

## Appendix 2. Species of fish that appear in the Mongolian Red Book

	Scientific name
1.	<i>Acipenser baeri baicalensis</i>
2.	<i>A. schrenckii</i>
3.	<i>Tinca tinca</i>
4.	<i>Mesocottus haitej</i>
5.	<i>Coregonus autumnalis migratorius</i>
6.	<i>Lampetra japonica</i>
7.	<i>Camporoides daurica</i>
8.	<i>Leander modestus</i>
9.	<i>Dahurinaia dahurica</i>
10.	<i>Cristaria plicata</i>
11.	<i>Anodonta sedakovi</i>
12.	<i>Middendorffinaia mongolica</i>

**Appendix 3.** The potential range, area of potential protection, and percentage of range potentially protected with current protected areas for species classified as legally as very rare or rare, in the Mongolian Red Book, Threatened by IUCN and listed in CITES Appendices I or II.

CLASS	NAME	POTENTIAL RANGE (10 <sup>6</sup> ha)	POTENTIAL PROTECTION (10 <sup>6</sup> ha)	%	LEGAL	REDBOO K	IUCN	CITES
Amphibia	<i>Salamandrella keyserlingii</i>	74.00	3.02	4.08		Y		
Amphibia	<i>Bufo damaensis</i>	26.07	0.69	2.64		Y		
Amphibia	<i>Hyla japonica</i>	26.07	0.69	2.64		Y		
Amphibia	<i>Rana chensinensis</i>	55.30	1.27	2.29		Y		
Reptilia	<i>Phrynocephalus helioscopus</i>	35.36	7.60	21.49		Y		
Reptilia	<i>Cyrtopodion elongatus</i>	35.36	7.60	21.49		Y		
Reptilia	<i>Eremias arguta</i>	35.36	7.60	21.49		Y		
Reptilia	<i>Eryx tataricus</i>	35.36	7.60	21.49		Y		
Reptilia	<i>Coluber spinalis</i>	64.54	1.61	2.49		Y		II
Aves	<i>Pelecanus crispus</i>	27.24	0.79	2.90	R	Y	V	I
Aves	<i>Botaurus stellaris</i>	45.42	2.22	4.89	R			
Aves	<i>Casmerodus albus</i>	48.76	1.55	3.18	R	Y		
Aves	<i>Platalea leucorodia</i>	61.97	3.18	5.13	R	Y		II
Aves	<i>Ciconia boyciana</i>	1.01	0.35	34.47	R	Y	E	I
Aves	<i>Ciconia nigra</i>	129.21	6.48	5.01	R	Y		II
Aves	<i>Cygnus olor</i>	6.11	0.58	9.49	R	Y		
Aves	<i>Cygnus cygnus</i>	136.25	11.88	8.72	VR	Y		
Aves	<i>Cygnus columbianus</i>	78.16	3.79	4.85	R			
Aves	<i>Anser albifrons</i>	20.11	1.63	8.10	R			
Aves	<i>Anas formosa</i>	64.96	3.19	4.90	R	Y	V	
Aves	<i>Aythya baeri</i>	1.19	0.54	45.41	R	Y	V	
Aves	<i>Oxyura leucocephala</i>	6.11	0.58	9.49	R	Y	V	
Aves	<i>Pandion haliaetus</i>	63.93	5.83	9.12		Y		
Aves	<i>Pernis ptilorhynchos</i>	26.88	1.78	6.62				
Aves	<i>Milvus migrans</i>	155.23	12.59	8.11				II

Aves	<i>Circus cyaneus</i>	95.73	7.61	7.95			II
Aves	<i>Circus melanoleucus</i>	58.50	6.68	11.42			II
Aves	<i>Accipiter gentilis</i>	89.69	4.33	4.82			II
Aves	<i>Accipiter gularis</i>	92.71	9.29	10.02			II
Aves	<i>Accipiter nisus</i>	131.25	10.74	8.18			II
Aves	<i>Buteo lagopus</i>	18.11	2.18	12.01			II
Aves	<i>Buteo rufinus</i>	27.31	0.79	2.89			II
Aves	<i>Buteo hemilasius</i>	155.23	12.59	8.11			II
Aves	<i>Aquila clanga</i>	39.16	4.41	11.25			II
Aves	<i>Aquila chrysaetos</i>	155.23	12.59	8.11			II
Aves	<i>Aquila heliaca</i>	51.19	1.80	3.52		R	I
Aves	<i>Circaetus gallicus</i>	12.01	1.60	13.29			II
Aves	<i>Hieraaetus pennatus</i>	60.74	5.84	9.61			II
Aves	<i>Falco naumanni</i>	155.23	12.59	8.11		R	II
Aves	<i>Falco tinninculus</i>	155.23	12.59	8.11			II
Aves	<i>Falco columbarius</i>	143.86	7.90	5.49			II
Aves	<i>Falco amurensis</i>	83.59	3.75	4.48	R		II
Aves	<i>Falco vespertinus</i>	17.86	2.24	12.52	R		II
Aves	<i>Falco subbuteo</i>	140.01	12.42	8.87			II
Aves	<i>Falco cherrug</i>	155.23	12.59	8.11			II
Aves	<i>Falco pelegrinoides</i>	6.11	0.58	9.49			II
Aves	<i>Tenrecogallus albigularis</i>	64.34	8.82	13.71	R	Y	
Aves	<i>Phasianus colchicus</i>	25.16	3.36	13.34	VR	Y	
Aves	<i>Grus japonensis</i>	1.19	0.54	45.41		V	I
Aves	<i>Grus leucogeranus</i>	40.09	0.56	1.40	VR	Y	V
Aves	<i>Otis tarda</i>	94.89	9.15	9.64	R	Y	II
Aves	<i>Larus ichthyaetus</i>	32.51	3.65	11.22		Y	
Aves	<i>Larus relictus</i>	94.88	9.10	9.59		Y	R
Aves	<i>Streptopelia tutur</i>	33.38	6.41	19.21	R		
Aves	<i>Bubo bubo</i>	155.23	12.59	8.11			II
Aves	<i>Surnia ulula</i>	54.21	3.53	6.51			II
Aves	<i>Glaucidium passerinum</i>	21.74	2.97	13.66			II

