

# Information Sheet on EAA Flyway Network Sites (SIS) – 2017 version

Available for download from <http://www.eaaflyway.net/about/the-flyway/flyway-site-network/>

*Categories approved by Second Meeting of the Partners of the East Asian-Australasian Flyway Partnership in Beijing, China 13-14 November 2007 - Report (Minutes) Agenda Item 3.13*

## Notes for compilers:

1. The management body intending to nominate a site for inclusion in the East Asian - Australasian Flyway Site Network is requested to complete a Site Information Sheet. The Site Information Sheet will provide the basic information of the site and detail how the site meets the criteria for inclusion in the Flyway Site Network. When there is a new nomination or an SIS update, the following sections with an asterisk (\*), from Questions 1-14 and Question 30, must be filled or updated at least so that it can justify the international importance of the habitat for migratory waterbirds.
2. The Site Information Sheet is based on the Ramsar Information Sheet. If the site proposed for the Flyway Site Network is an existing Ramsar site then the documentation process can be simplified.
3. Once completed, the Site Information Sheet (and accompanying map(s)) should be submitted to the Flyway Partnership Secretariat. Compilers should provide an electronic (MS Word) copy of the Information Sheet and, where possible, digital versions (e.g. shapefile) of all maps.

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## 1. Name and contact details of the compiler of this form\*:

Full name: Cheng Yuanqi, Director

EAAF SITE CODE FOR OFFICE USE ONLY:

Institution/agency: Management Bureau of Shengjin Hu National Nature Reserve

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**2. Date this sheet was completed\*:**

DD/MM/YYYY

24/01/2005

**3. Country\*:**

People's Republic of China

**4. Name of the Flyway Network site\*:**

Accepted English transcription of the Site's name.

Shengjin Hu National Nature Reserve (SNR)

**5. Map of site\*:**

The most up-to-date available and suitable map of the wetland should be appended to the SIS (only in digital format and shape file). The map must clearly show the boundary of the site. Please refer to the "Digitising Site Boundaries in Google Earth" file linked [here](#).

See Appendix 1 for location and site boundary maps.

**6. Geographical coordinates (latitude/longitude, in decimal degrees)\*:**

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.

116° 55' to 117° 15' E; 30° 15' to 30° 30' N.

(30.35000, 117.08330)

**7. Elevation\*:** (in metres: average and/or maximum & minimum)

The average altitude of the site is 11m above sea level; the highest point is 25m, the lowest is 9m.

**8. Area\*:**

The total area of the site, in hectares. If the areas of discrete site units are known, please also list each of these together with the names (or labels) used to identify and differentiate these units.

33,340ha

**9. General overview of the site\*:**

A brief (two sentences) summary of the site, mentioning principal physical and ecological functions, and its importance for migratory waterbirds.

The wetlands in Shengjin Hu National Nature Reserve include Shengjin Hu - a large and shallow, permanent, fresh water, inland lake with outlet to the lower Changjiang River - and several fish ponds and rice fields surrounding it. Seven species of shorebirds have been recorded in internationally important numbers. The site supports eighty species of waterfowl, including 22 species of shorebirds, and is the largest non-breeding habitat for Hooded Crane (*Grus monacha*) and an important non-breeding region for cranes, storks, geese, ducks and shorebirds. The lake has few known sources of pollution, but commonly receives large silt loads during summer floods. It supports several fishing communities and a growing eco-tourism industry.

**10. Justification of Flyway Site Network criteria\*:**

Please provide waterbird count information (with year of latest count) that demonstrates that the site meets the criteria of the Flyway Site Network (Annex 1). That is:

- it regularly supports > 20 000 migratory waterbirds; or,
- it regularly supports > 1 % of the individuals in a population of one species or subspecies of migratory waterbird; or,
- it supports appreciable numbers of an endangered or vulnerable population of migratory waterbird

- it is a “staging site” supporting > 5 000 waterbirds, or > 0.25% of a population stage at the site.

