

Designation date: 16/10/2013 Ramsar Site no. 2185

Information Sheet on Ramsar Wetlands (RIS) – 2009-2014 version

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Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 17, 4th edition).
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

Name: Jianhua YU
Institution: Bureau of Heilongjiang Dongfanghong Wetland
National Nature Reserve
Address: Dongfanghong Town, Hulin City, Heilongjiang
Province
Post: 158402
Telephone: +86-(0)467-5915866
Fax: +86-(0)467-5915866
Email: dfhsdglj@163.com

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

June 10, 2012

3. Country:

The People's Republic of China

4. Name of the Ramsar site:

The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.

Dongfanghong Wetland

5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only):

- a) Designation of a new Ramsar site ; or
b) Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area

The Ramsar site boundary and site area are unchanged:

or

If the site boundary has changed:

- i) the boundary has been delineated more accurately ; or
ii) the boundary has been extended ; or
iii) the boundary has been restricted**

and/or

If the site area has changed:

- i) the area has been measured more accurately ; or
ii) the area has been extended ; or
iii) the area has been reduced**

** **Important note:** If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site:

Refer to Annex III of the *Explanatory Note and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) a hard copy (required for inclusion of site in the Ramsar List): ;
ii) an electronic format (e.g. a JPEG or ArcView image) ;
iii) a GIS file providing geo-referenced site boundary vectors and attribute tables .

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The wetland boundary is almost the same as the existing Dongfanghong National Wetland Nature Reserve. There are three borderlines which are just the same as the reserve: to the south is Xiaomu Estuary and Sanxiao Road, to the north is the boundary of Datashan forest farm, to the west is Hurao Road. While the eastern borderline of the site follows the main stream of the Ussuri River, including parts of the tributaries of the Ussuri River, which is different from the reserve boundary.

8. Geographical coordinates (latitude/longitude, in degrees and minutes):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

Center: 46°18'34"N, 133°44'57"E

Extent: 46°12'04" - 46°22'56" N, 133°33'3" - 133°54'50"E

9. General location:

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

The wetland is located at the east of Heilongjiang Province, Dongfanghong Town, Hulin City. The wetland is about 80km away from Hulin City, 660km away from Harbin City.

10. Elevation: (in metres: average and/or maximum & minimum)

Average: 79.0 m

Maximum: 312.3 m

Minimum: 47.0 m.

11. Area: (in hectares)

31,538 ha

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Dongfanghong Wetland National Nature Reserve is located at the transition zone from Wandashan Mountains to Ussuri River. Rivers, floodplain marsh wetlands ecosystems and biodiversity are regarded as the conservation targets. The Nature Reserve is one of the important water conservation areas of Ussuri River. There are various wetland types here, such as permanent rivers wetlands, floodplains, lakes, marshes, wooded swamps, and shrub swamps. Many typical and representative sites for many wetland types could be found in the intact wetland. Rare and endangered animals and plants are recorded in the wetland, such as White Stork *Ciconia boyciana*, Red-crowned Crane *Grus japonensis*, and Tiger *Panthera tigris*. The Nature Reserve is an important breeding site and stopover for many waterfowls in Northeast Asia. The Nature Reserve is mainly located in the left floodplain of midstream Ussuri River, and it has great significance in conserving water sources, holding and buffering flood, recharging groundwater, regulating river runoff and protecting the ecological security of the entire catchment.

13. Ramsar Criteria:

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

1 • 2 • 3 • 4 • 5 • 6 • 7 8 • 9

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Criterion 1:

Dongfanghong Wetland National Nature Reserve is located in the southeast of Sanjiang Plain, China. The intact meadow, aquatic, marsh, belt-shaped savanna ecosystems are very rare in China. It keeps the original characteristics of the swamps in the forest area of the Manchu-Japanese Mixed Forest Biogeographic Province. It not only reflects the key features of wetland in Sanjiang Plain, but

also is highly typical and representative for inland freshwater wetlands and aquatic ecosystems in the temperate zone.

