

Designation date: 11/01/2002 Ramsar Site no. 1149

Information Sheet on Ramsar Wetlands (RIS) 2006-2008 version

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 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
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.

FOR OFFICE USE ONLY.

DD MM YY

Designation date Site Reference Number

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

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2. Date this sheet was completed/updated:

October 10, 2007

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.

Honghe National Nature Reserve

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:

The ecological characters have no change since the previous RIS.
The Ramsar Criterion 4 was added.

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 boundary of this Ramsar site is the same as that of the national nature reserve before 2003.

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: 47°49' N, 133°40' E.

Extent: 133°34'-133°46' E, 47°42'-47°52' N.

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 nearest city is Tongjiang of Heilongjiang Province which is about 150 km southwest to the Ramsar site.

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

Minimum 51.5 m, maximum: 54.5 m, average: 52 m.

11. Area: (in hectares)

21 836 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.

Honghe wetland is a low alluvial plain wetland originated from Heilongjiang River, Wusuli River and Songhuajiang River. It has a flat physiognomy with the southwest part higher than the northeast part. The weather here is wet with long winter and warm summer. It has the typical characteristics of continental monsoon climate.

This Ramsar site is located in Fuyuan County of Tongjiang, which is in the northeast of Sanjiang Plain. It is adjacent to Honghe Farm, Qianfeng Farm and Yalu River Farm in the surroundings. It mainly protects wetland ecosystems consisting of aquatic and terrestrial species and their habitats. Besides, it protects rare endangered wild species such as *Ciconia boyciana*, *Grus japonensis*, *Grus vipio* and *Cygnus Cygnus*. The biodiversity within this Ramsar site is very rich. The wetlands develop well with diverse marsh wetland types. Complex animal populations including forest animal populations, wetland animal populations and aquatic animal populations make this area maintain a natural status of marsh wetland of Sanjiang Plain.

Typical and original ecosystems as well as rich biodiversity of Honghe wetland make it of great importance in global biodiversity conservation. The site is also an important base of wetland research for many domestic and foreign experts and scholars.

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.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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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: This site holds diverse wetland types and is a centralized distribution area of marsh wetlands in Sanjiang Plain. The biodiversity is very rich within this Ramsar site where natural status of Sanjiang Plain's marsh wetland is mostly maintained. Vegetation develops well in the site. *Calamagrostis angustifoli* meadow, reed meadow and natural broadleaved island-shaped forests are unique and rare. Furthermore, the wetland plays a significant role in supplying underground water, regulating flood and reducing waterlog in downstream areas, maintaining regional ecological balance and regulating regional micro-climate.

Criterion 2: According to IUCN's Red List (2006), there are 3 endangered bird species and 4 vulnerable threatened bird species living in this site.

Species Latin Name	IUCN Category
<i>Ciconia boyciana</i>	EN
<i>Grus japonensis</i>	EN
<i>Anser cygnoides</i>	EN
<i>Grus vipio</i>	VU
<i>Anser erythropus</i>	VU
<i>Anas formosa</i>	VU
<i>Haliaeetus pelagicus</i>	VU

Criterion 4: Honghe National Nature Reserve serves as an important breeding habitat for large waterfowls such as *Ciconia boycian*, *Grus japonensi*, *Grus vipi* and *Cygnus cygnus*. Since 2002, there were 16-24 couples of *Ciconia boyciana*, 6-10 couples of *Grus japonensis*, 10-15 couples of *Grus vipio* and 2-3 couples of *Cygnus cygnus* breeding here in average annually. Meanwhile, the site is an important breeding and resting place for plovers, snipes, gulls, etc.

Criterion 5: Honghe Wetland serves as an important inhabiting and breeding place for 117 species of waterfowls. From 2002 to 2006, field monitoring work had been gradually carried out towards 12 water fowl species including *Ciconia boyciana*, *Grus japonensis*, *Grus vipio*, *Anas falcate* and *Anas poecilorhyncha*. In 2003, the individuals of water fowl breeding here reached up to 20 213.