Aves	<i>Athene noctua</i>	155.23	12.59	8.11			II
Aves	<i>Strix uralensis</i>	79.69	5.77	7.24			II
Aves	<i>Strix nebulosa</i>	20.55	2.43	11.82			II
Aves	<i>Asio otus</i>	110.57	11.53	10.43			II
Aves	<i>Asio flammeus</i>	79.69	5.77	7.24			II
Aves	<i>Aegolius funereus</i>	49.40	3.53	7.15			II
Aves	<i>Saxicola insignis</i>	55.80	7.99	14.32	Y		
Aves	<i>Remiz pendulinus</i>	100.87	9.07	8.99	Y		
Mammalia	<i>Spermophilus alaschanicus</i>	4.81	1.34	27.79	R	Y	
Mammalia	<i>Castor fiber</i>	2.56	0.41	15.97	VR	Y	
Mammalia	<i>Dryomys nitedula</i>	9.10	0.48	5.31	Y		
Mammalia	<i>Meriones tamariscinus</i>	50.92	6.63	13.03	Y		
Mammalia	<i>Sapindogonus kozlovi</i>	1.80	0.47	26.29	Y		
Mammalia	<i>Salpingotus crassicauda</i>	2.56	0.41	15.97	Y		
Mammalia	<i>Cardiocranus paradoxus</i>	22.56	1.92	8.53	Y		
Mammalia	<i>Lynx lynx</i>	34.10	6.02	17.66	R		II
Mammalia	<i>Otocolobus manul (Felis manul)</i>	73.65	1.98	2.68		K	II
Mammalia	<i>Felis silvestris</i>	13.66	0.41	3.00	R		II
Mammalia	<i>Uncia uncia (Panthera uncia)</i>	28.74	5.83	20.28	VR	Y	I
Mammalia	<i>Ursus arctos</i>	25.63	2.64	10.1			
Mammalia	<i>Ursus arctos priuinosus</i>	7.72	4.69	60.79	VR	Y	I
Mammalia	<i>Canis lupus</i>	155.23	12.59	8.11			II
Mammalia	<i>Vulpes corsac</i>	107.81	3.92	3.64		K	
Mammalia	<i>Cyon alpinus</i>	17.80	2.91	16.34	VR	Y	II
Mammalia	<i>Lutra lutra</i>	3.26	0.54	16.61	VR	Y	I
Mammalia	<i>Gulo gulo</i>	18.30	2.43	13.27		V	
Mammalia	<i>Martes foina</i>	40.74	3.61	8.87	R		
Mammalia	<i>Vormela peregusna</i>	54.41	6.61	12.15	R	Y	
Mammalia	<i>Equus hemionus</i>	7.80	3.77	48.34	R	Y	V
Mammalia	<i>Equus przewalskii</i>	23.04	5.11	22.16	VR	Y	I
Mammalia	<i>Camelus ferus</i>	14.65	5.17	35.27	VR	Y	V
Mammalia	<i>Sus scrofa nigriceps</i>	76.20	8.52	11.18	R	Y	

## **Activities Prohibited and Permitted within Protected Area Zones**

Prohibited Activity	Conditional Activity	Permitted Activity	Unclear in Env. Law
✗	✗	✗	✗

### **Strictly Protected Areas**

Pristine Zone
Conservation Zone
Limited Use Zone
<b>National Conservation Parks</b>
Special Zone
Travel and Tourism Zone
Limited Use Zone
<b>Peripheral Zones</b>
Buffers around SPAs and NCPs
<b>Nature Reserves</b>
Ecological Reserve
Biological Reserve
Paleontological Reserve
Geological Reserve
<b>Monuments</b>
Natural Monument
Historical and Cultural Monument
<b>Strict Zone Forests</b>
Sub-Alpine Forest
<b>Protected Zone Forests</b>
Green Zone
Prohibited Strip
Locally Protected Forest Zone
<b>Natural Plant Zones</b>
Green Zone
Riparian Zone
Oasis
Very Rare Animal Habitat
Area w/ Degraded Plant Cover
Area w/ Very Rare Plants
Sand Movement Protected Zone
Soil Erosion Protected Strip
<b>Water Zones</b>
Protected Zone
Sanitary Zone
Community Protection Zone

