Summary on Marine and Coastal Protected Areas in NOWPAP Region

(NOWPAP DINRAC, March 2010)

1. Overview

This summary is based on *the Database on Coastal and Marine Nature Reserves in the Northwest Pacific Region* (NowpapNatureReserve, http://dinrac.nowpap.org/NowpapNatureReserve.php) which is developed and maintained by NOWPAP DINRAC. The data was collected and provided by the National Focal Points of DINRAC started from 2006 and updated periodically. The WDPA (World database of protected areas, http://www.wdpa-marine.org), and the Ramsar Sites Database (http://ramsar.wetlands.org) were also taken as reference. The summary intends to give an overview and understanding on current situation of marine and coastal protected areas (MPAs) in NOWPAP region. The MPAs - marine and coastal protected areas comprise the nature reserves, national parks, wetland protected areas (Ramsar Sites) in NOWPAP Region. The sea area mainly covers the Yellow Sea and Eastern Area of NOWPAP region.

Based on the existing data, there are total 87 MPAs in NOWPAP region covers an area of 4,090,046ha (Table 1 to Table 3). The earliest MPA was established in October 1916 and the latest was in August 2007 (Table 4). The smallest area is 10ha in Japan and largest area is 909,000ha in China (Table 5).

Statistics tables and figures below are conducted on number, area, protected level, protected type and protected objectives (species) for MPAs in NOWPAP (Table 6 and Fig.1 to Fig.5). The list (List 1) and the location of the MPAs (Map 1) are listed individually.

2. Statistics

Table 1. Number of MPAs in NOWPAP Region by Country

Country	Total Number	Level			Protected Type		
		National	Provincial	Municipal/ County	Natural ecosystem	Wild animal and plant	Nature heritage
China	20	9	5	6	15	17	17
Japan	31	17	14	0	31	31	20
Korea	22	22	0	0	22	20	13
Russia	14	7	7	0	14	14	7
Region	87	55	26	6	82	82	57

Table 2. Area of MPAs in NOWPAP Region by Country (hectare)

Country	Total Area	Level			Protected Type		
		National	Provincial	Municipal/ County	Natural ecosystem	Wild animal and plant	Nature heritage
China	1367206	1150525	194149	22532	1355210	1343716	1359955
Japan	408737	143945	264792	0	408737	408737	386282
Korea	357333	357333	0	0	357333	353710	333718
Russia	1956770	1121850	834920	0	1956770	1956770	756000
Region	4090046	2773653	1293861	22532	4078050	4062933	2835955

Notes: In Japan, the national park includes several MPAs; the data collected for the area is the total area of the national park, not of the MPAs.

Table 3. Number of Ramsar Site of MPAs in NOWPAP Region

	Ramsar Site Total	Ramsar Site of MPAs in NOWPAP Region
China	6	2
Korea	24	2
Japan	10	12
Russia	5	0
Region	45	16

Table 4. Establishment Data of MPAs in NOWPAP Region

	Title	Site name	Establishment date
The Earliest	Kedrovaja Pad State Nature Biospheric Reserve	Primorsky Kray, Russia	10-1916
The Latest	Tango-Amanohashidate-Oheyama Quasi National Park	Kyoto, Japan	03-08-2007

Table 5. Area of MPAs in NOWPAP Region

	Title	Site name	Area (ha)
The Smallest	Katano-Kamoike Ramsar Site	Ishikawa, Japan	10
The Largest	Dalian Larga Seal National Nature Reserve	Dalian City, Liaoning Province, China	909,000