A listing of the populations of migratory waterbirds covered by the East Asian – Australasian Flyway Partnership and the 1% thresholds is attached (Annex 3).

The “staging site” criterion is particularly difficult to apply and application of this should be discussed with the Secretariat. Also note that some species have several populations that are very difficult to distinguish in the field.

Twenty-two species of shorebirds have been recorded in Shengjin Hu National Nature Reserve (SNR) (See Appendix 2). Among these, at least 11 species winter in SNR. Generally, 20,000 to 25,000 shorebirds winter in SNR, except in years when the water level is too high or too low, as in 1997 and in 2003. Two species of shorebirds, Pheasant-tailed Jacana (*Hydrophasianus chirurgus*) and Grey-headed Lapwing (*Vanellus cinereus*), breed in SNR each year. Observations indicate that the number of Pheasant-tailed Jacana breeding in SNR has increased in recent years. Black-tailed Godwit is a passage migrant that stops in SNR during late October to late November. Sometimes several hundred can be observed. Seven species of shorebirds meet the 1% criteria for populations in the East Asian-Australasian Flyway (see Table 1).

**Table 1.** Shorebird species recorded at Shengjin Hu National Nature Reserve that meet the 1% criteria for populations in the East Asian-Australasian Flyway.

Chinese name	English & Scientific names	Maximum Count	Date	Season	1% Criteria*	Reference <sup>#</sup>
凤头麦鸡	Northern Lapwing <i>Vanellus vanellus</i>	10 000+	10/11/1998	Non-Breeding	1 000	Liu Zhengyuan
红脚鹬	Common Redshank <i>Tringa totanus</i>	904	08/01/2004	Non-Breeding	650	Zhou Lizhi
黑腹滨鹬	Dunlin <i>Calidris alpina</i>	10 000+	27/10/1995	Non-Breeding	9 500	Yu Guiqing
反嘴鹬	Pied Avocet <i>Recurvirostra avosetta</i>	503	27/11/2002	Non-Breeding	250	Liu Zhengyuan
灰头麦鸡	Grey-headed Lapwing <i>Vanellus cinereus</i>	473	14/07/2004	Breeding	250	Xu Wenbin
白腰草鹬	Green Sandpiper <i>Tringa ochropus</i>	320	18/01/1995	Non-Breeding	250	Liu Zhengyuan
水雉	Pheasant-tailed Jacana <i>Hydrophasianus chirurgus</i>	348	17/07/2004	Breeding	250	Xu Wenbin

\* Population estimates from Wetlands International (2002).

# Names listed are either survey counters or survey leaders responsible for the waterbird monitoring database of Shengjin Hu National Nature Reserve.

## 11. Wetland Types\*:

List the wetland types present (see Annex 2). List the wetland types in order of their area in the Flyway Network site, starting with the wetland type with the largest area.

Wetlands in Shengjin Hu National Nature Reserve include:

Inland Wetlands (O): Shengjin Hu Lake, a permanent inland lake connected with the Changjiang (Yangtse) River, and

Man-made wetlands: (1,2 and 3) fish ponds, farm ponds and rice fields around the Lake.

## 12. Jurisdiction\*:

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

### **Territorial jurisdiction over the site:**

Municipal Authorities of Chizhou City, Anhui Province.

### **Functional jurisdiction for conservation purposes:**

The provincial Forestry Department of Anhui, the Forestry Bureau of Chizhou City and Shengjinghu NNR.

### 13. 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 and the title and/or name and email address/phone number of the person or persons in this office with direct responsibility for managing the wetland.

**Name:** Management Bureau of Shengjin Hu National Nature Reserve, Anhui, China.

**Contact person:** Cheng Yuanqi, Director, Management Bureau of Shengjin Hu National Nature Reserve

**Address:** Town of Da Dukou, Chizhou City, Anhui Province 247231, P.R. of China

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### 14. Bibliographical references\*:

A list of key technical references relevant to the wetland, including management plans, major scientific reports, and bibliographies, if such exist. Please list Web site addresses dedicated to the site or which prominently feature the site, and include the date that the Web site was most recently updated. When a large body of published material is available about the site, only the most important references need be cited, with priority being given to recent literature containing extensive bibliographies.