Criterion 6: Six species of water fowls exceed the 1% level of their population in abundance, as shown in the following table.

Name	Number	1%
<i>Ciconia boyciana</i>	262(in spring 2002)	30
<i>Grus japonensis</i>	12(in autumn 2006)	10
<i>Grus vipio</i>	36(in autumn 2006)	30
<i>Anas falcata</i>	1500(in autumn 2006)	350
<i>Anser fabalis</i>	1250(in autumn 2006)	800

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:

Changbaishan Subregion, Northeastern Region, Palearctic Realm

b) biogeographic regionalisation scheme (include reference citation):

The Biogeography of Fauna in China (Zhang Rongzu, 1999)

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.

Geology and Geomorphology: Honghe wetland is an alluvial plain wetland originated from three rivers. It has a flat physiognomy with the southwest part higher than the northeast part and a relative height difference of 3 meters. It is geologically located in the central section of Fuyuan sunken basin which is the subordinate structure unit in broken and sunken basin of Tongjiang Inland in the Mesozoic era. The land subsided intermittently since the Quarternary period. The slope of the land surface is 1/5000 to 1/10000, and the site could be divided into two types: terrace and river floodplain according to the elevations.

The first terrace has a large area within the site and has no cutting trace. The land surface is covered by 5.65-14.5 meters of clay and sandy clay soils. Lots of swamps and lowlands are distributed in the terrace, with relative height difference of 1 to 1.2 m. The low floodplains are mainly located at both sides of Nongjiang River and Wolulan Rive in the shapes of strip and tadpole.

Soil type: With high latitude, the soil developed differently under the influence of natural and anthropogenic factors. The soil consists of 4 main types including white-stiff soil, meadow soil, bog soil and peat soil. Soil type and the distribution of vegetation are close related, and different types of vegetation provide suitable habitats for wildlife.

Origin: The site is a low alluvial plain wetland originated from Heilongjiang River, Wusuli River and Songhua River.

Hydrology: The site is covered by two rivers (Nongjiang River and Wolulan River), both of which are seasonal marsh rivers with a total length of 32.7 km within the site. Nongjiang River is originated from wetlands in the southeast of Qinglongshan Farm. The total length is 116 km and the length within the site is 25.7 km. The total area of the Nongjiang Basin is 2 630 km², 284 km² of which is covered by the site, accounting for 10.8 of the total area. The length of Wolulan River is 7 km. It is a branch of Nongjiang River and a primary water supply source of the core area of the reserve. It joins Nongjiang River at Fendou Bridge. The water quality of the rivers is good.

Water quality: The site's natural water chemistry type is HCO₃-Na, that of upper floodplain groundwater is HCO₃-Ca/Na, and that of marsh water is COCl₂-Na. The mineralization degree of the water is 36-202 mg/l, the rigidity is 0.67-4.67 and the pH value is 5.3-6.8.

Climate: The weather of the site has obvious characteristics of temperate monsoon climate, with cold winter, hot summer, windy and rainless spring, cool but short autumn. The mean annual temperature is 1.9 °C, the annual accumulated temperature is 2 165-2 624 °C. The mean annual precipitation is 585 mm. The main rainy season is from July to August, occupying 50-70% of the total annual precipitation. The mean annual evaporation is 1 166 mm. The mean annual sunshine hour is 2356. The growth period is about 114-150 days. The frost-free period is about 131 days. The maximum depth of the frozen earth layer is 1.8-2.2 m. The frozen layer depth of marsh vegetation is 1.6-2.8 m. The mean annual snowfall is 10-40 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).