Table 6. Protected Objects of MPAs in NOWPAP Region

Country	Protected Objects
China	- **Rare and valuable and/or economic seashell, echinoderm, fish and algae** (Haliotis Discus Hannai, Spinose sea-cucumber, Strongylocentrotus Nudus, Burnt-end Ark, Chlamys Farreri, Saxidomus Purpuratus, Red Sea Bream and Greenling etc.) - **Endangered resident and migratory waterfowls** (Whooper Swan, swans, Red -crowned Crane, Saunder's Gull, Siberian Crane, Imperial Eagle, Golden Eagle, Cinerous Vulture etc.) - **Larga seal** - **Chinese Pit-Vipers** - **Coastal physiognomy** (karst landform, marine abrasion landform, island reef landform etc.) - **Coastal landscape** - **Paleo-biologic fossil, ramous stone in Sinian Period and Cambrian** - **Rare terrestrial plants** - **The habitat and marine ecosystem of above protected objects**
Japan	- **Seashell, aquatic mollusk and fish** (Shinji-ko Goby, Corbicula Clam etc.) - **Indigenous and rare birds, predatory birds and migratory waterfowls** (Tundra Swan, Mallard. Japanese Crane, Japanese Marsh Warbler, Japanese Reed-bunting, Yellow-breasted Bunting, Schrenck's Little Bittern, Baikal Teal, plovers, Sooty Guillemot, Hornbilled Puffin, Northern Goshawk, White-tailed Sea Eagle, Golden Eagle) - **Indigenous mammal** (Japanese Monkeys, Tsushima Wildcat and Marten etc.) - **Cave-dwelling animals and insects** - **Rare indigenous plants** (Japanese Red Pine and Japanese Oak etc.) - **Alpine, marsh and aquatic plants** - **Grassland vegetation, snowland vegetation, forests** - **Coastal physiognomy** (marine abrasion landform etc.) - **Coastal landscape** (sand beach, sand dune etc.)
Korea	- **Seashell, aquatic mollusk, echinoderm** - **Algae, fish, macrobenthos, benthic animals (** temperate and subtropical fishes, soft and hard corals and coral reef, moss animal, tunicate etc.) - **Waterfowls**(Streaked Shearwater, A Black-tailed Gull, Swinhoe's Storm Petrels) - **Insects, amphibians, reptiles and mammals** - **Rare terrestrial plants** (virgin forest etc.) **and marine plants** - **Coastal physiognomy** (marine abrasion landform etc.) - **Coastal landscape** (sand beach, sand dune etc.)
Russia	- **Algae, fish** - **Marine mammals** - **Waterfowls** - **Mammals** (spotted deer, Amur tiger, goral, moose and other hunting hoof) - **Amphibia, reptiles** (Lizard, snake) - **Insects, invertebrate** - **Fungi, lichen, muscoid, vascular plants, forage land, plantations, virgin forest** - **Spawning areas of salmon fishes and wood ecosystems** - **Coastal landscape** (landscape zone etc.)

