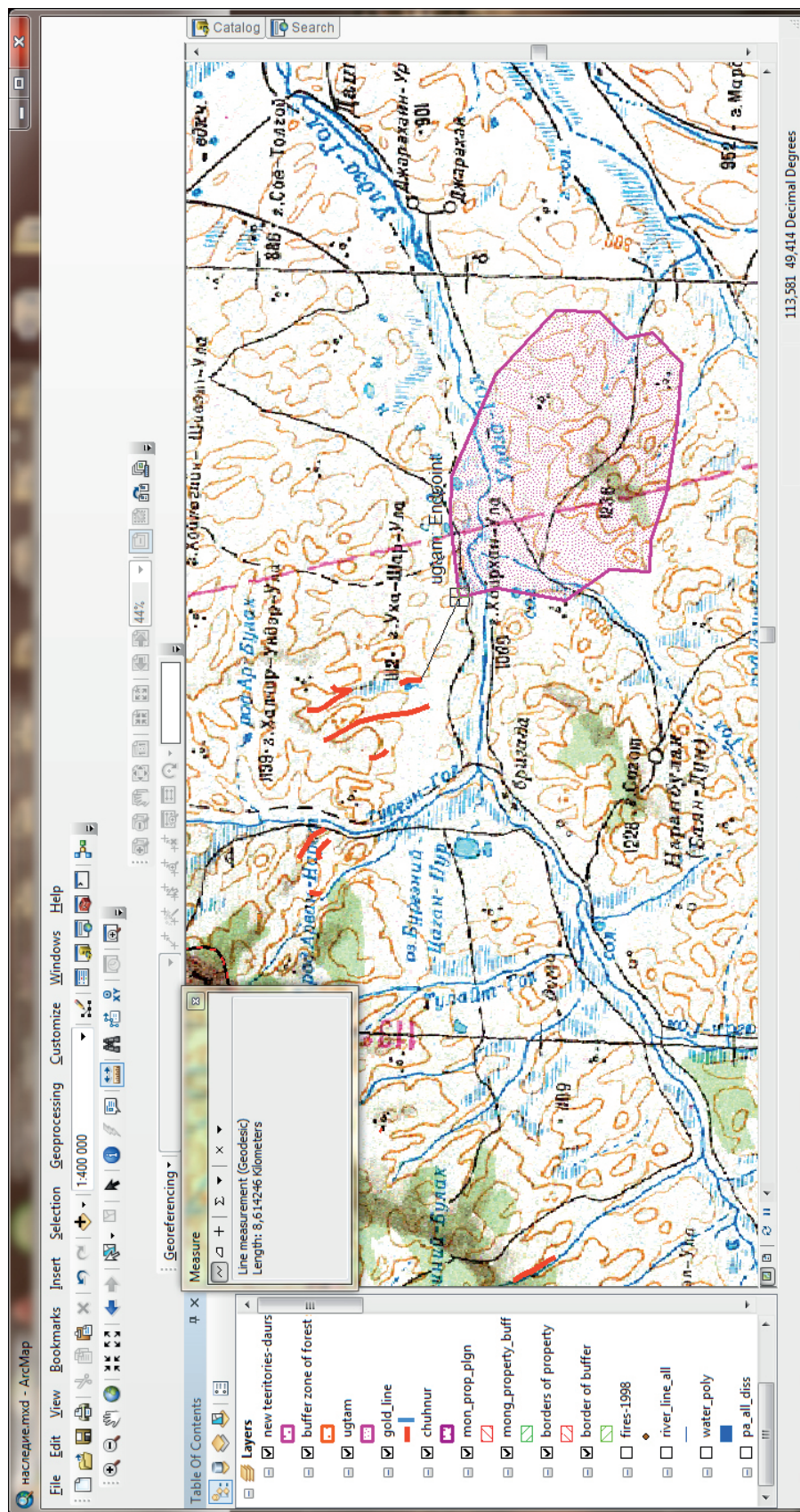
CHAIRMAN OF
RUSSIAN–MONGOLIAN INTER-
GOVERNMENTAL COMMISSION
ON COOPERATION IN THE AREAS
OF TRADE, ECONOMY, SCIENCE
AND TECHNOLOGY
(RUSSIAN PARTY),
MINISTER OF NATURAL RESOURC-
ES AND ENVIRONMENT OF THE
RUSSIAN FEDERATION