Wetlands International (2002). Waterbird Population Estimates – Third Edition. Wetlands International Global Series No.12, Wageningen, The Netherlands. 226pp.

Xu Wenbin (1997). A Bright Pearl for Eco-tourism—Shengjin Hu NNR. China Biosphere NR.

Xu Wenbin (1999). Variation of Wintering Waterbirds in Shanghu section of Shengjin Hu NNR. Wild Animal Magazine.

Liu Zhengyuan, Xu Wenbin, (2001). Research on wintering habitat of Hooded Crane in Shanghu section of Shengjinghu NNR. Issue 5 of Resources and environment of Yangtze River

China National Wetland Conservation Action Plan (2002).

General programming for Shengjin Hu NNR

Lu Jianjian (1990), China Wetlands. 1993, Management Plan for Poyanghu NNR, Jiangxi Province

Asia-Pacific Migratory Waterbird Conservation Strategy: 2001-2005

### 15. 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.

- **Geomorphology:** The south-east bank of Shengjin Hu Lake is a low mountain area. The north-west bank is on the Changjiang River alluvial plain.
- **Soil type and chemistry:** The soil type of the region is simple. The main and original soil type is red acid earth.
- **Water quality:** Little known pollution from local sources. Water quality of Shengjin Hu is considered good.
- **Depth, fluctuations and permanence of water:** The maximum lake area is 14 000ha, when the water level is 17.03m above sea level. During September to February each year, the water level falls to less than 10m above sea level and the lake area falls to 3,400ha. The annual average water level is 10.88m with an average lake area of 7,600ha.
- **Catchment area:** The water of Shengjin Hu comes from local run-off and two rivers, with a catchment area of 1,548.1 km<sup>2</sup>.
- **Climate:** The annual rainfall is 1,600 mm on average, varying from 759mm to 2022mm. The average annual temperature is 16.1° C. The average temperature in January is 4.0° C. The lowest

temperature recorded is  $-12.5^{\circ}\text{C}$ ; the highest recorded temperature is  $40.2^{\circ}\text{C}$ .

## 16. Physical features of the catchment area:

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

## 17. Hydrological values:

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

- **Flood control:** The Lake can store 8 hundred million tonnes of water in the flood season when necessary.
- **Irrigation:** In the dry season, the Lake provides good quality water for local agriculture.

## 18. General ecological features:

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

Shengjin Hu is a large, shallow, freshwater lake with a shoreline of 165km. Eighty percent of the lakebed area is covered with silt. The lake is naturally divided into three connected parts: the upper, middle and lower lakes. Eighty-four species of aquatic and semi-aquatic vascular plants have been recorded, the dominant species being *Eurgle ferox*, *Ceratophyllum demersum*, *Trapa maximowizzii*, *Nymphoides peltatum*, *Potamogeton malainus*, *Vallisneria spiralis*, *Phalaris arundinacea*, *Cares unisexualis*, *C. cinerascens* and *Polygonum lapathifolium*. Water used to flow freely through Shengjin Hu. The construction of the Huangpen Watergate at the outlet of Shengjin Hu in 1958 enabled some degree of water level control. The Watergate is now opened in late spring and early summer to draw in fish from the Changjiang River. It is also opened in late fall to draw down the Lake when the flood season of the Yangtze River is finished in order to make space for next year's water. The exposed lakebed and the resultant wet meadow provide ideal habitat for non-breeding migratory birds.

## 19. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy 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 SIS.*

(Please add here the species which do not come under sec no 14)

Wild Soja (*Glycine soja*, Sieb.et Zucc.), a national protected wild plant, is distributed in the reserve.