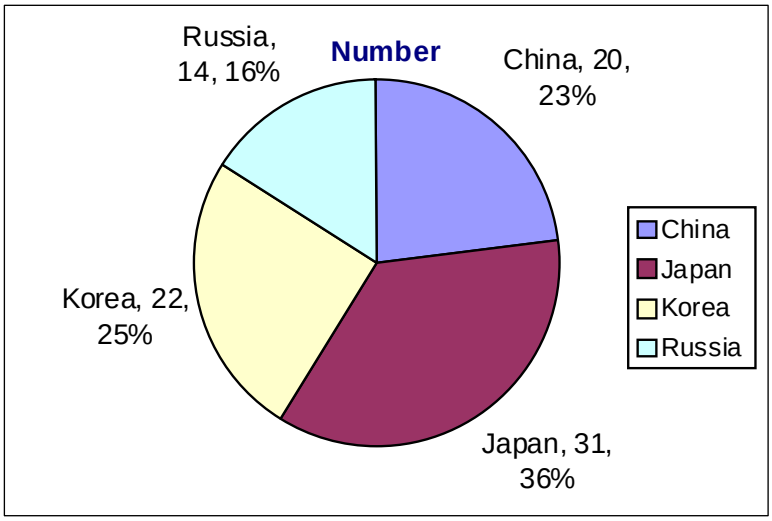


Fig.1 Number of MPAs in NOWPAP Region by Country

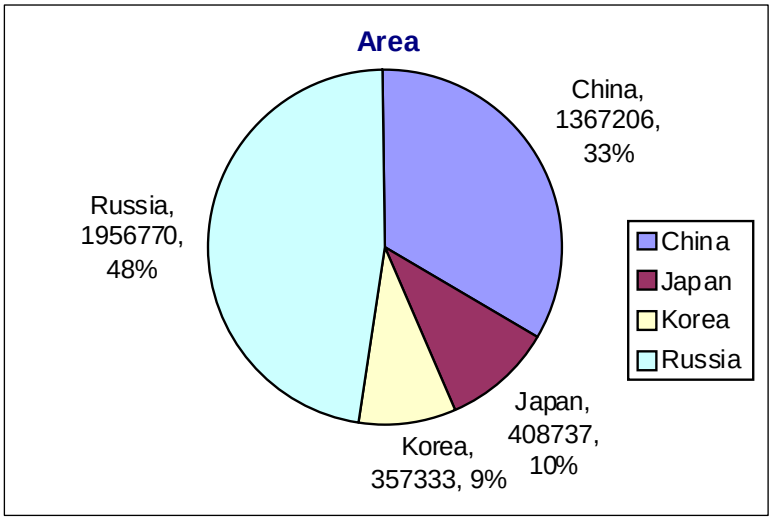