S.E. DONSKOY

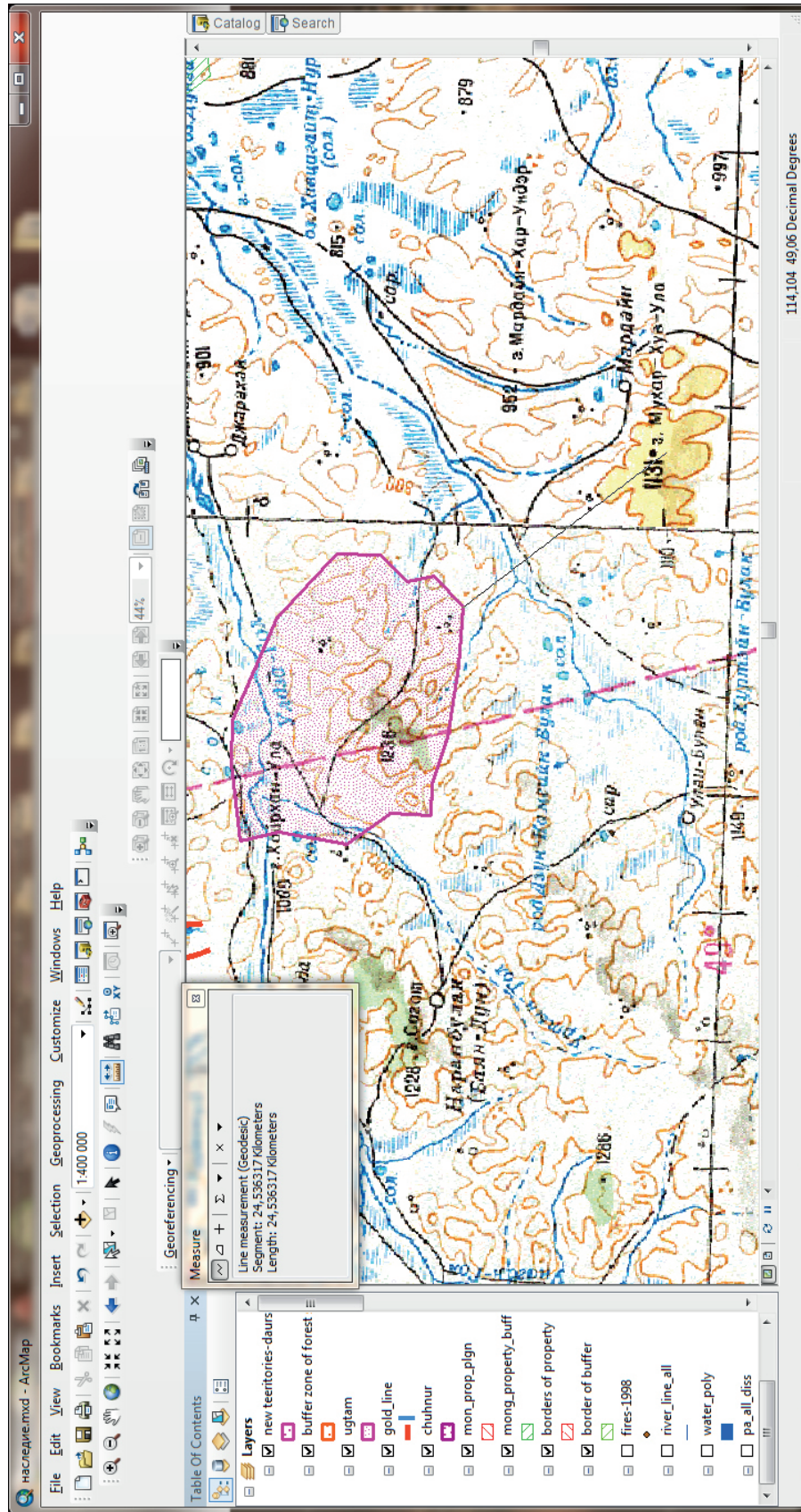
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MENTAL COMMISSION ON COOPERA-
TION IN THE AREAS OF TRADE, ECON-
OMY, SCIENCE AND TECHNOLOGY
(MONGOLIAN PARTY),
MINISTER OF FOREIGN AFFAIRS OF
MONGOLIA,
L. PUREVSUREN

Position of the nearest mining objects with respect to the Ugtam Refuge (according to satellite image and GIS analysis data)

1. Distance between the refuge border and the alluvial gold mining sites (shown with red lines).



2. Distance from the refuge borders and the storage of the Mardayn mine (the closest object).



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- Official web-site of Wildlife Science and Conservation Center of Mongolia: <http://www.wsc.org.mn/iba.html>. Date of last visit 15.01.2016.