**Activities Prohibited  
and Permitted within  
Protected Area Zones**

		Prohibited Activity	Conditional Activity	Permitted Activity	Unclear in Env. Law
<b>Other Land Uses</b>					
Plowing					
Use of Explosives					
Exploration of Natural Resources					
Extract Sand and Stone					
Tourism					
Construction of Tourism Facilities					
Photos and Videos					
Mountain and Ovoo Worship					
Other Traditional Ceremonies					
Temporary Residence					
Construction of Roads					
Construction of Buildings					
Maintain Public Sport Fields					
Traditional Household Activities					
Traditional Livestock Husbandry					
Use of Hayfields					
Town Development					
Extension of Settled Areas					
Fence Construction					
Emergency Landing of Aircraft					
Flying Aircraft at a Low Altitude					
Soil Restoration					
<b>Strictly Protected Areas</b>					
Pristine Zone					
Conservation Zone					
Limited Use Zone					
<b>National Conservation Parks</b>					
Special Zone					
Travel and Tourism Zone					
Limited Use Zone					
<b>Peripheral Zones</b>					
Buffers around SPAs and NCPs					
<b>Nature Reserves</b>					
Ecological Reserve					
Biological Reserve					
Paleontological Reserve					
Geological Reserve					
<b>Monuments</b>					
Natural Monument					
Historical and Cultural Monument					
<b>Strict Zone Forests</b>					
Sub-Alpine Forest					
<b>Protected Zone Forests</b>					
Green Zone					
Prohibited Strip					
Locally Protected Forest Zone					
<b>Natural Plant Zones</b>					
Green Zone					
Riparian Zone					
Oasis					
Very Rare Animal Habitat					
Area w/ Degraded Plant Cover					
Area w/ Very Rare Plants					
Sand Movement Protected Zone					
Soil Erosion Protected Strip					
<b>Water Zones</b>					
Protected Zone					
Sanitary Zone					
Community Protection Zone					

## **Activities Prohibited and Permitted within Protected Area Zones**

**Activities Prohibited  
and Permitted within  
Protected Area Zones**

Prohibited Activity	████
Conditional Activity	██████
Permitted Activity	██████

Unclear in Env Law

**Water - cont'd**

Permanently Alter Natural River Channel

**Wildlife**

Hunt/Trap for Scientific Purposes

Hunt/Trap Very Rare Animals

Hunt/Trap for Cultural and Artistic Purposes

Hunt/Trap Rare Animals

Hunt/Trap for Household Purposes

Hunt/Trap for Commercial Purposes

Commercial Hunting by Foreigners

Disturb or Destroy Nests/Burrows/Dens

Hunt Helpless Animals During Natural Disasters

Hunt from a Vehicle

Hunt/Trap Newborn Animals

Hunt/Trap Migrating Animals

Hunt/Trap Animals on way to Water/Salt Licks

Shoot/Trap Unidentified Animals

Place Traps/Pits on Animal Paths

Use of Chemicals/Explosives/Smoke/Lights

Collect or Damage Bird Eggs

Use Guns Not Designed for Hunting

Fishing

Fauna Habitat Enhancement

Wildlife Surveys

**Strictly Protected Areas**

Pristine Zone

Conservation Zone

Limited Use Zone

**National Conservation Parks**

Special Zone

Travel and Tourism Zone

Limited Use Zone

**Peripheral Zones**

Buffers around SPAs and NCPs

**Nature Reserves**

Ecological Reserve

Biological Reserve

Paleontological Reserve

Geological Reserve

**Monuments**

Natural Monument

Historical and Cultural Monument

**Strict Zone Forests**

Sub-Alpine Forest

**Protected Zone Forests**

Green Zone

Prohibited Strip

Locally Protected Forest Zone

**Natural Plant Zones**

Green Zone

Riparian Zone

Oasis

Very Rare Animal Habitat

Area w/ Degraded Plant Cover

Area w/ Very Rare Plants

Sand Movement Protected Zone

Soil Erosion Protected Strip

**Water Zones**

Protected Zone

Sanitary Zone

Community Protection Zone

## **Appendix 5. List of references, documents and atlas used for preparing the BAP.**

- A world list of mammalian species. Corbet and Hill, Oxford University Press, 1991
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**Appendix 6. List of animal species classified as very rare, and rare under the Mongolian Law on Hunting**

**1. Very Rare Species**

**Mammals**

	<b>English name</b>	<b>Scientific name</b>
1.	Przewalskii horse	<i>Equus przewalskii</i>
2.	Bactrian camel	<i>Camelus ferus</i>
3.	Gobi bear	<i>Ursus arctos</i>
4.	moose	<i>Alces alces cameloides</i>
5.	reindeer	<i>Rangifer tarandus</i>
6.	musk deer	<i>Moschus moschiferus</i>
7.	beaver	<i>Castor fiber</i>
8.	Eurasian otter	<i>Lutra lutra</i>
9.	snow leopard	<i>Uncia uncia</i>
10.	Asiatic wild dog	<i>Cuon alpinus</i>
11.	saiga antelope	<i>Saiga tatarica</i>

**Birds**

	<b>English name</b>	<b>Scientific name</b>
1.	houbara bustard	<i>Chlamydotis undulata</i>
2.	whooper swan	<i>Cygnus cygnus</i>
3.	whitenaped crane	<i>Grus vipio</i>
4.	ring-necked pheasant	<i>Phasianus colchicus</i>
5.	hooded crane	<i>Grus monacha</i>
6.	Siberian crane	<i>Grus leucogeranus</i>

**Fish**

	<b>English name</b>	<b>Scientific name</b>
1.	Amur sturgeon	<i>Acipenser schrenki</i>
2.	Siberian sturgeon	<i>Acipenser baeri</i>

**2. Rare species**

**Mammals**

	<b>English name</b>	<b>Scientific name</b>
1.	argali	<i>Ovis ammon</i>
2.	Siberian ibex	<i>Capra sibirica</i>
3.	Asiatic wild ass	<i>Equus hemionus</i>