Fig.2 Area of MPAs in NOWPAP Region by Country

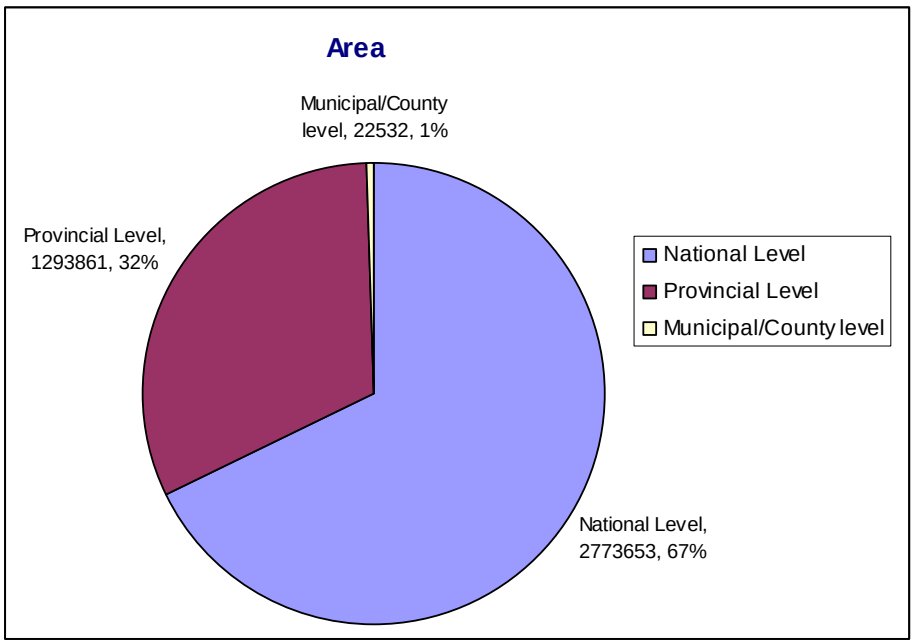


Fig.3 Area of Protected Level in NOWPAP Region by Country