Criterion 2:

The rare and endangered species distributing in the wetlands and corresponding applicable standards are listed in the table below:

	Latin Name	IUCN	CMS	CITES	C
Birds					
	<i>Aythya baeri</i>	CR	I/II	—	
	<i>Ciconia boyciana</i>	EN	I	I	
	<i>Grus japonensis</i>	EN	I	I	
	<i>Anser cygnoides</i>	VU	I/II	—	
	<i>Anser erythropus</i>	VU	I/II	—	
	<i>Grus vipio</i>	VU	I	I	
	<i>Aquila clanga</i>	VU	I/II	II	
	<i>Emberiza aureola</i>	VU	I	—	
with the wetland. They live in both the wetland and forest. Tiger species are just found their footprints and the Asiatic Black Bear and Siberian Musk					
	<i>Panthera tigris</i>	EN	—	I	
	<i>Ursus thibetanus</i>	VU	—	I	
	<i>Moschus moschiferus</i>	VU	—	II	
Plant					
	<i>Chosenia arbutifolia</i>	VU	—	—	

Criterion 4 :

Dongfanghong Wetland National Nature Reserve is not only the habitat for the globally endangered and national class-I protected animal *Panthera tigris*, but it is also one of ecological corridors for *Panthera tigris* travelling between China and Russia, as well as the habitats and breeding grounds for *Ciconia boyciana*, *Mergus squamatus*, *Grus japonensis*, *Grus vipio* and *Cygnus cygnus*, and many other large rare waterfowls. According to the monitoring data, there are 4-6 pairs of *Ciconia boyciana*, 5-10 pairs of *Grus japonensis*, 4-5 pairs of *Grus vipio* inhabiting in this site annually. In recent years, observation reports on *Panthera tigris* are frequently reported in the Reserve.

Criterion 5 :

Birds in the Reserve are extensively investigated and monitored by scientists and technicians since 2001, when the Reserve was established. According to scientific investigation and monitoring statistics, the number of waterfowl observed in recent two years is listed below

Species	Latin Name	Amount in 2011	Amount in 2012	Investigating season
Great Cormorant	<i>Phalacrocorax carbo</i>	3400	3500	Spring, Summer
Grey Heron	<i>Ardea cinerea</i>	260	240	Summer
Swan Goose	<i>Anser cygnoides</i>	390	420	Spring
Greylag Goose	<i>Anser anser</i>	930	950	Spring
Bean Goose	<i>Anser fabalis</i>	1380	1510	Spring
Greater White-fronted Goose	<i>Anser albifrons</i>	660	720	Summer
Northern Pintail	<i>Anas acuta</i>	750	800	Summer
Ruddy Shelduck	<i>Tadorna ferruginea</i>	1300	1200	Summer

Common Merganser	<i>Mergus merganser</i>	400	500	Summer
Red-breasted Merganser	<i>Mergus serrator</i>	280	320	Summer
Garganey	<i>Anas querquedula</i>	2000	2200	Summer
Tufted Duck	<i>Aythya fuligula</i>	1100	1200	Summer
Common Teal	<i>Anas crecca</i>	1200	1200	Summer
Mallard	<i>Anas platyrhynchos</i>	4150	4200	Summer
Northern Lapwing	<i>Vanellus vanellus</i>	2600	2700	Summer
Green Sandpiper	<i>Tringa ochropus</i>	1700	1800	Summer
Black-headed Gull	<i>Larus ridibundus</i>	3450	3500	Summer
White-winged Tern	<i>Chlidonias leucopterus</i>	6800	7500	Summer
Whiskered Tern	<i>Chlidonias hybrida</i>	1700	1800	Summer
Common Tern	<i>Sterna hirundo</i>	3060	3120	Summer
Oriental Stork	<i>Ciconia boyciana</i>	40	50	Spring, Summer
Red-crowned Crane	<i>Grus japonensis</i>	8	10	Summer
White-naped Crane	<i>Grus vipio</i>	7	10	Summer
Common Snipe	<i>Gallinago gallinago</i>	320	326	Summer
Whooper Swan	<i>Cygnus cygnus</i>	22	28	Summer
Common Pochard	<i>Aythya ferina</i>	150	180	Summer
Baer's Pochard	<i>Aythya baeri</i>	145	150	Summer
Eurasian Wigeon	<i>Anas penelope</i>	70	80	Summer
Falcated Duck	<i>Anas falcata</i>	680	700	Summer
Lesser White-fronted Goose	<i>Anser erythropus</i>	780	800	Summer
Northern Shoveler	<i>Anas clypeata</i>	300	306	Summer
Western Spot-billed Duck	<i>Anas poecilorhyncha</i>	1400	1420	Summer
Purple Heron	<i>Ardea purpurea</i>	70	78	Summer
Great Bittern	<i>Botaurus stellaris</i>	180	185	Summer
Total	-	41682	43703	