4.	goitered gazelle	<i>Gazella subgutturosa</i>
5.	elk (red deer)	<i>Cervus elaphus</i>
6.	moose	<i>Alces alces pfizenmayeri</i>
7.	wild boar	<i>Sus scrofa</i>
8.	Eurasian lynx	<i>Lynx lynx</i>
9.	beech marten	<i>Martes foina</i>
10.	European wild cat	<i>Felis silvestris</i>
11.	marbled polecat	<i>Vormela peregusna</i>
12.	ground squirrel	<i>Citellus spermophilus</i>

### **Birds**

	<b>English name</b>	<b>Scientific name</b>
1.	Altai snowcock	<i>Tetraogallus altaicus</i>
2.	pied goose	<i>Anser albifrons</i>
3.	swan goose	<i>Anser cygnoides</i>
4.	barheaded goose	<i>Anser indicus</i>
5.	mute swan	<i>Cygnus olor</i>
6.	Bewick's swan	<i>Cygnus columbianas</i>
7.	Baikal teal	<i>Anas formosa</i>
8.	Baer's pochard	<i>Aythya baeri</i>
	mandarin duck	<i>Aix galericulata</i>
10.	white-headed duck	<i>Oxyura leucocephala</i>
11.	Eurasian bittern	<i>Botaurus stellaris</i>
12.	great white egret	<i>Casmerodius albus</i>
13.	Eurasian spoonbill	<i>Platalea leucorodia</i>
14.	Oriental white stork	<i>Ciconia boyciana</i>
15.	black stork	<i>Ciconia nigra</i>
16.	great bustard	<i>Otis tarda</i>
17.	Asiatic dowitcher	<i>Limnodromus semipalmatus</i>
18.	black-winged stilt	<i>Himantopus himantopus</i>
19.	European turtle dove	<i>Streptopelia turtur</i>
20.	red-footed falcon	<i>Falco vespertinus</i>
21.	Amur falcon	<i>Falco amurensis</i>
22.	Dalmatian pelican	<i>Pelecanus crispus</i>

### **Fish**

	<b>English name</b>	<b>Scientific name</b>
1.	grass carp	<i>Ctenopharyngodon idella</i>
2.	silver carp	<i>Hyophthalmichthys molitrix</i>
3.	tench	<i>Tinca tinca</i>

## Appendix 7 List of plant species classified as very rare and rare under the Mongolian Law on Natural Plants

### a) Very rare plants

<i>Arnica iljinii</i>	<i>Cyripedium macranthum</i>
<i>Abies sibirica</i>	* <i>Dasiphora lactiflora</i>
<i>Aconitum kusnezoffi</i>	<i>Dictamnus dasycarpus</i>
<i>Acorus calamus</i>	<i>Drosera anglica</i>
<i>Adonis mongolica</i>	<i>Drosera rotundifolia</i>
<i>Allium macrostemon</i>	<i>Dryopteris dilatata</i>
<i>Allium obliquum</i>	<i>Elaeagnus moorcroftii</i>
<i>Ammopiptanthus mongolicus</i>	<i>Ephedra equisetina</i>
<i>Anabasis aphylla</i>	<i>Ephedra fedtschenkoae</i>
<i>Anabasis eripoda</i>	<i>Epipogon aphyllum</i>
<i>Androsace longifolia</i>	<i>Ferula ferulaeodes</i>
<i>Anenarrhena asphodeloides</i>	<i>Gagea hiensis</i>
<i>anemarrhena</i>	<i>Gentiana macrophylla</i>
* <i>Aquilegia ganboldii</i>	<i>Gentiana pulmonaria</i>
<i>Arnebia guttata</i>	* <i>Glycyrrhiza squamulosa</i>
<i>Artemisia leucophylla</i>	<i>Gueldenstaedtia monophyla</i>
* <i>Artemisia tomentella</i>	<i>Gymnocarpos przewalskii</i>
<i>Artemisia xanthochroa</i>	<i>Halimodendron halodendron</i>
* <i>Asperula osculenta</i>	<i>Hedysarum fruticosum</i>
<i>Asterothamnus centrali-asiaticus</i>	<i>Hedysarum sangilense</i>
<i>Biebersteinia odora</i>	<i>Helicrysum arenarium</i>
<i>Botrychium lanceolatum</i>	<i>Iljinia regelii</i>
<i>Brachanthemum gobicum</i>	<i>Incarvillea potaninii</i>
<i>Brachanthemum mongolorum</i>	<i>Juniperus sabina</i>
<i>Calypso bulbosa</i>	<i>Jurinea mongolica</i>
<i>Cardamine parviflora</i>	<i>Lancea tibetica</i>
<i>Caragana brachypoda</i>	<i>Lilium martagon</i>
<i>Caragana gobica</i>	* <i>Lilium pensylvanicum</i>
<i>Caragana tibetica</i>	<i>Limonium aureum</i>
<i>Centaurea pulchella</i>	<i>Lycopodium alpinum</i>
<i>Chesneya mongolica</i>	<i>Lycopodium clavatum</i>
<i>Chrysanthemum sinuatum</i>	<i>Maianthemum dilatatum</i>
* <i>Cistanche deserticolla</i>	<i>Malva mauritiana</i>
<i>Clematis glauca</i>	<i>Mitella nuda</i>
* <i>Codonopsis clematidea</i>	* <i>Nematonostoc flagelliforme</i>
<i>Convallaria keiskei</i>	<i>Neottia camtschatea</i>
<i>Corallorrhiza trifida</i>	<i>Neottianthe cucullata</i>
<i>Cyripedium calceolus</i>	<i>Nuphar pumilum</i>