## 20. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 10. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the SIS.*

(Please add here the species which do not come under sec no 14)

One hundred and seventy-one species of birds have been recorded in SNR, including eighty species of waterfowls. It is particularly important as a non-breeding area for migratory water birds, which rest and feed in the shallow swampy areas of the lake created as the water level falls in autumn. The non-breeding season birds include *Egretta garzetta*, *E. cinerea*, *Ciconia nigra*, *Threskionnis melanocephalus*, *Platalea leucorodia*, *Cygnus columbianus*, *Anser fabalis*, *A. cygnoides*, *Anas falcata*, *A. formosa*, *A. acuta*, *Fulica atra*, *Aix galericulata*, *Tringa erythropus*, *T. nebularia*, *T. ochropus*, *Limosa limosa*, *Recurvirostra avocetta* and *Otis tarda*. Four species of cranes occur (*Grus grus*, *G. vipio* and *G. leucogeranus*). SNR supports the largest non-breeding population of Hooded Crane (*Grus Monacha*) in China; usually about 350 individuals over-winter. It also supports about 10% of the global population of *C. boyciana*; usually 200-300 individuals over winter. The total number of waterfowl in SNR is about 100,000. It is one of the most important non-breeding areas for cranes, storks, geese, ducks and shorebirds. From 2002, the number of Tundra Swan wintering here is more than 4000.

SNR has a very rich fish fauna: 61 species have been recorded including *Cyprinus carpio*, *Carassius aratas*, *Simiperca chuatyi*, *Culter erythropterus*, *Eliopichthys bambusa*, *Ophiocephalus argus*, *Parasilunus asotus*, *Acanthorhodeus taenianalis*, *Pseudobagrus fulvidraco*, *Mylophthalmichthys molitrix* and *Hemiculter bleekeri*.

At least 18 species of molluscs occur, including *Cipangopaludina chinensis*, *Bellamya quadrata*, *Radix auricularia*, *Limnoperna lacustris*, *Hyriopsis cumingii*, *Anodonta woodiana*, *Cristaria plicata* and *Corbicula fluminea*.

## 21. Social, economic and cultural values:

a) Describe if the site has any general social, economic 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:

- **Eco-tourism:** The growth of eco-tourism in SNR is expected to bring additional income for local residents, who will in-turn give more support to the conservation of waterfowls and their habitat.
- **Education and scientific research:** SNR is an ideal place for conducting research on limnology, ichthyology, ornithology etc. Experts and students from universities, colleges and institutes will help to improve management of the reserve.
- **Fishery:** Fishing in Shengjin Hu represents the main source of income for about 1000 local residents and an important source of income for several other families. It has been found that fishing activities sometimes influence wintering birds.
- **Grazing:** In winter, thousands of buffalos graze on the grassland of the lakebed. The influence of buffalos on wintering birds needs further investigation.

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? (Double-click the checkbox to check and choose "Checked" under "Default Value" from "Check Box Form Field Options" window)

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:

## 22. Land tenure/ownership:

a) Within the Flyway Network site:

Shengjin Hu Nature Reserve lands is nationally owned and is managed by local government. The fishponds and rice fields belong to the local community, and leased by the resident operators.

b) In the surrounding area:

## 23. Current land (including water) use:

a) Within the Flyway Network site:

About forty thousand people live in the reserve; nearly 5% of these are fishermen. Principal human activities in the reserve are fishing, rice planting and cattle grazing.

b) In the surroundings/catchment:

In the surrounding lands and catchment, principal human activities are agriculture and forestry. Since 2000, felling of natural forests has been forbidden in the catchment area.

**24. 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 Flyway Network site:

- **Aquaculture:** Observations in recent years have found that in some parts of Shengjin Hu, the area of the submerged vegetation has reduced. The most likely cause is too many fish fry being bred in the lake.
- **Siltation:** From 1995 to 1999 (except for 1997), there were four very large summer floods in Shengjin Hu. The heavy loads of silt and sand reduced lake depth in some parts and silting up of some streams in winter.