Criterion 6 :

The population size of waterfowl reaches the 1% threshold published by Wetlands International in 2013:

Species Name	Latin Name	Population 2011	Population 2012	1% Threshold
Great Cormorant	<i>Phalacrocorax carbo</i>	3400	3500	1000
Greylag Goose	<i>Anser anser</i>	930	950	710
Bean Goose	<i>Anser fabalis</i>	1380	1510	30
Greater White-fronted Goose	<i>Anser albifrons</i>	660	720	180
Ruddy Shelduck	<i>Tadorna ferruginea</i>	1300	1200	710
Garganey	<i>Anas querquedula</i>	2000	2200	1400
Green Sandpiper	<i>Tringa ochropus</i>	1700	1800	1000
Whiskered Tern	<i>Chlidonias hybrida</i>	1700	1800	1000
Common Tern	<i>Sterna hirundo</i>	3060	3120	460
Oriental Stork	<i>Ciconia boyciana</i>	40	50	30
Red-crowned Crane	<i>Grus japonensis</i>	8	10	4
White-naped Crane	<i>Grus vipio</i>	7	10	10
Baer's Pochard	<i>Aythya baeri</i>	145	150	5
Lesser White-	<i>Anser erythropus</i>	780	800	260

fronted Goose				
Western Spot-billed Duck	<i>Anas poecilorhyncha</i>	1400	1420	1000

Criterion 7 :

Dongfanghong Wetland is an important habitat and breeding site for northern cold-water fishes and ancient cold-water fishes, There are 61 fish species belonging to 9 families in 5 orders here, *Brachymyotax lenok*, a 2nd level national protection species, and a species listed in ‘China Red Data Book of Endangered Animals’ is distributed in Dumu river and Damu river in this area. The Reserve has very typical environmental characteristics for northern fish, and is an important part of global biodiversity. The level of diversity at this site is higher than average for this location.

The fish directory in Dongfanghong Wetland is shown in Appendix 2.

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Temperate broad-leaf forests or woodlands, and subpolar deciduous thickets, Manchu-Japanese Mixed Forest Biogeographic Province, Palaearctic Realm

b) biogeographic regionalisation scheme (include reference citation):

A Classification of the Biogeographical Provinces of the World (Miklos D.F. Udvardy, 1975)

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Geological: Dongfanghong Wetland National Nature Reserve is located in Ussuri River alluvial plain, which is a component of Sanjiang Plain. Most soil along the Sanjiang Plain is yellow primary soil, and soil to west side of Ussuri River is river sediments. During the new tectonic movement, here is always the intermittent settlement movement area, which is dominated by large area of subsidence.

Geomorphology: The terrain is low and flat in the Reserve, with low hills. Low plains are covered with compositely or mosaic shaped bubble marshes. The terrain is obviously stratified. Open water, marshes, marsh-like meadows, meadows and belt-shaped savanna transit in sequence with terrain rising. Three geomorphology types are: floodplain, first terrace and second terrace.

Origin: Naturally originated

Hydrology: The rivers in Dongfanghong Wetland National Nature Reserve belong to hydrological system of Ussuri River, mainly including Ussuri River and its tributaries, Dumu River, Damu River and Xiaomu River. Ussuri River within this Reserve is 200 to 300 meters width, usually 2 to 4 meters depth, and 500 to 600 m³/s flow rates. Dumu River, Damu River and Xiaomu River all belong to the secondary tributary of the hydrological system of Ussuri River. They are 3 to 20 meters width, 1.2 to 1.9 meters depth. There are numerous perennial and seasonal water bubbles with various shapes and sizes, and 0.5 to 4 meters depth. The water source mainly depends on rain water, swamp water seepage, river backwaters, etc.