The catchment is about 2 660 km², mainly covering 4 farms (i.e. Qinglongshan Farm, Nongjiang Farm, Qianjin Farm and Yaluhe Farm) belonging to Jian Sanjiang Management Bureau of Agriculture Reclamation. It has a relatively flat physiognomy. The southwest part is higher than the northeast part, with the relative height difference being 3 meters. It is geologically located in the central section of Fuyuan sunken basin which is the subordinate structure unit in broken and sunken basin of Tongjiang Inland in the Mesozoic era. The land subsided intermittently since the Quarternary period. The soil main types include white-stiff soil, meadow soil, bog soil and peat soil. The mainly vegetation types are *Calamagrostis angustifoli*, *Carex lasiocarpa*, *Carex pseudocuraica* and *Glyceria spiculosa*. Located in the temperate continental monsoon climate zone, the catchment is warm, with abundant sunshine, profusion rainfall and long frost-free period. From the late 1980s to the early 1990s, along with the agricultural development, draining channels for farmland drainage have been built in most areas of the upstream catchment of the reserve.

18. Hydrological values:

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

Recharging flood water of about 5.08×10⁶ m³ and regulating underground water of about 1×10⁷ m³ per year, Honghe wetland plays an important role in water purification. According to the “Water Resources Bulletin” by the Administration of Water Resources of Heilongjiang Province in 1998, the land surface water quality within the site is at □ level. The wetland plays a significant role in regulating regional climate, maintaining the normal underground water level and purifying air.

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)
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Inland:

L	<u>M</u>	N	O	P	Q	R	Sp	Ss	<u>Tp</u>	<u>Ts</u>	<u>U</u>	Va	Vt	W	Xf	Xp	Y	Zg	Zk(b)
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Human-made:

1	2	3	4	5	6	7	8	9	Zk(c)
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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: Permanent freshwater marshes covered by seasonal companion floating plants, accounting for 45% of the site.

Ts: Seasonal/intermittent flood area covered by meadow plant communities, accounting for 30%.

M: Permanent river. In the site there exist Longjiang River and its branch river, Wolulan River, accounting for 13%.

U: Herbaceous peat, accounting for 7%.

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.

Honghe wetland mainly consists of a great area of permanent freshwater herbaceous marsh and marsh pool. The vegetation types mainly include *Calamagrostis angustifoli*, *Carex lasiocarpa*, *Carex pseudocuraica* and *Glyceria spiculosa*. This wetland is an important inhabiting place for birds in Sanjiang Plain, which can provide abundant foods for the birds. The wetland birds distributed within the site include storks, cranes, herons, geese, ducks, gulls and etc.

The wetland plants cover most of the seasonal intermittent flooding areas, the coverage reaches over 95%. The constructive species are *Carex lasiocarpa*, *Carex meyeriana*, *Carex pseudocuraica*, *Carex appendiculata*, *Calamagrostis angustifoli*, *Salix brachypada* and etc. which compose relatively complete freshwater marsh ecosystems, and provided good breeding and inhabiting places for the rare and endangered waterfowls such as *Ciconia boyciana*, *Grus japonensis*, *Grus vipio*, *Cygnus cygnu* and etc. Also, island-shaped secondary forests are distributed in the wetland, the main species of which are *Populus davidiana*, *Betula platyphylla*, *Alnus sibirica*, *Quercus mongolica* and etc. They can provide many inhabiting places to passerines birds such as *Fringilla montifringilla*, *Uragus sibiricus*, *Emberiza cioides* and *Emberiza yessoensis*. Meanwhile, the site plays an important role in climate regulation and water supply for the surrounding areas.

A large amount of aquatic grasses, waterfowls and fish grow in the wetland pools which are the important breeding and feeding grounds of waterfowls.

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 vegetation types within this Ramsar site mainly include forest, meadow, lowland marsh meadow and aquatic vegetation. The site totally holds 1 012 plant species of 103 families, of which 6 species (i.e. *Glycine soja*, *Phellodendron amurense*, *Acanthopanax senticosus*, *Fraxinus mandshurica*, *Juglans mandshurica* and *Astragalus membranaceus*) are under the national key protection. The dominant species is *Calamagrostis angustifolia*. According to the condition of water accumulation on the wetland surface, two marsh types are identified: the light marsh (mainly consisting of *Calamagrostis angustifolia* and *Carex lasiocarpa*) and heavy marsh (mainly consisting of *Carex lasiocarpa* marsh, *Carex lasiocarpa-Carex Pseudocuraica* marsh, and *Clyceria acutiflora* marsh).