* <i>Nymphaea candida</i>	<i>Rosa kokanica</i>
<i>Olgaea leucophylla</i>	<i>Rosa laxa</i>
<i>Orchis fuchsii</i>	* <i>Sagittaria natans</i>
<i>Orchis militaris</i>	<i>Salvia deserta</i>
<i>Oxycoccus microcarpus</i>	<i>Sambucus manshurica</i>
<i>Oxytropis acanthacea</i>	<i>Sanguisorba alpina</i>
<i>Oxytropis fragilifolia</i>	<i>Saussurea involucrata</i>
<i>Oxytropis Grubovii</i>	<i>Saxifraga hirculus</i>
<i>Paeonia lactiflora</i>	<i>Scheuchzeria palustris</i>
<i>Paris verticillata</i>	<i>Sedum pallescens</i>
<i>Pedicularis abrotanifolia</i>	* <i>Sertia Banzaragczii</i>
<i>Pedicularis altaica</i>	<i>Solidago dahurica</i>
<i>Peganum harmala</i>	<i>Sophora flavescens</i>
<i>Phlomis oreophila</i>	<i>Sorbaria sorbifolia</i>
<i>Physochlaina albiflora</i>	<i>Tofieldia coccinea</i>
<i>Plantanthera bifolia</i>	* <i>Trollius sajanense</i>
<i>Polygonatum humile</i>	<i>Tugarinovia mongolica</i>
<i>Populus diversifolia</i>	<i>Tulipa uniflora</i>
<i>Potaninia mongolica</i>	<i>Typha minima</i>
<i>Rhamnus parvifolia</i>	<i>Vaccinium myrtillus</i>
<i>Rhamnus ussurienis</i>	<i>Valeriana saichanensis</i>
* <i>Rhaponticum carthamoides</i>	* <i>Viburnum mongolicum</i>
<i>Rheum uninerve</i>	<i>Viburnum sargentii</i>
<i>Rhodiola rosea</i>	<i>Vicia tsydenii</i>
<i>Rhododendron adamsii</i>	<i>Vincetoxicum sibiricum</i>
<i>Rhododendron aureum</i>	<i>Viola brachycheras</i>
<i>Rhododendron dahuricum</i>	<i>Zizania latifolia</i>
<i>Rhododendron ledebouri</i>	<i>Zigadenus sibiricus</i>
<i>Rhododendron parvifolium</i>	<i>Zygophyllum potaninii</i>

### b) Rare Plants

<i>Achillea acuminata</i>	<i>Allium maximoviczii</i>
<i>Achillea ledebourii</i>	<i>Anabasis elatior</i>
<i>Achnatherum inebrians</i>	<i>Asparagus oligoclonos</i>
<i>Aconitum anthoroideum</i>	<i>Asperula humifusa</i>
<i>Aconitum komarovii</i>	<i>Asperula saxicola</i>
<i>Agrostemma githago</i>	<i>Asterothamnus molliusculus</i>
<i>Alchemilla cyrtopleura</i>	<i>Astragalus altaicus</i>
<i>Alchemilla krylovii</i>	<i>Astragalus baitagensis</i>
<i>Alchemilla hebescens</i>	<i>Astragalus changaicus</i>
<i>Alchemilla pavlovii</i>	<i>Astragalus granitovii</i>
<i>Allium galanthum</i>	<i>Astragalus gregorii</i>

<i>Astragalus kurtschumensis</i>	<i>Diarthron linifolium</i>
<i>Astragalus physocarpus</i>	<i>Draba altaica</i>
<i>Astragaius scabrisetiformis</i>	<i>Draba multiceps</i>
<i>Astragalus squarrosulus</i>	<i>Draba pygmaea</i>
<i>Astragalus vulpinus</i>	<i>Draba sibirica</i>
<i>Atraphaxis compacta</i>	<i>Echinops nanus</i>
<i>Atraphaxis spinosa</i>	<i>Elymus excelsus</i>
<i>Batrachium kauffmannii</i>	<i>Elymus fedtschenkoi</i>
<i>Batrachium mongolicum</i>	<i>Elymus pamiricus</i>
<i>Brachanthemum mongolicum</i>	<i>Elymus praecaespitosus</i>
<i>Braya siliquosa</i>	<i>Epilobium davuricum</i>
<i>Bunias cochlearioides</i>	<i>Equisetum ramosissimum</i>
<i>Bunium capillifolium</i>	<i>Equisetum variegatum</i>
<i>Butomus junceus</i>	<i>Eragrostis cilianensis</i>
<i>Calamagrostis inexpansa</i>	* <i>Eremogonia androsacea</i>
<i>Calamagrostis turczaninovii</i>	* <i>Eremogonia juncea (arenaria)</i>
<i>Calligonum gobicum</i>	<i>Eremopyrum distans</i>
<i>Calligonum junceum</i>	<i>Eryngium planum</i>
<i>Calystegia hederacea</i>	<i>Festuca litvinovii</i>
<i>Calystegia subvolubilis</i>	<i>Festuca venusta</i>
<i>Camelina microcarpa</i>	<i>Frankenia pulverulenta</i>
<i>Cardamine leucantha</i>	<i>Galatella macrosciadia</i>
<i>Cardamine macrophylla</i>	<i>Galitzkyia macrocarpa</i>
<i>Cardamine trifida</i>	<i>Gentiana riparia</i>
<i>Carex leporina</i>	<i>Gnaphalium supinum</i>
<i>Carpoceras ceratocarpum</i>	<i>Goldbachia ikonnikovii</i>
<i>Cenolophium denudatum</i>	<i>Goldbachia laevigata</i>
<i>Centaurea adpressa</i>	<i>Goniolimon callicomum</i>
<i>Centaurea calva</i>	<i>Gypsophila cephalotes</i>
<i>Chelidonium majus</i>	<i>Halocnemum strobilaceum</i>
<i>Chenopodium chenopodioides</i>	<i>Hedysarum dahuricum</i>
<i>Chenopodium iljinii</i>	<i>Helictotrichon altaicum</i>
<i>Chorispora bungeana</i>	<i>Herniaria glabra</i>
<i>Chrysanthemum chalchingolicum</i>	<i>Hieracium echioides</i>
<i>Chrysosplenium nudicaule</i>	<i>Hordeum bogdanii</i>
<i>Cimicifuga dahurica</i>	<i>Iris halophila</i>
<i>Cirsium pendulum</i>	* <i>Juncellus pannonicus</i>
<i>Clematis aethusifolia</i>	<i>Juncus articulatus</i>
<i>Cleome gobica</i>	<i>Jurinea chaetocarpa</i>
<i>Climacoptera subcrassa</i>	<i>Kalidium caspicum</i>
<i>Crypsis schoenoides</i>	<i>Kobresia robusta</i>
<i>Dianthus hoeltzeri</i>	<i>Lagocheirus bungei</i>
<i>Dianthus soongoricus</i>	<i>Lappula semiglabra</i>
<i>Dianthus superbus</i>	<i>Leonurus panzerioides</i>