Soil: Zonal soil in this Reserve is dark brown soil, including dark brown forest soil and meadow dark brown soil; Non-zonal soil includes five categories: white pulp soil, meadow soil, bog soil, peat soil and river silt.

Water quality: The water mineralization in the Reserve is less than 0.2 g/L, indicating that it is a low mineralized water. Water quality is good with very small amount of sand.

Climate: The area belongs to the temperate continental monsoon climate, with a humid and rainy summer, and a long and cold winter. The annual average temperature is 1.4 ~ 2.2 °C, annual accumulated temperature (≥ 10 °C) is 2200 ~ 2500°C and frost-free period is about 135 ~ 140 days. The earth gets frozen in late November with an average depth of 1.57 meters frozen layer and a maximum depth of 2 meters frozen layer. Snow is stably accumulated since late November. The minimum temperature is -42 °C in the area. The annually maximum snow depth is 60 cm. Northwest wind prevails throughout the year and windy season generally appears in May and October. The maximum wind force can reach 20m/s. Annual precipitation is 500 to 800 mm, which is affected by monsoon. 70% precipitation concentrates in June to September. Annual sunshine time is 2308.6 hours. The mean annual evaporation is 1149.6 cm.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

Dongfanghong Wetland National Nature Reserve belongs to the hydrological system of Ussuri River. Ussuri River is an important boundary river in northeastern China, which rises in Russian Xihete Hill. The length of Ussuri River within China is 198 km, with a catchment area of 9334 km². The geomorphology of this area is mainly low hills and floodplains, belonging to the low hilly area. The terrain is flat. Northwest is higher than southeast with an average altitude of 80-90 meters. There are four major rivers in the area. Soil types are classified to six categories: dark brown soil, white pulp soil, meadow soil, swamp soil, peat soil and river silt. Its climate belongs to temperate continental monsoon climate, with four distinctive seasons, late spring, late thaw, strong wind and low precipitation. Summer is short and hot, with southeast wind prevailing; and concentrative precipitation. While in autumn, it's getting cold quickly with early frost and windiness. Winter is long and severely cold, with northwest wind prevailing.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

The floodplain and marsh in Dongfanghong Wetland have great capacity for water storage and permeation. The wetland, has great significance for water conservation, flood control and river supplement. The Reserve is very important for the ecological safety of the catchment. Meanwhile, various wetlands in the Reserve are helpful for slowing water flow rate, purifying water, depositing and excluding sediments. Thereby, the soil nutrition can be maintained and improved, which benefits water quality of Ussuri River downstream.

19. Wetland Types

a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the *Explanatory Notes & Guidelines*.

Marine/coastal: A • B • C • D • E • F • G • H • I • J • K • Zk(a)

Inland: L • M • N • O • P • Q • R • Sp • Ss • Ip • Is • U • Va •
Vt • W • Xf • Xp • Y • Zg • Zk(b)

Human-made: 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c)

b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

Tp (13356 ha, 47.0%), Ts (8722 ha, 30.4%), P (2579 ha, 9.0%), Xf (1719 ha, 6.0%), W (1204 ha, 4.2%), M (974 ha, 3.4%)

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Dongfanghong Wetland is dominated by flora of Changbaishan Mountain, including Inner Mongolian and Siberian plant species. Forests, shrubs, meadows, swamps and other aquatic vegetation are distributed in the wetland. Broad-leaved and Korean pine mixed forest is the dominant forest type. The wetland consists of permanent rivers, lakes, marshes, marsh-like meadows, flooding plain wetlands, shrub swamp and arbor swamp. The dominant plants are *Phragmites communis*, *Deyeuxia angustifolia*, *Care lasiocarpa*, *Carex pseudo-curaica*, etc. The wetland is one of the key habitats for aquatic birds in Wandashan Forest. Besides providing the abundant food and habitats for endangered water birds, as *Ciconia boyciana*, *Grus japonensis* and *Grus vipio*, the wetland also contributes to the regional climate regulating and water supplying for peripheral areas.

