

Tentative List

Name of country: Russian Federation

List drawn up by: Russian Ministry of Natural Recourses

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NAME OF PROPERTY GEOGRAPHICAL LOCATION

Daurian Steppes (Daursky State Nature Biosphere Reserve)

The nominated territory is located inside the State Nature Biosphere Reserve Daursky and its buffer zone. The reserve is situated in the Torey hollow in the south of East Siberia.

The area of the nominated territory is 208.3 thousand hectares.

DESCRIPTION

The territory includes the whole Torey lakes, adjoining river floodplains, more than 20 small lakes and vast steppes.

Climate: The climate in the area of the preserve is sharply continental, hot in summer and dry and cold in winter. The climate distinctive feature is huge amplitude of variances in temperature, daily (15-20 C) and annual (90 C), as well as non-uniform distribution of precipitation in the seasons. The climate changes are of cyclic type and they influence the hydrological regime in the territory of the reserve (in particular, a water-level in lakes), which influences in its turn ecosystem, flora and fauna condition.

Relief: In the contemporary relief of the reserve's territory accumulative alluvial and lacustrine (laky) plains, rough terrain and isolated massifs of low hills are prevailing. Higher hills with relative height of 100-150 metres above sea level can only be found along the northern shore of lakes. Coastal plain consists of three lake terraces, a characteristic form of terrain here are beach ridges located in a floodplain and the first terrace of lakes above the floodplains. They were formed when the shoreline was shifted as a result of a lake level change. The number of ridges amounts to 19-20 on a slope. Their size varies from 0.5 up to 2-3 metres high and 20-30 metres wide.

Hydrology: There are more than 500 lakes in the Torey hollow in the periods of high humidity. In the nominated territory there are about 40 lakes including the largest ones – the Torey lakes. The reserve contains the Barun-Torey and Zun-Torey lakes, which have the common hydrological system. The lakes have an unsteady water regime, the periodicity of their change is mostly determined by the climate: during the last 200-220 years the lakes have dried and have filled up many times (just in the XX century – four times) with the periodicity of 25-40 years. Constant season changes of Torey level also take place.

Soils: Chestnut and mountain-chestnut soils as well as a soil complex containing salines are most widely spread. In the south-western part of the reserve there are sand sediments in the form of active and non-active dunes. Along the Imalka and Uldza river basins meadow and marsh-meadow soils are

formed. There are a few areas of permafrost of an insular type that are mostly located around the lake hollows. According to the data available, the depth of perennially frozen rocks is about 10-15 metres and sometimes 20 metres.

Flora: The list of plants in the reserve today consists of 440 species from 244 genera and 73 families. The following families are most rich with species: aster family – 56 species, gramineous family – 44 species, rose family – 38 species, fabaceous family – 36 species.

The reserve has more than 20 species of rare or narrow habitat. Two of them are included in the Red Book of Russia: Chinese triborodnik (*Tripogon chimensis* (Franchet) Hackel) and a narrow leaved asparagus (*Asparagus brachyphyllus* Turcz). Most of the rest are included in the Red Book of Chita Region. Among the species with a special conservation status relicts and endemics of Central Asia prevail. The crossing of different habitats is typical for the reserve's flora: South-Siberian and Mongolian (64 species), Eurasian (48 species), Central-Asian (43 species), Mandjurian-Daurian (42 species), East Asian (38 species) and circumpolar (35 species) habitats. There are steppe, meadow, saline, water and shrubby types of communities, with tansy steppes (a sort of meadow steppes) as endemic for Transbaikalia. Dauria's distinctive feature is a wide spread of crushed stone soils on gentle slopes, ridge tops and placoras, which makes it possible for hemypetrophic variants of steppes to develop among terrain's elements that are unusual for them.

Fauna: There are 4 fish species, 3 amphibian species, 3 reptile species 317 bird species and 48 mammalian species, more than 800 insect species in the reserve's fauna. The fauna of invertebrates is still poorly understood.