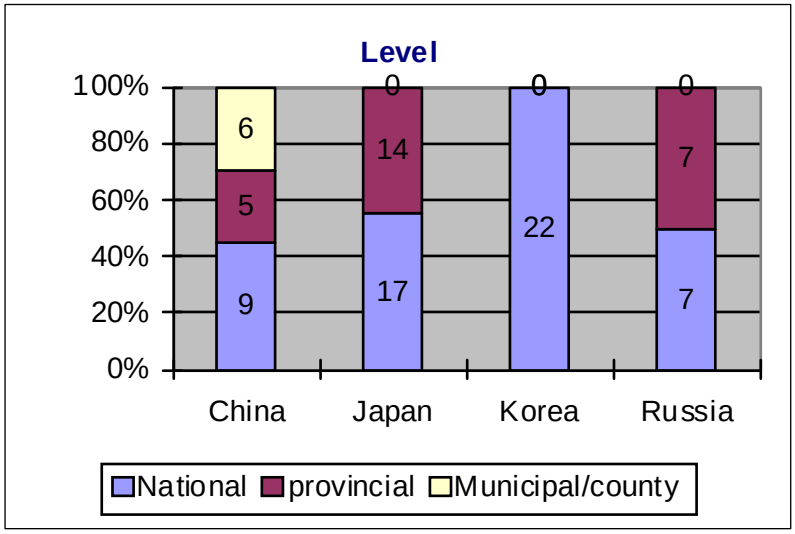


Fig.4 Level of Protection by Country

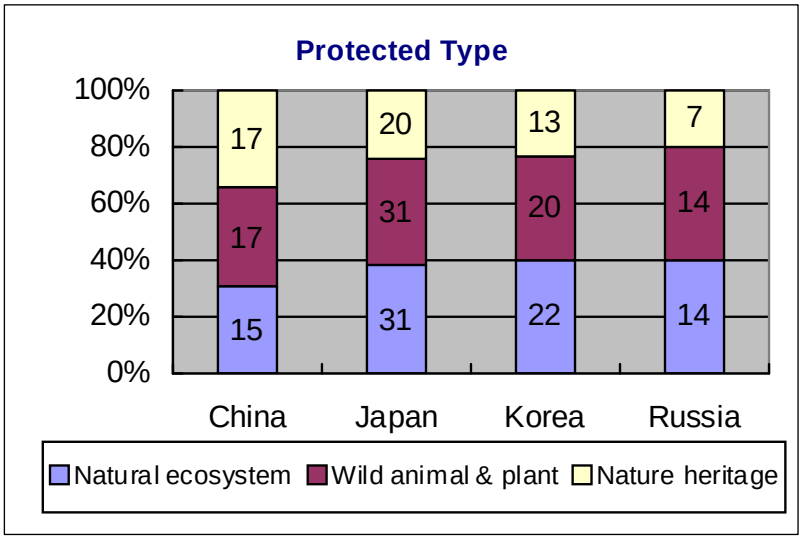
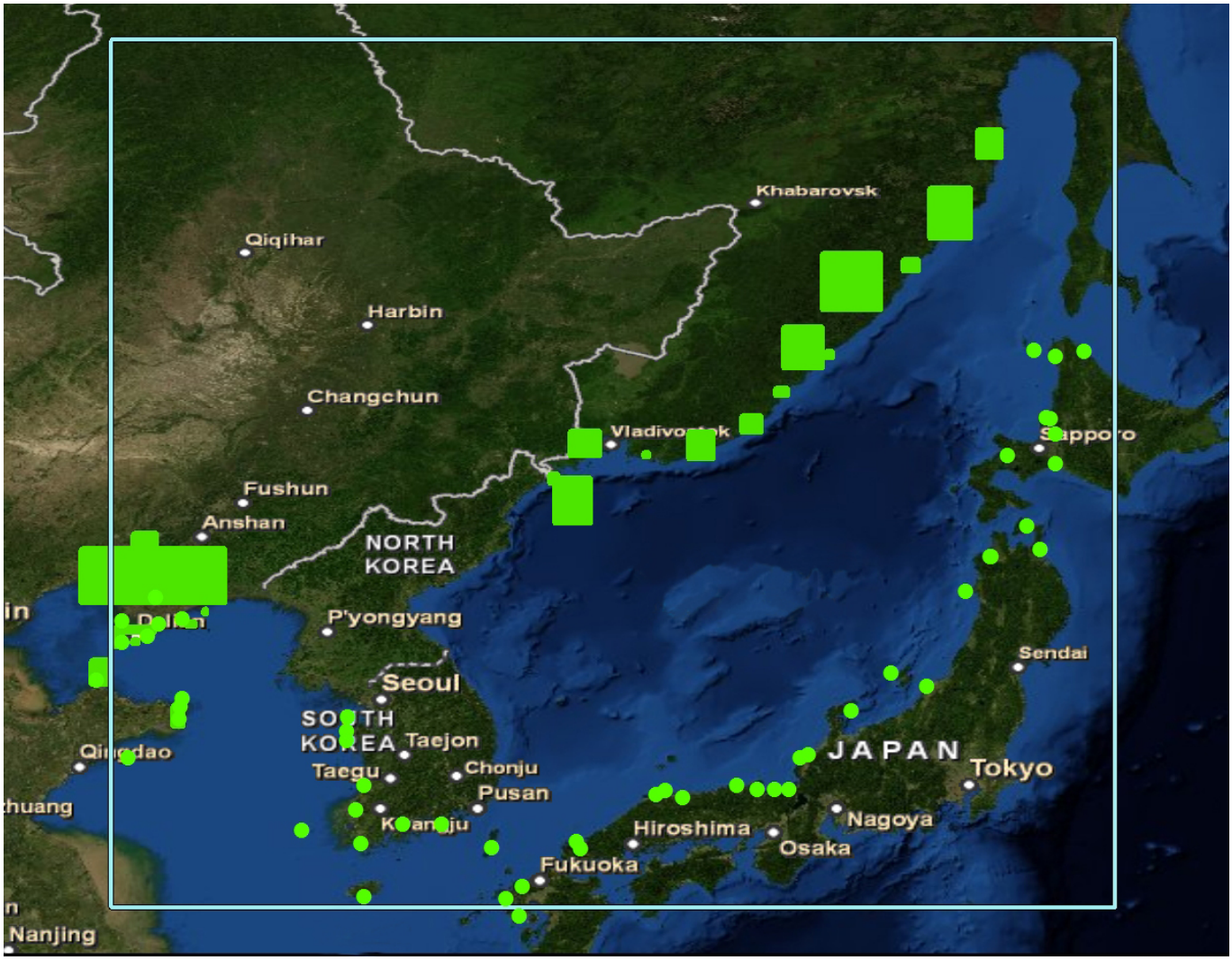