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

The flora in Dongfanghong Wetland belongs to Changbaishan flora, sub-kingdom of Sion-Japanese, Holarctic Kingdom with various typical vegetation types. The dominant forests are secondary broad-leaved forest, including *Quercus mongolica* community, *Betula platyphylla* community and *Populus davidiana* community. *Corylus heterophylla* community, *Alnus japonica* community, *Salix spp.* community are the dominant shrub vegetation. The meadow vegetation can be classified to typical meadows and swamp-like meadows; the former is dominant by *Deyeuxia angustifolia* and *Betula frutiosa*, while the latter is dominant by *Salix brachypada*, *Carex schmidtii*, *Calamagrostis angustifolia*, *Phragmites australis* and so on. *Carex appendiculata*, *Carex meyeriana*, *Carex lasiocarpa*, *Carex pschdo-curaica*, *Scirpus trqueter*, *Glyceria spiculosa* are the most popular plants in marshes. *Potamogeton distinctus*, *Utricularia vulgaris*, *Trapa potaninii*, *Nymphoides peltata*, *Brasenia schreberi*, *Semen euryales*, *Salvinia natans*, *Nelumbo nucifera*, *Typha angustifolia*, *Zizania atifolia* are the major aquatic plant species. 803 higher plant species from 144 families are recorded in the wetland, including 101 bryophytes species from 37 families, 28 pteridophytes species from 12 families and 674 spermatophytes species from 95 families.

Besides plant species listed in Criterion 2 (Section 14), there are 8 species of National Protection Class II: *Fraxinus maudshurica*, *Phellodendron amurens*, *Tilia amurensis*, *Cyein soja*, *Sagittaria natans*, *Myriophyllum ussuriense* and *Pinus koreansis*.

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

In Dongfanghong Wetland, there are a total of 342 vertebrate species, specifically 68 fish species from 15 families in 9 orders, 7 reptile species from 4 families in 3 orders, 216 bird species from 44 families in 17 orders and 44 mammal species from 14 families in 6 orders. Besides the species listed in Criterion 2, , there are species of National Protection Class I: Sable (*Martes zibellina*); 15 species of National Protection Class II: Hazecl Grouse (*Bonasia bonasia*), Black Grouse (*Tetrao*

tetrix), Collared Scops-owl (*Otus bakkamoena*), Common Scops-owl (*Otus scops*), Eurasian Eagle-owl (*Bubo bubo*), Snowy Owl (*Bubo scandiacus*), Brown Hawk-owl (*Ninox scutulata*), Ural Owl (*Strix uralensis*), Long-eared Owl (*Asio otus*), Short-eared Owl (*Asio flammeus*), Greater White-fronted Goose (*Anser albifrons*), Whooper Swan (*Cygnus Cygnus*), Mandarin Duck (*Aix galericulata*), Eurasian Lynx (*Lynx lynx*), Mountain Hare (*Lepus timidus*), Eurasian Elk (*Alces alces*).

23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

The wetland region is relatively undeveloped. Local inhabitants still keep traditional agrarian culture, fishing and hunting culture and folk culture without ethnic or religious conflicts. Few human activities, no industries or mining with heavy pollution contribute to the pristine state of the wetlands, which provide natural habitats for the wild animals, such as endangered bird species.

The pristine and beautiful scenery, abundant resources of native fauna and flora and the unsophisticated customs all make this site an ideal destination for tourism, leisure and vacation.

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?

If Yes, tick the box and describe this importance under one or more of the following categories:

i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:

ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:

iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:

iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

a) within the Ramsar site:

State ownership; Dongfanghong Wetland National Nature Reserve has the tenure of land use.

b) in the surrounding area:

State ownership. To the east of the Dongfanghong Wetland National Nature Reserve is Russia, with Ussuri River as the boundary river. The north and west area to the Reserve belongs to Dongfanghong Forestry Bureau. To the south is Zhengbaodao Island National Reserve. The land in the surrounding area is tenured to Dongfanghong Forestry Bureau and Xiaomuhe Forestry Farm.