JUSTIFICATION OF “OUTSTANDING UNIVERSAL VALUE”

The Torey lakes with the adjacent steppe areas are one of the key nature complexes of “Dauria's steppe” bioregion, marked by WWF as one of 200 most important bioregions in the world.

The Torey lakes are the narrow spot (“bottle neck”) of the largest East-Australian flyway of waterfowl and passerine birds. The lakes are included in the list of water and marshlands of international value, they are recognized as a key ornithological territory in Asia. A total number of birds migrating across the Torey hollow is by preliminary estimate no less than three million birds in spring and no less than 6 million birds in autumn. The location of the reserve on one of continental flyways as well as the diversity of habitat conditions determines both ornithofauna diversity (there are 317 species of birds, 150 of them nesting, 123 – flying by and wintering, 44 – flying in and out, spotted in the territory) and a unique quantity and set of rare bird species. In Daurian reserve there are 6 globally vulnerable to extinction species of birds, three species are close to globally vulnerable ones, 20 are included in the Red Book of IUCN and 30 – in the Red Book of Russia. The Torey lakes and adjacent steppe territories of the Torey hollow are of vitally importance for world populations of the whole series of species including those under the threat of distinction (Relict Gull (*Larus relictus*), many species of cranes, Great Bustard (*Otis tarda dybowskii*), Swan Goose (*Cygnopsis cygnoides*) and others).

Besides birds, the whole natural spectrum of flora and fauna typical for the given nature-climatic zone is preserved or restored on the protected territory. So the whole complex of typical for Dauria's steppe mammal species can be found in the reserve (48 species). Daurian reserve is the only in Russia place of wintering and reproduction for Mongolian Gazelle. Starting from the winter 1999/2000 from 1.2 up to 4.1 thousand birds of a large migrating population that spends most of the year in Mongolia pass winter in the reserve limits. In some periods the number of Mongolian Gazelles amounts to 10-12 thousands.

The Torey lakes themselves are of scientific interest as unique nature phenomena. The hydrological regime of lakes is unsteady: during 30-60 years the stage of maximum filling changes into almost absolute drying up. The reasons for such changes as well as their actual periodicity are still a scientific mystery. According to the hydrological stages of lakes there is a complete change of biocenoses in a huge area: the growth, species set and quantity of birds and mammals are changing. Nature phenomena of such sort are unique nature laboratories and they can give precious scientific information about the habitat change and the mechanisms of adaptation to new conditions.

- Criteria met:

N (iv)

N (ii)

- Assurances of authenticity or integrity:

The whole natural spectrum of flora and fauna typical for the given nature-climatic zone is preserved or restored on the nominated territory; the whole complex of mammal species characteristic for Dauria's steppes and almost all types of vegetable communities, typical for the region, with the historically formed set of plant and animal species can be found there.

The territory of the biosphere reserve "Daursky" and a surrounding buffer zone is an integrated environmental territory with a strict protection regime. Thus the territory and function integrity of the whole nature complex is achieved on a considerable area.

- Comparison with other similar properties:

The Torey lakes are unrivalled in East Asia for the collection and number of rare and threatened species as well as their abundance. Some of these species can also be found on the lake Dalaynor in a contiguous part of China, and the quantity of some species, Swan Goose, for example, can be larger than on the Torey lakes. However, a variety and a number of nesting species there are much poorer. Steppe habitats surrounding the Dalaynor Lake experience considerable anthropogenic impact and lost their former importance.

Ornithological significance of this territory on a world scale is not only in a unique complex of nesting species but also in the fact that the Torey hollow is one of the most important in East Asia places of concentration during the period of waterfowl migration. An important intercontinental branch of East Asian-Australian flyway crosses the area.

The shallow character of the Torey lakes (4-7 metres are the maximum depths during the full-water stage) together with a large area, indented shore line and more than 10 islands distinguish them from the majority of lakes in Asia similar in size.