<i>Lilium buschianum</i>	<i>Piptatherum songaricum</i>
<i>Lilium potaninii</i>	<i>Pisum arvense</i>
<i>Limonium gobicum</i>	<i>Poa alpina</i>
<i>Limonium grubovii</i>	<i>Poa kenteica</i>
<i>Linaria hepatica</i>	<i>Poa reverdattoi</i>
<i>Linum pallescens</i>	<i>Poa supina</i>
<i>Linum usitatissimum</i>	* <i>Poacynum hendersonii</i>
<i>Lophanthus krylovii</i>	<i>Polygonum dumetorum</i>
<i>Matricaria recutita</i>	<i>Potamogeton lucens</i>
<i>Melandrium mongolicum</i>	<i>Potamogeton natans</i>
<i>Melilotus albus</i>	<i>Potamogeton obtusifolius</i>
<i>Melilotus wolgicus</i>	<i>Potamogeton paelongus</i>
<i>Microstigma junatovii</i>	<i>Potentilla arenosa</i>
<i>Minuartia arctica</i>	<i>Potentilla chrysantha</i>
<i>Minuartia regeliana</i>	<i>Potentilla ikonnikovii</i>
<i>Minuartia stricta</i>	<i>Potentilla imbricata</i>
<i>Moehringia umbrosa</i>	<i>Potentilla norvegica</i>
<i>Moneses uniflora</i>	<i>Potentilla regeliana</i>
<i>Najas marina</i>	<i>Puccinellia przewalskii</i>
<i>Nanophyton erinaceum</i>	<i>Pulicaria prostrata</i>
<i>Nepeta pannonica</i>	<i>Pulsatilla multifida</i>
<i>Nymphaea tetragona</i>	<i>Ranunculus propinquus</i>
* <i>Oenanthe javanica</i>	<i>Rhodiola algida</i>
<i>Onosma transrhytmnense</i>	<i>Ribes fragrans</i>
<i>Oxytropis diantha</i>	<i>Ribes heterotrichum</i>
<i>Oxytropis falcata</i>	* <i>Ribes hispidulum</i>
<i>Oxytropis gorbunovii</i>	<i>Rochelia leiocarpa</i>
<i>Oxytropis komarovii</i>	<i>Rosa albertii</i>
<i>Oxytropis krylovii</i>	<i>Rosa beggeriana</i>
<i>Oxytropis ladyginii</i>	<i>Rosa platyacantha</i>
<i>Oxytropis mongolica</i>	<i>Rumex pseudonatronatus</i>
<i>Oxytropis saposnikovii</i>	<i>Salsola foliosa</i>
<i>Oxytropis sordida</i>	<i>Salsola rosacea</i>
<i>Oxytropis sutaica</i>	<i>Saussurea cathariniae</i>
<i>Oxytropis tenuis</i>	<i>Saussurea foliosa</i>
<i>Paeonia anomala</i>	<i>Saussurea glacialis</i>
<i>Papaver saichanense</i>	<i>Saussurea involucrata</i>
<i>Pedicularis fissa</i>	<i>Saussurea klementzii</i>
<i>Petrosimonia litwinowii</i>	<i>Saussurea latifolia</i>
<i>Petrosimonia sibirica</i>	<i>Schismus arabicus</i>
<i>Peucedanum terebinthaceum</i>	<i>Schizachne callosa</i>
<i>Phleum alpinum</i>	<i>Scolochloa festucacea</i>
<i>Phlomis pratensis</i>	<i>Scirpus radicans</i>
<i>Pinguicula alpina</i>	<i>Scorzonera grubovii</i>