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. 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.***

Honghe wetland is rich in biodiversity and serves as an important breeding and inhabiting place for migratory birds in Northeast Asia. Totally, there are 7 species of national first-class protected birds and 33 species of national second-class protected birds. At present, the population of *Ciconia boyciana* is about 3 000 in the world. Since 1993, the reserve made use of man-made nests to attract 16-24 couples of *Ciconia boyciana* every year.

According to an investigation, there are 215 bird species under 43 families of 16 orders, including 116 species of summer migratory birds, 7 species of winter migratory birds and 28 species of resident birds. In addition, the site holds 32 animal species under 10 families of 4 orders, 25 fish species under 6 families of 4 orders and 8 amphibian species under 4 families of 2 orders.

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:

Hezhe, a native nationality in the site, created a splendid ancient fishery civilization which reserved lots of traditional land use modes benefiting the protection of resources and environment.

This Ramsar site is an important base of environmental education, for example, it is the scientific research, education and practicing base of Northeast Forestry University, scientific research base of Northeast Institute of Geography and Agroecology of CAS (Chinese Academy of Science).

Owing to the original nature landscapes, rich biodiversity resources and the unique artificial attraction method of *Ciconia boyciana*, Honghe wetland becomes a well known scientific research

base and artificial attraction base of *Ciconia boyciana* throughout the country even the world.

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?

No.

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; the reserve has the tenure of land use.

b) in the surrounding area:

State ownership; the local government has the tenure of land use.

25. Current land (including water) use:

a) Within the Ramsar site:

All the land in this Ramsar site is included within the National Nature Reserve. The reserve was extended in 2003. Currently, the function division of the reserve are as following:

Core area: accounting for 28.2% of the total area of the reserve. This area retains relatively complete original wetland ecosystems and biodiversity. It is the centralized distribution area of the main protected birds, as well as an important breeding habitat and feeding ground for the geese and ducks. Nearly no direct human disturbance occurs in this area.

Buffer area: accounting for 63.7% of the reserve. This region retains original or part-original wetland ecosystem types, serving as natural barriers and buffers for the core area. In recent years, in collaboration with Northeast Institute of Geography and Agroecology of CAS (Chinese Academy of Science), Northeast Forestry University, and Institute of Natural Resources of Heilongjiang Provincial Academy of Science, the researchers of the reserve carried out such scientific research activities as meteorological monitoring, hydrological monitoring, vegetation study, artificial attraction of *Ciconia boyciana* and crane investigation.

Experiment area: accounting for 9.1% of the reserve. At present, the wetlands are well preserved except for some farmlands in the experiment area. In addition, the reserve carried out

many activities in this area, such as education, scientific research, band-marking of birds, and artificial breeding and rescue of endangered species.

b) In the surroundings/catchment:

Farmland is the main land use type in the upstream region of Nongjiang River, soybeans and rice cultivation accounts for about 80% of the total region. Other parts of this area are mostly wetland. The downstream region is mostly represented as the Sanjiang Wetland Nature Reserve. The other surroundings areas are farms belonging to Jian Sanjiang Management Bureau of Agriculture Reclamation. The main crop types are rice and soybeans, and the rice accounts for about 60% of the total planting areas.

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:

None.

b) in the surrounding area:

The increasing paddy fields caused by the agricultural development in the surrounding areas could produce some influences on the water supply of the wetland.

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.

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?:

d) Describe any other current management practices:

According to the “Regulations of Heilongjiang Province on the Protection of Wetland” (1994), wetland exploitation was limited; according to the “Law of the People's Republic of China on the Protection of Wild Animals” (1988), hunting was forbidden in the Ramsar site. Meanwhile, the reserve set up the Resource Protection Section, by which any illegal hunting and logging were forbidden.

The reserve actively completed the work of confirming the site’s land ownership.

The reserve carried out the wetland restoration projects and developed long-term mechanism of recharging wetland water to ensure the effective conservation of the wetland resources.

This Ramsar site has not been listed in the Montreux Records.