**Water level control:** Water depth is a most important factor affecting the biomass and integrity of habitats and directly influences abundance and biodiversity of waterbirds in a freshwater ecosystem. At present, the Reserve authorities do not have any effective measures to control water level when necessary

b) In the surrounding area:

**25. Conservation measures taken:**

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Flyway Network 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.

- **Nature reserve established:** Shengjin Hu Nature Reserve was established by the government of Anhui Province in 1986, and became a National Nature Reserve in 1997. The total area of SNR is 33,340ha. Besides Shengjinghu Lake, the Nature Reserve also includes some small lakes, fishponds, rice fields and forests around the lake. Hunting and collecting bird eggs have been totally forbidden in the Reserve.
- **General plan:** The General Plan of Shengjin Hu National Nature Reserve was mapped out in 1998 and was approved by the Ministry of Forestry, China, in 2000. One bird observation station was built in 2002. Construction of facilities for research, conservation, education and extension commenced in 2003.
- **Ecology research:** Studies on the wintering ecology of some endangered birds (such as Oriental Stork, Eurasian Spoonbill and Hooded Crane) since 1989 have led to changes in management of the Reserve. Monitoring of aquatic vegetation began in 2001.
- **Bird statistics:** Since the establishment of the reserve in 1986, bird species and the numbers of cranes, storks, spoonbill, geese and shorebirds in the reserve have been assessed and recorded.
- **Forest protection:** Since 2000, felling of natural forests has been forbidden in the catchment.
- **Participation of local communities and indigenous people:** As a result of education and awareness conducted since 1986, the local communities and indigenous people have realized that Shengjin Hu is an important waterfowl habitat. When diseased and injured birds are found, locals send these to the reserve bureau.

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate, see Annex 3):

Ia ; Ib ; II ; III ; IV ; V ; VI ; N/A

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

If yes, is it being implemented?: If no, is one being planned?

d) Describe any other current management practices:

**26. Conservation measures proposed but not yet implemented:**

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

- **Legislation:** a draft of *The Management Act of Shengjin Hu Lake National Nature Reserve* has been handed to the Municipality of Chizhou City. It is proposed to be a government ordinance of Anhui Province.
- **Management plan:** A management plan of the reserve is needed, but has not been compiled. A tourism plan and fishery plan should also be compiled.
- **Wetland rehabilitation:** A wetland rehabilitation plan for Shengjin Hu Lake National Nature Reserve was compiled several years ago, but has not been carried out due to funding problems.

**27. Current scientific research and facilities:**

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

Current scientific research includes: breeding ecology of Pheasant-tailed Jacana and Grey-headed Lapwing, monitoring species numbers, distribution, and abundance of shorebirds, and variation of aquatic vegetation. Monitoring of non-breeding water birds is conducted twice a month.

The main tools used in research are telescopes, binoculars and digital camera.

**28. 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.

An open letter has been written to the residents in the Reserve to tell them of its importance, and how to protect the birds and their habitats. Five thousand copies of public awareness materials introducing the reserve have been distributed through the communities. In April 4-10 of each year, during “Love Birds Week” of Anhui Province, the Reserve Bureau stages exhibitions in Chizhou City and nearby towns.

**29. Current recreation and tourism:**

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

College students from the Cities of Hefei, Nanjing and Wuhu visit the Reserve each year in holiday season. Few travelers visit the reserve at present, but increasing numbers have shown interest in the reserve.

**30. Threats\*:**

Which of the following threats is present historically – when the threat stopped but the effects are still there (H), currently (C) or potentially (P)?