<i>Scorzonera parviflora</i>	<i>Thermopsis hirsutissima</i>
<i>Scutellaria paulsenii</i>	<i>Thermopsis longicarpa</i>
<i>Scutellaria supina</i>	<i>Thymus komarovii</i>
<i>Scutellaria viscidula</i>	<i>Thymus mongolicus</i>
<i>Senecio argunensis</i>	<i>Thymus pavlovii</i>
<i>Setaria glauca</i>	<i>Thymus roseus</i>
<i>Silene iche-bogdae</i>	<i>Tillaea aquatica</i>
<i>Silene mongolica</i>	<i>Torularia grubovii</i>
<i>Sisymbrium loeselii</i>	<i>Tretocarya pratensis</i>
<i>Sisymbrium subspinescens</i>	<i>Trifolium repens</i>
<i>Smelovskia bifurcata</i>	<i>Trollius altaicus</i>
<i>Sophora alopecuroides</i>	<i>Veronica perpusilla</i>
<i>Sparganium glomeratum</i>	<i>Vicia geminiflora</i>
<i>Stellaria media</i>	<i>Vicia japonica</i>
<i>Stellaria pulvinata</i>	<i>Vicia semenovii</i>
<i>Stellaria radians</i>	<i>Vincetoxicum lanceolatum</i>
<i>Stenocoelium athamantoides</i>	<i>Viola acuminata</i>
<i>Stipa consanguinea</i>	<i>Viola brachysepala</i>
<i>Stipa rubens</i>	<i>Viola collina</i>
<i>Strigosella africana</i>	<i>Viola patrinii</i>
<i>Suaeda linifolia</i>	<i>Ziziphora clinopodioides</i>
<i>Synurus deltoides</i>	<i>Zygophyllum gobicum</i>
<i>Tamarix hispida</i>	<i>Zygophyllum kaschgaricum</i>
<i>Tanacetum tanacetoides</i>	<i>Zygophyllum latifolium</i>
<i>Taraxacum armeriifolium</i>	<i>Zygophyllum mucronatum</i>
<i>Tetracme quadricornis</i>	<i>Zygophyllum neglectum</i>
<i>Thermopsis grubovii</i>	* <i>Zygophyllum sianum</i>

\* Scientific name not verified

**Appendix 8.** The potential range, area of potential protection, and percentage of range potentially protected with current and proposed protected areas for species classified as legally very rare or rare, in the Mongolian Red Book, Threatened by IUCN, and in CITES Appendices I or II.

CLASS	NAME	POTENTIAL RANGE (10 <sup>6</sup> ha)	POTENTIAL PROTECTION (10 <sup>6</sup> ha)	%	LEGAL	REDBOOK	IUCN	CITES
Amphibia	<i>Salamandrella keyserlingii</i>	74.00	8.80	11.89	Y			
Amphibia	<i>Bufo damaensis</i>	26.07	2.80	10.73	Y			
Amphibia	<i>Hyla japonica</i>	26.07	2.80	10.73	Y			
Amphibia	<i>Rana chensinensis</i>	55.30	5.18	9.37	Y			
Reptilia	<i>Phrynocephalus helioscopus</i>	35.36	8.18	23.12	Y			
Reptilia	<i>Cyrtopodion elongatus</i>	35.36	8.18	23.12	Y			
Reptilia	<i>Eremias arguta</i>	35.36	8.18	23.12	Y			
Reptilia	<i>Eryx tataricus</i>	35.36	8.18	23.12	Y			II
Reptilia	<i>Coluber spinalis</i>	64.54	6.72	10.41	Y			
Aves	<i>Pelecanus crispus</i>	27.24	2.33	8.55	R	Y	V	I
Aves	<i>Buteo stellaris</i>	45.42	4.91	10.81	R			
Aves	<i>Casmerodus albus</i>	48.76	4.15	8.50	R	Y		
Aves	<i>Platalea leucorodia</i>	61.97	8.35	13.47	R	Y		II
Aves	<i>Ciconia boyciana</i>	1.01	0.35	34.47	R	Y	E	I
Aves	<i>Ciconia nigra</i>	129.21	15.80	12.23	R	Y		II
Aves	<i>Cygnus olor</i>	6.11	0.74	12.07	R	Y		
Aves	<i>Cygnus cygnus</i>	136.25	19.91	14.62	VR	Y		
Aves	<i>Cygnus columbianus</i>	78.16	8.60	11.01	R			
Aves	<i>Anser albifrons</i>	20.11	2.52	12.55	R			
Aves	<i>Anas formosa</i>	64.96	6.91	10.63	R	Y	V	
Aves	<i>Aythya baeri</i>	1.19	0.54	45.41	R	Y	V	
Aves	<i>Oxyura leucocephala</i>	6.11	0.74	12.07	R	Y	V	
Aves	<i>Pandion haliaetus</i>	63.93	10.05	15.71		Y		
Aves	<i>Pernis ptilorhynchos</i>	26.88	4.04	15.05				II
Aves	<i>Milvus migrans</i>	155.23	22.02	14.19				II
Aves	<i>Circus cyaneus</i>	95.73	12.25	12.80				II
Aves	<i>Circus melanoleucus</i>	58.50	8.67	14.82				II
Aves	<i>Accipiter gentilis</i>	89.69	9.76	10.88				II