Fig.5 Protected Type by Country



Map.1 Location of MPAs in NOWPAP Region

Notes: The Map shows the location of 75 of all 87 MPAs with the geographical coordinate information. The 'rectangle' marks the latitude and longitude of the border of the east, west, south and north. The 'point' marks the center of the MPA.

3. List of MPAs in NOWPAP Region

China

No.	Title	Site_Name	Area(ha)	Level	Type
1	Liaoning Shuangtai Estuary National Nature Reserve (Ramsar site)	Xinglongtai District, Panjin City, Liaoning Province	80000	National	Natural ecosystem, Wild animal & plant, Nature heritage
2	Dandong Yalujiang Estuary Wetland National Nature Reserve	Donggang, Dandong City, Liaoning Province	108057	National	Natural ecosystem, Wild animal & plant, Nature heritage
3	Jinshitan National Park	Ganjingzi District, Dalian City, Liaoning Province	9030	National	Natural ecosystem, Nature heritage
4	Dalian Jinshitan Geological Relics Municipal Nature Reserve	Ganjingzi District, Dalian City, Liaoning Province	3960	Municipal/County	Nature heritage
5	Dalian Haiwangjiu Island Marine Sight Municipal Nature Reserve	Dalian City, Liaoning Province	2143	Municipal/County	Natural ecosystem, Wild animal & plant, Nature heritage
6	Dalian Changshan Islands Rare Marine Biology Municipal Nature Reserve	Changhai County, Dalian City, Liaoning Province	413	Municipal/County	Wild animal & plant
7	Dalian Larga Seal National Nature Reserve (Ramsar site)	Lvshunkou District, Dalian City, Liaoning Province	909000	National	Natural ecosystem, Wild animal & plant, Nature heritage
8	Dalian Chengshantou Coast Physiognomy National Nature Reserve	Jinzhou District, Dalian City, Liaoning Province	1350	National	Wild animal & plant, Nature heritage
9	Dalian Changhai Rare Marine Biology Provincial Nature Reserve	Changhai County, Dalian City, Liaoning Province	5170	Provincial	Wild animal & plant, Nature heritage
10	Dalian Sanshan Island Rare Marine Products Municipal Nature Reserve	Zhongshan District, Dalian City, Liaoning Province	1103	Municipal/County	Wild animal & plant, Nature heritage
11	Dalian Beach and Lvshunkou National Park	Lvshunkou District, Dalian City, Liaoning Province	10500	National	Natural ecosystem, Nature heritage
12	Dalian Liaopian Island - Yuhuangding Marine Ecology Municipal Nature Reserve	Ganjinzi District, Dalian City, Liaoning Province	1580	Municipal/County	Natural ecosystem, Wild animal & plant, Nature heritage
13	Liaoning Snake Island - Liaotie Mountain National Nature Reserve	Lvshunkou District, Dalian City, Liaoning Province	17073	National	Natural ecosystem, Wild animal & plant, Nature heritage
14	Rongcheng Whooper Swan National Nature Reserve	Chengshan Town, Rongcheng City, Shandong Province	10500	National	Natural ecosystem, Wild animal & plant, Nature heritage
15	Rongcheng Chengshantou Marine Ecosystem Provincial Nature Reserve	Rongcheng City, Shandong Province	6366	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
16	Rongcheng Sanggou Bay County Nature Reserves	Rongcheng City, Shandong Province	13333	Municipal/County	Natural ecosystem, Wild animal & plant, Nature heritage
17	Changdao National Nature Reserve	Changdao County, Shandong Province	5015	National	Natural ecosystem, Wild animal & plant
18	Miaodiao Islands Seal Provincial Nature Reserve	Changdao County, Shandong Province	173100	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
19	Yantai Kongtong Islands Provincial Nature Reserve	Zhifu District, Yantai City, Shandong Province	7690	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
20	Haiyang Qianliyan Island Provincial Nature Reserve	Haiyang City, Shandong Province	1823	Provincial	Natural ecosystem, Wild animal & plant

Japan

No.	Title	Site_Name	Area(ha)	Level	Type
1	Rishiri-Rebun-Sarobetsu National Park	Hokkaido	24166	National	Natural ecosystem, Wild animal & plant, Nature heritage
2	Kutcharo-Ko Ramsar Site	Hokkaido	1607	National	Natural ecosystem, Wild animal & plant
3	Sarobetsu-Genya Ramsar Site	Hokkaido	2560	National	Natural ecosystem, Wild animal & plant
4	Shokanbetsu-Teuri-Yagishiri Quasi National Park	Hokkaido	43559	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
5	Uryunuma-Shitsugen Ramsar Site	Hokkaido	624	National	Natural ecosystem, Wild animal & plant
6	Miyajima-Numa Ramsar Site	Hokkaido	41	National	Natural ecosystem, Wild animal & plant
7	Niseko-Shakotan-Otaru Kaigan Quasi National Park	Hokkaido	19009	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
8	Utonai-Ko Ramsar Site	Hokkaido	510	National	Natural ecosystem, Wild animal & plant
9	Shimokita Hanto Quasi National Park	Aomori	18641	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
10	Hotokenuma Ramsar Site	Aomori	222	National	Natural ecosystem, Wild animal & plant
11	Tsugaru Quasi National Park	Aomori	25966	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
12	Chokai Quasi National Park	Akita, Yamagata	28373	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
13	Oga Quasi National Park	Akita	8156	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
14	Sado-Yahiko-Yoneyama Quasi National Park	Niigata	29464	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
15	Sakata Ramsar Site	Niigata	76	National	Natural ecosystem, Wild animal & plant
16	Noto Hanto Quasi National Park	Toyama, Ishikawa	9672	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
17	Katano-Kamoike Ramsar Site	Ishikawa	10	National	Natural ecosystem, Wild animal & plant
18	Echizen-Kaga Kaigan Quasi National Park	Fukui	9246	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
19	Mikata-Goko Ramsar Site	Fukui	1110	National	Natural ecosystem, Wild animal & plant
20	Wakasa Bay Quasi National Park	Fukui, Kyoto	19195	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
21	San'in Kaigan National Park	Kyoto	8783	National	Natural ecosystem, Wild animal & plant, Nature heritage
22	Tango-Amanohashidate-Oheyama Quasi National Park	Kyoto	19023	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage

No.	Title	Site_Name	Area(ha)	Level	Type
23	Nakaumi Ramsar Site	Tottori	8043	National	Natural ecosystem, Wild animal & plant
24	Daizen-Oki National Park	Tottori	35053	National	Natural ecosystem, Wild animal & plant, Nature heritage
25	Shinji-Ko Ramsar Site	Shimane	7652	National	Natural ecosystem, Wild animal & plant
26	Kitanagato-kaigan Quasi National Park	Yamaguchi	12384	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
27	Akiyoshidai Groundwater System Ramsar Site	Yamaguchi	563	National	Natural ecosystem, Wild animal & plant, Nature heritage
28	Iki-Tsushima Quasi National Park	Nagasaki	11946	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
29	Saikai National Park	Nagasaki	24646	National	Natural ecosystem, Wild animal & plant, Nature heritage
30	Genkai Quasi National Park	Fukuoka, Saga and Nagasaki	10158	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
31	Unzen-Amakusa National Park	Nagasaki	28279	National	Natural ecosystem, Wild animal & plant, Nature heritage

Korea

No.	Title	Site_Name	Area(ha)	Level	Type
1	Daeijakdo and Adjacent Ecosystem Conservation Area	Ongjin-Gun, Incheon City	5570	National	Natural ecosystem, Wild animal & plant
2	Ongjin-Jangbongdo Tidal Flat Wetland Protection Area	Incheon City	6840	National	Natural ecosystem, Wild animal & plant
3	Shinduri sand dune Ecosystem Conservation Area	Taean-Gun, Chungnam Province	63	National	Natural ecosystem, Nature heritage
4	Taean National Park	Taean-gun, Chungnam Province	32657	National	Natural ecosystem, Wild animal & plant, Nature heritage
5	Sohwangsa sand dune Ecosystem Conservation Area	Boryeong City, Chungnam Province	12	National	Natural ecosystem, Wild animal & plant, Nature heritage
6	Muan Tidal Flat Wetland Protection Area (Ramsar site)	Muan-Gun, Jeonnam Province	3559	National	Natural ecosystem, Nature heritage
7	Hanryeo Maritime National Park	Jeonnam and Kyeongnam Province	54563	National	Natural ecosystem, Wild animal & plant, Nature heritage
8	Suncheon Bay Tidal Flat Wetland Protection Area (Ramsar site)	Suncheon City, Jeonnam Province	2800	National	Natural ecosystem, Wild animal & plant
8	Hongdo Island Nature Reserve	Jeonnam Province	586	National	Natural ecosystem, Wild animal & plant, Nature heritage
10	Dadohae Maritime National Park	Jeonnam Province	223151	National	Natural ecosystem, Wild animal & plant, Nature heritage
11	Jindo Tidal Flat Wetland Protection Area	Jindo-Gun, Jeonnam Province	123	National	Natural ecosystem, Wild animal & plant
12	Bosung-Beolgyo Tidal Flat Wetland Protection Area	Bosung-Gun, Jeonnam Province	750	National	Natural ecosystem, Wild animal & plant
13	Byeonsan National Park	Jeonbuk Province	15472	National	Natural ecosystem, Wild animal & plant, Nature heritage
14	Oryukdo and Adjacent Ecosystem Conservation Area	Busan City	35	National	Natural ecosystem, Wild animal & plant, Nature heritage