25. Current land (including water) use:

a) within the Ramsar site:

The residents in the Reserve are less than 200. Except a few people engaged in fishery and forestry, most residents are engaged in the management work of wetlands, such as wildlife protection, resource investigation, monitor, patrol, etc. Dongfanghong Wetland keeps a pristine state with low intensive water exploitation. The site area is a little larger than the reserve area. The site area is 31,538ha and the reserve is 31,516ha

b) in the surroundings/catchment:

Surroundings are all covered by forests. To the south is Zhenbaodao Wetland National Nature Reserve.

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

a) within the Ramsar site:

The activities of residents, especially fishing, have some influence on the wetland resources and wildlife habitats.

b) in the surrounding area:

Agriculture and fishery have some influence on the wetland resources and wildlife habitats.

27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

Dongfanghong Wetland was approved as a provincial nature reserve by State Forestry Administration and the People's Government of Heilongjiang Province in Aug. 2001. In Sep. 2009, it was promoted as a national nature reserve and officially designated as Dongfanghong Wetland National Nature Reserve, Heilongjiang Province.

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ; Ib ; II ; III ; IV ; V ; VI

c) Does an officially approved management plan exist; and is it being implemented?:

Master Plan for Dongfanghong Wetland Natural Reserve, Heilongjiang, approved by State Forestry Administration in 2001.

Master Plan for Dongfanghong Wetland National Natural Reserve, Heilongjiang, approved by The State Council in 2009.

Project of Conservation and Establishment of Dongfanghong Wetland, Heilongjiang, approved and implemented by State Forestry Administration.

d) Describe any other current management practices:

Deforestation, grazing, hunting, fishing, herb gathering, reclamation, field burning, mining, quarrying, dredging and so on is forbidden in the natural reverse.

The core zone and the buffer zone of the natural reserve are classified as conservation zone of biodiversity. Any business activities and exploitation activities, such as agriculture, plantation, fishery and tourism, are forbidden in the core zone. Scientific surveys and research are also strictly limited in the core zone. The experiment zone is classified as ecotourism zone, except for visits and surveys, no business activities and exploitation activities are permitted.

Establish Dongfanghong Wetland Resources Monitoring Center for daily monitoring of wetland resources and wildlife resources.

To promote the awareness of law and environmental conservation of local resident, education on related laws, regulations and environmental protection is carried out by various media, such as newspapers, broadcasts and TV, etc.

Experts from colleges, universities or research institutes are invited frequently to give technical training to managerial staff.

Enact a series of regulations, such as Natural Reserve Patrol Regulation, to improve the protection and the management.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

Expanding international cooperation, enhance exchanges with the outside world. There are frequent cooperation between the Reserve and Wetlands International, as well as good cooperation among the nature reserves located in the birds' migration routes in Northeast Asia.

'Regulations on Administration of Dongfanghong Wetlands National Natural Reserve' is formulated and promulgated to standardize and strengthen the protection and management of Dongfanghong wetlands.

Community co-management organization is established to encourage local residents to participate in natural protection.

Close hill sides to facilitate afforestation, improve the ecological environment and enlarge wetlands area.

Build archives files geographical information system for endangered rare animals, plants and wetlands and.

29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

In 2002, the Reserve collaborated with Wildlife Institute, Heilongjiang to conduct a field survey on Dongfanghong Wetland. Directories of wetland plants, fishes, amphibians, reptiles, birds and mammals are compiled.

In 2003, the Reserve collaborated with Northeast Forestry University and conducted a field trip in Dongfanghong Wetland to make a complementary directory of wetland plants, fishes, amphibians, reptiles, birds and mammals and compile a new directory of insects and fungi.

Bird banding work has been carried out since 2005, 75 species from 15 families in 4 orders have been banded in recent year. In 2009, the Reserve was awarded as the national advanced unit in national bird banding by the national bird banding center.

In 2006 the reserve conducted projects as "Comprehensive Scientific Survey and Research of Nature Reserve", "Remote Video Monitoring" and "Monitoring and Survey of Water and Soil in Wetlands".

