

Tentative List

Name of country: Russian Federation

List drawn up by: Ministry of Natural Resources of the RF

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NAME OF PROPERTY GEOGRAPHICAL LOCATION

Magadansky State Nature Reserve

The Reserve is located in the south-eastern part of the Magadan Region, near the northern coast of the Okhotsk Sea. The Reserve consists of 4 clusters: Kava-Chelomdjinsky, Olsky, Yamsky and Seimchansky. All clusters are separated and removed from the Office of the Reserve (located in Magadan) at 100-600 km.

The clusters have the following average coordinates:

- Kava-Chelomdjinsky cluster: 146°50'E, 60°10'N
- Olsky cluster (Koni peninsula): 151°30'E, 59°N
- Yamsky cluster: 155°20'E, 59°20'N (marine part), 153°30'E, 59°45'N (coastal part)
- Seimchansky cluster: 153°E, 63°50' N

The area of the Reserve (the territory, proposed for the inscription on the WH List) is 883 817 ha.

DESCRIPTION

All 4 clusters of Magadansky Reserve are separated from each other, rather hard-to-reach and have no settlements or constant transport roads. Each cluster has its own distinctive features in locality appearance, climate conditions, composition of flora and fauna.

Clusters of the Magadansky Reserve are located within the Northern Far East mainland mountain and upland physical-geographical province. Among them emerges the Okhotsko-Kolymskoye highland standing on the watershed between Kolyma basin (Arctic basin) and rivers falling into the Okhotsk Sea. From the west the area is adjoined by the south-eastern edge of Cherskogo mountain system and a line of intermountain areas the most noteworthy of which is Seimchano-Buyundinskaya.

The Reserve's area is situated in the zone of moderate and sub-polar climate characterized by cold long winter and cool short summer. The vegetation period is not enough provided by heat, typical are summer frosts and uneven humidification.

All landscape-vegetation groups of the south of the Magadan Region are presented at the Reserve. According to the latest data, at the area of three near-Okhotsk clusters were noted 638 species of higher vascular plants. At floristically poor Seimchansky cluster grow 236 plant species, but the share of continental species absent at other clusters is high here. The most significant features of each cluster from the conservational point of view:

Yamsky coastal cluster – features the disjunctively located part of Siberian spruce areal on the north-eastern edge of its distribution. The cluster is distinguished by the high biodiversity and the abundance of relic dark-coniferous plant species. In river-bed of Yama form the breeding grounds of the Far East salmon.

Yamsky marine cluster – features the peculiar vegetation of the bird bazaars of Yamsky islands which had apparently been formed as the result of long-time interaction of birds and coastal vegetation.

Kava-Chelomdjinsky cluster – except its vast area and great diversity of vegetation types, is unique by its species composition and wetland complex typology. A line of species on their eastern edge of areal grows here. The silversides breeding grounds in the flood-lands of river Chelomdzha are the largest and the most genetically valuable compared to those remained in Asia and North America.

Olsky cluster – has one of the richest specific flora of the northern Far East with great number of endemics of the different floristic regions and relics of different age and genesis. The peninsula is an intersection spot of arctic and arctic-alpine species' southern migration routes and routes of Far East species moving to the north.

Seimchansky cluster – is the only continental cluster with the composite flood plain structure and rich and diverse wetland and flood plain vegetation. It is peculiar by many species common in the Pacific found in its inland flood plain forests as relics.

In rivers and lakes of the Reserve are met 32 fish species. The most numerous are migrating salmon – humpback salmon, chum salmon, silver salmon (*Onchoryncus gorbusha*, *O. keta*, *O. kisutch*); separate specimen of quinnat and blue-back salmon (*O. tshawytscha*, *O. nerka*) are met. In rivers and lakes of the Seimchansky cluster are common: Arctic grayling, whitefish, *Brachymystax lenok*, *Coregonus cylinotracheous*, pike, perch and burbot.

Avifauna of the Reserve is representative for the Okhotsk-Kolyma area. Avifauna list includes 173 species, 150 of which are nesting, the others are noted on passage.

40 species of terrestrial and 8 species of marine mammals have been registered within the Reserve. Most common are *Sorex caecutiens* and *Sorex daphaenodon*, northern redbacked vole, chipmunk, pika, blue hare, brown bear, fox, sable, ermine, mink, locally – elk and bighorn sheep. At all clusters are met, but less typical are: red and Russian flying squirrels, root vole, weasel, glutton. Lynx is rarely met.

JUSTIFICATION OF “OUTSTANDING UNIVERSAL VALUE”

- Criteria met:

N (i)

Koni peninsula glacier forms have been inscribed onto the Register of World Geological Heritage. Alluvial river valleys of the Reserve are characterized by high sedimentation and powerful talik zone development.