15	Nakdong River Estuary Wetland Protection Area	Saha-Gu, Busan City	3420	National	Natural ecosystem, Wild animal & plant
16	Nakdong River Estuary Ecosystem Conservation Area	Saha-Gu, Busan City	3420	National	Natural ecosystem, Wild animal & plant
17	Dokdo Protected Natural Area	Gyeongbuk Province	18	National	Natural ecosystem, Wild animal & plant
18	Munseom and Adjacent Ecosystem Conservation Area	Segwuipo-Si, Jeju Special Province	1368	National	Natural ecosystem, Wild animal & plant, Nature heritage
19	Chagwido Island Nature Reserve	Jeju Special Province	672	National	Natural ecosystem, Wild animal & plant
20	Marado Island Nature Reserve	Jeju Special Province	686	National	Natural ecosystem, Wild animal & plant, Nature heritage
21	Munseom Island and Beomseom Island Nature Reserve	Jeju Special Province	975	National	Natural ecosystem, Wild animal & plant, Nature heritage
22	Seongsan Ilchulbong Nature Reserve	Jeju Special Province	587	National	Natural ecosystem, Wild animal & plant, Nature heritage

Russia

No.	Title	Site_Name	Area(ha)	Level	Type
1	Tumninskiy Federal Partial Reserve	Khabarovsk Territory	143100	National	Natural ecosystem, Wild animal & plant
2	Botchinskiy State Nature Reserve	Khabarovsk Territory	267300	National	Natural ecosystem, Wild animal & plant, Nature heritage
3	Losinyiy State Zoological Partial Reserve	Primorsky Kray	26000	Provincial	Natural ecosystem, Wild animal & plant
4	Verkhnebikinskiy State Nature Landscape Partial Reserve	Primorsky Kray	746500	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
5	Goraliy State Zoological Partial Reserve	Primorsky Kray	4700	Provincial	Natural ecosystem, Wild animal & plant
6	K.G.Abramov Sikhote-Alin State Nature Biospheric Reserve	Primorsky Kray	401430	National	Natural ecosystem, Wild animal & plant, Nature heritage
7	Chiernyie Skaly State Zoological Partial Reserve	Primorsky Kray	12400	Provincial	Natural ecosystem, Wild animal & plant
8	Vasil'kovskiy State Zoological Partial Reserve	Primorsky Kray	34000	Provincial	Natural ecosystem, Wild animal & plant
9	Kedrovaja Pad State Nature Biospheric Reserve	Primorsky Kray	17900	National	Natural ecosystem, Wild animal & plant, Nature heritage
10	Barsovyi Federal Partial Reserve	Primorsky Kray	106900	National	Natural ecosystem, Wild animal & plant
11	Vostok Bay(Zaliv Vostok) State Marine Partial Reserve	Primorsky Kray	1820	Provincial	Natural ecosystem, Wild animal & plant
12	L.G.Kaplanov Lazovskiy State Nature Reserve	Primorsky Kray	121000	National	Natural ecosystem, Wild animal & plant, Nature heritage
13	Khasanskiy Natural Park	Primorsky Kray	9500	Provincial	Natural ecosystem, Wild animal & plant, Nature heritage
14	Far Eastern State Marine Nature Biospheric Reserve	Primorsky Kray	64220	National	Natural ecosystem, Wild animal & plant, Nature heritage