Collaborating with Northeast Forestry University, the Reserve launched Research of the Monitoring Technology Based on Internet of Things and Its Application to Forestry' project since 2011, the project is in progress now.

In 2005, the national monitoring station of wildlife epidemics was established to prevent and control the wildlife epidemics.

Currently the reserve is building a research and monitoring center and possesses 3 protection and management station; 2 automatic meteorological monitoring stations; 1 prevention and healing center for diseases and insects; 1 watchtower; 1 set of remote video monitoring equipment. Scientific

research equipments include 15 computers, 5 cameras, 2 video cameras, 6 telescopes, 6 GPS terminals, 3 laser range finder, 1 digital night vision device, 2 far-infrared cameras.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

Publicity and education centre has been built, with a reading room, a multi-media classroom, and a specimen room, etc. It has already been working for research, publicity and education.

Public education is carried out at the annual World Wetlands Day, Bird-loving Week, Earth Day, etc.

Provincial-level science education base was built in 2012, in order to popularize the ecological benefits of wetlands, the importance of wetlands protection, and the national laws and regulations on wetlands protection.

Thousands of all kinds of pamphlets, and posters are issued and distributed to the local residents for free every year.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

No leisure or tourism activities have been implemented to date, except for only a few small-scale visits, surveys and scientific research activities.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

Regional: The Government of Heilongjiang Province

Functional: Dongfanghong Forestry Bureau of Heilongjiang Province, Hejiang Forestry Bureau of Heilongjiang, General Bureau of Forestry Industry in Heilongjiang Province, State Forestry Bureau

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Bureau of Heilongjiang Dongfanghong Wetland National Nature Reserve

General Director: Yunbin XIANG

Address: Dongfanghong Town, Hulin city, Heilongjiang Province

Post: 158402

Office Tele: +86-(0)467-5915866

Email : dfhsdglj@163.com

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

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Appendix 1:

Species	Latin Name	Amount in 2011	Amount in 2012	Investigating season
Great Cormorant	<i>Phalacrocorax carbo</i>	3400	3500	Spring, Summer
Grey Heron	<i>Ardea cinerea</i>	260	240	Summer
Swan Goose	<i>Anser cygnoides</i>	390	420	Spring
Greylag Goose	<i>Anser anser</i>	930	950	Spring
Bean Goose	<i>Anser fabalis</i>	1380	1510	Spring
Greater White-fronted Goose	<i>Anser albifrons</i>	660	720	Summer
Northern Pintail	<i>Anas acuta</i>	750	800	Summer
Ruddy Shelduck	<i>Tadorna ferruginea</i>	1300	1200	Summer
Common Merganser	<i>Mergus merganser</i>	400	500	Summer
Red-breasted Merganser	<i>Mergus serrator</i>	280	320	Summer
Garganey	<i>Anas querquedula</i>	2000	2200	Summer
Tufted Duck	<i>Aythya fuligula</i>	1100	1200	Summer
Common Teal	<i>Anas crecca</i>	1200	1200	Summer
Mallard	<i>Anas platyrhynchos</i>	4150	4200	Summer
Northern Lapwing	<i>Vanellus vanellus</i>	2600	2700	Summer
Green Sandpiper	<i>Tringa ochropus</i>	1700	1800	Summer
Black-headed Gull	<i>Larus ridibundus</i>	3450	3500	Summer
White-winged Tern	<i>Chlidonias leucopterus</i>	6800	7500	Summer
Whiskered Tern	<i>Chlidonias hybrida</i>	1700	1800	Summer
Common Tern	<i>Sterna hirundo</i>	3060	3120	Summer
Oriental Stork	<i>Ciconia boyciana</i>	40	50	Spring, Summer
Red-crowned Crane	<i>Grus japonensis</i>	8	10	Summer
White-naped Crane	<i>Grus vipio</i>	7	10	Summer
Common Snipe	<i>Gallinago gallinago</i>	320	326	Summer
Whooper Swan	<i>Cygnus cygnus</i>	22	28	Summer
Common Pochard	<i>Aythya ferina</i>	150	180	Summer
Baer's Pochard	<i>Aythya baeri</i>	145	150	Summer
Eurasian Wigeon	<i>Anas penelope</i>	70	80	Summer
Falcated Duck	<i>Anas falcata</i>	680	700	Summer
Lesser White-fronted Goose	<i>Anser erythropus</i>	780	800	Summer
Northern Shoveler	<i>Anas clypeata</i>	300	306	Summer
Western Spot-billed Duck	<i>Anas poecilorhyncha</i>	1400	1420	Summer
Purple Heron	<i>Ardea purpurea</i>	70	78	Summer
Great Bittern	<i>Botaurus stellaris</i>	180	185	Summer
Total	-	41682	43703	