Insular or continuous permafrost with the connected hydrological, relief and soil genesis is developed at the plain areas. Watching the course of these processes on the periphery of continuous permafrost spreading may play an important role in estimation of the climate change consequences.

N (iv)

The major part of Northern Far East taiga biodiversity is conserved within the Magadansky Reserve. At the vast area between Lena river and the Okhotsk Sea there is no other protected area of federal level. Here is presented the whole transition gradient from ultracontinental to oceanic conditions, and also the whole spectrum of altitude zonality typical for North-East of Russia. Concerning flora, only at the Koni peninsula was noted up to $\frac{3}{4}$ of the whole floristic diversity of North Okhotia.

- Highly productive flood plain communities are protected at Kava-Chelomdjinsky, Yamsky and Seimchansky clusters. Outlined by mountain taiga, lakes and bogs, deciduous flood plains of Okhotsko-Kolymsky area, exist indigenous oasis of diversity and abundance of flora and fauna. Along salmon river valleys lay migration routes of fish and bird species. In beds of river network form reproduction hearths of the Far East salmons, loaches and diverse aquatic species. Silver salmon spawning grounds at Chelomdja and Yama rivers are probably the largest and genetically sound of all the remained in Asia and North America.
- At Yamsky islands are located the largest Asian Pacific sea bird colonies. The population size of crested auk, least auk and fulmar is especially high. In the Odyan bay near Pjagina peninsula exists the largest hearth of endemic marbled murrelet (*Brachyramphus marmoratum*). At the Pjagina peninsula coasts nests another endemic of the Northern Pacific – the kittlitz murrelet (*Brachyramphus breviroste*). A line of nesting bird species have been ascribed to globally threatened and inscribed on the Threatened birds of Asia List and into the Red Book of Russia. These are species like *Haliaeetus pelagicus*, white-tailed eagle, osprey, jer-falcon, fish owl and eagle owl. In the river Kava middle-stream is located the southern nesting spot of the white-fronted goose;
- At the largest of Yamsky islands (Motykil) lays the northern Okhotsk reproductive otary rookery;
- In the river Yama valley exists the spruce (*Picea obovata*) relic growth hearth.

N (iii)

Each of the four clusters of the Reserve has objects which are highly attractive from the aesthetic point of view: glacier corries and lakes of Koni peninsula, rocky shores and reefs of Pjagina and Koni peninsulas, peculiar outlines of Yamsky islands, plain landscapes of the Kava-Chelomdjinsky and Yamsky clusters, Kolyma river with the sharp line between the “green corridor” of its flood plain and landscapes of mountain outlines.

- Assurances of authenticity or integrity:

Despite the remoteness of its clusters, the Magadansky Reserve presents the united natural complex with its components indissolubly tied with each other by the common origin and the dynamics of natural development. Each cluster is an integrated preserved area which has never experienced influence of human management activity.

Size of clusters (from 38 096 ha till 624 456 ha) is quite enough for supporting the existence and functions of typical natural complexes of North-East Asia. The Reserve’s area serves not only as a refuge for rare, endemic and relic species, but also as a hearth of reproduction of species having an ecosystem or management value. With the status of the State Nature Reserve – the highest conservation status in Russia, - the area of the Magadansky Reserve provides conservation and natural reproduction of separate biological species and the whole ecosystems.

- Comparison with other similar properties:

The nominated site “Magadansky Reserve” represents the unique biosphere plot with the transition from the continent to the ocean shelf which, together with geological history, defines many of its natural and climatic features. Here are noted:

- exceptionally high productivity of coastal marine ecosystems;
- indigenous landscapes of North-East Asia which are not specially protected nowhere else (insular forests of alluvial flood plains, continental mountain taiga, Bering cedar tundra, alpine tundra);
- indigenous flora and vegetation (relic spruce and aspen growth spots, mixed spruce and Erman’s

- birch forests, hearths of floristic diversity and endemism of North-East Asia (prominent, magadania, - *Gorodkovia jacutica*, *Salix Khokhriakovii*, etc.); interpenetration of Asian-Bering and East-Siberian flora;
- unique diversity and abundance of avifauna (nestings of globally threatened species, significant number of species inscribed into the Red Book of Russia, flight stops of arctic migrants, the largest colonies of sea birds);
 - ecosystems of salmon rivers of North-Okhotsk macroslope with the largest spawning grounds of the Far East salmon;
 - the unique cold-resistant invertebrate fauna.

It is important to note that relatively isolated location of North-East Asia during glacial period, fast elevation of mountain structures and extremely harsh climatic conditions led to formation of few very indigenous biotas which have no analogues neither in West Palearctic, nor in North America. They are fully enough presented in the Kolyma basin and in North Okhotia. Such are continental sparse larch forests, Bering cedar tundra, alpine and sub-alpine landscapes of the Kolymskoye highland, mixed Erman's birch forests of the Okhotsk coast, deciduous forests of pluvial valleys.