28. Conservation measures proposed but not yet implemented:

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

No.

29. Current scientific research and facilities:

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

Current research projects: from 2000 to 2006, in collaboration with the Northeast Institute of Geography and Agroecology of CAS (Chinese Academy of Science), Northeast Forestry University, Institute of Natural Resources of Heilongjiang Provincial Academy of Science, the reserve carried out 6 research projects and published over 30 research articles. From 2000 to 2007, A UNDP/GEF project, "Conservation and Sustainable Use of China's Wetland Biodiversity" developed its Sanjiang subproject in the reserve, and multiple researches such as land use, ecotourism, legal assessment and hydrological monitoring were carried out.

Scientific research facilities: In 2001, the reserve established many facilities integrating conservation and management, including the east checkpoint, west checkpoints, scientific research comprehensive building, automatic meteorological observation stations, automatic water resource monitoring system and exhibition hall for wildlife specimen. In 2006, the reserve was set up the Honghe wetland research base of Northeast Institute of Geography and Agroecology of CAS, the scientific research, education and practicing base of Northeast Forestry University, and the environmental education base of Jian Sanjiang Management Bureau of Agriculture Reclamation of Heilongjiang Province. Present equipments include 12 telescopes, 6 GPS, 4 digital cameras, one digital vidicon and one water quality testing instrument.

Scientific monitoring: Since 2000, scientific monitoring programs which have been taken mainly include habitat and population monitoring of large waterfowl, surface water and groundwater monitoring, meteorological monitoring and band-marking of migratory birds.

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.

The reserve established a display room for animal specimen (100m²) and a screening hall (100m²), which hold an annual reception of about 2 000 tourists. Since 2001, near 30 000 volumes of booklets on the brief introduction of the reserve, brochures on *Ciconia boyciana* and flyers on wetland conservation were printed. Besides, 5000 hats and 2000 reserve emblems were made for the propaganda as well.

31. Current recreation and tourism:

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

So far, the reserve is under strict protection. There is no recreation/tourism activity conducted in the reserve.

32. Jurisdiction:

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

Territorial: Heilongjiang General Bureau of Farms and Land Reclamation.

Functional: Department of Environment Protection of Heilongjiang Province.

Superior administration: Department of Environment Protection of Heilongjiang Province and Bureau of Agriculture Reclamation of Heilongjiang Province.

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.

Institution: Management Bureau of Honghe National Nature Reserve

Principal: Shubin Dong (Director)

Address: Jiansanjiang Management Bureau of Agriculture Reclamation, Heilongjiang 150090.

Tel: +86-(0)454-5703077

34. Bibliographical references:

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

- [1] Zheng Zuoxin. 1987. A Synopsis of the Avifauna of China. Beijing: Science Press.
- [2] Ma Jianzhang. 1992. The Avifauna of Heilongjiang. Beijing: China Forestry Press.
- [3] Chen Gangqi, et al. 1996. Mires in Sanjiang Plain. Beijing: Science Press.
- [4] Ni Hongwei, et al. 1999. Biodiversity in Honghe Natural Reserve. Harbin: Heilongjiang Science Technology Publishing Company.
- [5] Ma Yiqing, et al. 1985. The Numerical Distribution of Red-crowned Crane in Sanjiang Plain. Territory & Natural Resources Study, 2: 38-46.
- [6] Ma Yiqing, Li Xiaoming. 1987. The Distribution and Protection of Red-crowned Crane in China. Environmental Science and Management, 2: 30-35.
- [7] Ma Yiqing, et al. 1993. Nature Reserves in Heilongjiang Area. Chinese Wildlife (supplement): 1-5.
- [8] Liu Xingtu, et al. 2005. Wetland in Northeast China. Beijing: Science Press, 90-98.
- [9] Zheng Guangmei. 2005. A Checklist on the Classification and Distribution of the Birds of China. Beijing: Science Press, 89-90.
- [10] Zheng Guangmei, Wang Qishan. 1998. Red Book of Endangered Animal in China-Birds. Beijing: Science Press, 78-98.

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