Appendix 2:

NO	Latin Name	If breeding in the site
1	<i>Lampetra reisseneri</i>	No
2	<i>Lampetra japonica</i>	No
3	<i>Oncorhynchus</i>	Yes
4	<i>Salvelinus malma</i>	Yes
5	<i>Hucho taimen</i>	Yes
6	<i>Brachymyotax lenok</i>	Yes
7	<i>Coregonus ussuriensis</i>	Yes
8	<i>Coregonus chadary</i>	Yes
9	<i>Thymallus arcticus</i>	Yes
10	<i>Hypomesus olidus</i>	Yes
11	<i>Hypomesus transpacificus</i>	Yes
12	<i>Esox reicherti</i>	Yes
13	<i>Opsariichthys bidens</i>	Yes
14	<i>Aphyocypris chinensis</i>	Yes
15	<i>Mylopharyngodon pectus</i>	Yes
16	<i>Ctenopharyngodon idellus</i>	Yes
17	<i>Phoxinus phoxinus</i>	Yes
18	<i>Phoxinus phoxinus</i>	Yes
19	<i>Phoxinus czekanowskii</i>	Yes
20	<i>Phoxinus lagousarii</i>	Yes
21	<i>Leuciscus waleckii</i>	Yes
22	<i>Leuciscus brandii</i>	Yes
23	<i>Leuciscus hakonensis</i>	Yes
24	<i>Pseudaspius leptocephalus</i>	Yes
25	<i>Squaliobarbus curriculus</i>	Yes
26	<i>Elopichthys bambusa</i>	Yes
27	<i>Hemiculter leuciculus</i>	Yes
28	<i>Hemiculter bleekeri</i>	Yes
29	<i>Culter erythropterus</i>	Yes
30	<i>Erythroculter ilishaeformis</i>	Yes
31	<i>Erythroculter mongolicus</i>	Yes
32	<i>Parabramis pekinensis</i>	Yes
33	<i>Megalobrama terminalis</i>	Yes
34	<i>Xenocypris argentea</i>	Yes
35	<i>Xenocypris microlepis</i>	Yes
36	<i>Rhodeus sericeus</i>	Yes
37	<i>Hemibabus labeo</i>	Yes
38	<i>Hemibabus maculatus</i>	Yes
39	<i>Paralecogobio strigalus</i>	Yes

40	<i>Pseudorasbora parva</i>	Yes
41	<i>Gobio gobio</i>	Yes
42	<i>Ladislavia taczanowskii</i>	Yes
43	<i>Gobio soldatovi</i>	Yes
44	<i>Gobio linyuancesis</i>	Yes
45	<i>Gobio tenuicorpus</i>	Yes
46	<i>Gnathopogon mantschuricus</i>	Yes
47	<i>Abbottina rivularis</i>	Yes
48	<i>Saurogobio dalryi</i>	Yes
49	<i>Rostrogobio amurensis</i>	Yes
50	<i>Cyprinus carpio</i>	Yes
51	<i>Carassius auratus</i>	Yes
52	<i>Hypophthalmichthys molitrix</i>	Yes
53	<i>Noemacheilus barbatulus</i>	Yes
54	<i>Parabolia fasciata</i>	Yes
55	<i>Cobitis lutheri</i>	Yes
56	<i>Misgurnus mohoity</i>	Yes
57	<i>Cobitis granoei</i>	Yes
58	<i>Silurus asorus</i>	No
59	<i>Pelteobagrus fulvidraco</i>	No
60	<i>Percottus glehii</i>	Yes
61	<i>Channa grgus</i>	Yes