Aves	<i>Accipiter gentilis</i>	92.71	14.12	15.23		II
Aves	<i>Accipiter nisus</i>	131.25	19.42	14.80		II
Aves	<i>Buteo lagopus</i>	18.11	3.12	17.24		II
Aves	<i>Buteo rufinus</i>	27.31	2.30	8.41		II
Aves	<i>Buteo hemilasius</i>	155.23	22.02	14.19		II
Aves	<i>Aquila clanga</i>	39.16	6.47	16.52		II
Aves	<i>Aquila chrysaetos</i>	155.23	22.02	14.19	R	I
Aves	<i>Aquila heliaca</i>	51.19	4.82	9.41		R
Aves	<i>Circaetus gallicus</i>	12.01	2.39	19.87		II
Aves	<i>Hieraaetus pennatus</i>	60.74	10.11	16.64		II
Aves	<i>Falco naumanni</i>	155.23	22.02	14.19		R
Aves	<i>Falco tinninculus</i>	155.23	22.02	14.19		II
Aves	<i>Falco columbarius</i>	143.86	17.24	11.98		II
Aves	<i>Falco amurensis</i>	83.59	9.02	10.79	R	II
Aves	<i>Falco sparverius</i>	17.86	3.41	19.07	R	II
Aves	<i>Falco subbuteo</i>	140.01	20.49	14.64		II
Aves	<i>Falco cherrug</i>	155.23	22.02	14.19		II
Aves	<i>Falco pelegrinoides</i>	6.11	0.74	12.07		II
Aves	<i>Tetraogallus altaicus</i>	64.34	11.92	18.53	R	Y
Aves	<i>Phasianus colchicus</i>	25.16	4.68	18.62	VR	Y
Aves	<i>Grus japonensis</i>	1.19	0.54	45.41		V
Aves	<i>Grus leucogeranus</i>	40.09	2.89	7.22	VR	V
Aves	<i>Otis tarda</i>	94.89	13.00	13.70	R	Y
Aves	<i>Larus ichthyaetus</i>	32.51	5.55	17.09	Y	R
Aves	<i>Larus relicus</i>	94.88	13.87	14.62	Y	I
Aves	<i>Stercorarius tarturus</i>	33.38	7.09	21.25	R	
Aves	<i>Bubo bubo</i>	155.23	22.02	14.19		II
Aves	<i>Surnia ulula</i>	54.21	6.79	12.52		II
Aves	<i>Glaucidium passerinum</i>	21.74	4.34	19.95		II
Aves	<i>Athene noctua</i>	155.23	22.02	14.19		II
Aves	<i>Strix uralensis</i>	79.69	10.64	13.35		II
Aves	<i>Strix nebulosa</i>	20.55	3.80	18.48		II
Aves	<i>Asio otus</i>	110.57	17.53	15.85		II

Aves	<i>Asio flammeus</i>	79.69	10.64 -	13.35			II
Aves	<i>Aegolius funereus</i>	49.40	6.69	13.55			II
Aves	<i>Saxicola insignis</i>	55.80	10.51	18.84	Y		
Aves	<i>Remiz pendulinus</i>	100.87	13.71	13.59	Y		
Mammalia	<i>Talpa altaica</i>	2.60	0.10	3.74	Y		
Mammalia	<i>Spermophilus alaschanicus</i>	4.81	1.28	26.64	R Y		
Mammalia	<i>Castor fiber</i>	2.56	0.51	20.06	VR Y		
Mammalia	<i>Dryomys nitedula</i>	9.10	1.27	14.01	Y		
Mammalia	<i>Meriones tamariscinus</i>	50.92	9.66	18.97	Y		
Mammalia	<i>Salpingotus kozlovi</i>	1.80	0.07	3.73	Y		
Mammalia	<i>Salpingotus crassicauda</i>	2.56	0.51	20.06	Y		
Mammalia	<i>Cardiococcyx paradoxus</i>	22.56	3.89	17.23	Y		
Mammalia	<i>Lynx lynx</i>	34.10	7.42	21.76	R		II
Mammalia	<i>Otocolobus manul (Panthera uncia)</i>	73.65	7.22	9.81	K	II	
Mammalia	<i>Felis silvestris</i>	13.66	0.96	7.03	R		II
Mammalia	<i>Uncia uncia (Panthera uncia)</i>	28.74	7.41	25.77	VR Y	V	I
Mammalia	<i>Ursus arctos</i>	25.63	4.65	18.14			I
Mammalia	<i>Ursus arctos prinosus</i>	7.72	4.65	60.27	VR Y		I
Mammalia	<i>Canis lupus</i>	155.23	22.02	14.19			II
Mammalia	<i>Vulpes corsac</i>	107.81	11.06	10.26		K	
Mammalia	<i>Cyon alpinus</i>	17.80	3.63	20.39	VR Y	V	II
Mammalia	<i>Lutra lutra</i>	3.26	0.57	17.41	VR Y		I
Mammalia	<i>Gulo gulo</i>	18.30	3.74	20.42		V	
Mammalia	<i>Martes foina</i>	40.74	7.00	17.18	R		
Mammalia	<i>Vormela peregusna</i>	54.41	9.77	17.95	R Y		
Mammalia	<i>Equus hemionus</i>	7.80	3.89	49.87	R Y	V	I
Mammalia	<i>Equus przewalskii</i>	23.04	5.62	24.37	VR Y		I
Mammalia	<i>Camelus ferus</i>	14.65	4.72	32.22	VR Y	V	
Mammalia	<i>Sus scrofa nigripes</i>	76.20	14.55	19.10	R Y		
Mammalia	<i>Moschus moschiferus</i>	17.84	4.03	22.60	VR Y	E II	
Mammalia	<i>Cervus elaphus</i>	51.00	6.90	13.53	R		
Mammalia	<i>Alces alces camelooides</i>	0.18	0.18	100.00	VR Y		
Mammalia	<i>Alces alces pfeffermayeri</i>	16.98	4.01	23.63	R Y		

Mammalia	<i>Rangifer tarandus valentiniæ</i>	4.31	0.09	1.97	VR	Y	
Mammalia	<i>Saiga tatarica</i>	7.80	3.89	49.87	VR	Y	II
Mammalia	<i>Gazelle subgutturosa</i>	29.81	6.33	21.24	R		
Mammalia	<i>Capra sibirica</i>	33.33	4.76	14.27	R		
Mammalia	<i>Ovis ammon</i>	32.08	8.70	27.13	R	Y	II.

V - Vulnerable

E - Endangered

K - Insufficiently known

R - Rare