	Historically	Currently	Potentially
<b>Residential and commercial development</b>			
housing and urban areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
commercial and industrial areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tourism and recreation areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Agriculture and aquaculture</b>			
annual and perennial non-timber crops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
wood and pulp plantations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
livestock farming and ranching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
marine and freshwater aquaculture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Energy production and mining</b>			

oil and gas drilling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
mining and quarrying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
renewable energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Transportation and service corridors

roads and railroads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
utility and service lines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
shipping lanes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
flight paths	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Biological resource use

hunting and collecting terrestrial animals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
gathering terrestrial plants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
logging and wood harvesting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
fishing and harvesting aquatic resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Human intrusions and disturbance

recreational activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
war, civil unrest and military exercises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
work and other activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Natural system modifications

fire and fire suppression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
dams and water management/use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
other ecosystem modifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Invasive and other problematic species and genes

invasive non-native/alien species	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
problematic native species	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
introduced genetic material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Pollution

household sewage and urban waste water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
industrial and military effluents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
agricultural and forestry effluents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
garbage and solid waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
air-borne pollutants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

excess energy

**Geological events**

volcanoes

earthquakes/tsunamis

avalanches/landslides

**Climate change and severe weather**

habitat shifting and alteration

droughts

temperature extremes

storms and flooding

**Please write here any additional threats and comments/queries you have on the threats.**

## **Annex 1: Criteria for the inclusion of sites in the Flyway Site Network**

(From the Partnership Text)

To be considered for inclusion in the Flyway Site Network, this Partnership adopts the following criteria:

- a. Convention on Wetlands (Ramsar, Iran, 1971) criteria for internationally important sites for migratory waterbirds. That is:
  - Criterion 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.
  - Criterion 5: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.
  - Criterion 6: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.
- b. The staging criteria as applied under the Asia - Pacific Migratory Waterbird Conservation Strategy. That is:
  - i. A staging site should be considered internationally important if it regularly supports 0.25% of individuals in a population of one species or subspecies of waterbirds on migration.
  - ii. A staging site should be considered internationally important if it regularly supports 5,000 or more waterbirds at one time during migration.
- c. Under exceptional circumstances a site can be nominated if it supports migratory waterbirds at a level or stage of their life cycle important to the maintenance of flyway populations. Justification of such nominations will be considered by the Partnership on a case by case basis.

## Annex 2: Ramsar Classification System for Wetland Type

The codes are based upon the Ramsar Classification System for Wetland Type as approved by Recommendation 4.7 and amended by Resolutions VI.5 and VII.11 of the Conference of the Contracting Parties. The categories listed herein are intended to provide only a very broad framework to aid rapid identification of the main wetland habitats represented at each site.

To assist in identification of the correct Wetland Types to list in section 19 of the RIS, the Secretariat has provided below tabulations for Marine/Coastal Wetlands and Inland Wetlands of some of the characteristics of each Wetland Type.

### Marine/Coastal Wetlands

- A -- **Permanent shallow marine waters** in most cases less than six metres deep at low tide; includes sea bays and straits.
- B -- **Marine subtidal aquatic beds**; includes kelp beds, sea-grass beds, tropical marine meadows.
- C -- **Coral reefs.**
- D -- **Rocky marine shores**; includes rocky offshore islands, sea cliffs.
- E -- **Sand, shingle or pebble shores**; includes sand bars, spits and sandy islets; includes dune systems and humid dune slacks.
- F -- **Estuarine waters**; permanent water of estuaries and estuarine systems of deltas.
- G -- **Intertidal mud, sand or salt flats.**
- H -- **Intertidal marshes**; includes salt marshes, salt meadows, saltings, raised salt marshes; includes tidal brackish and freshwater marshes.
- I -- **Intertidal forested wetlands**; includes mangrove swamps, nipah swamps and tidal freshwater swamp forests.
- J -- **Coastal brackish/saline lagoons**; brackish to saline lagoons with at least one relatively narrow connection to the sea.
- K -- **Coastal freshwater lagoons**; includes freshwater delta lagoons.
- Zk(a) – **Karst and other subterranean hydrological systems**, marine/coastal

### Inland Wetlands

- L -- **Permanent inland deltas.**
- M -- **Permanent rivers/streams/creeks**; includes waterfalls.
- N -- **Seasonal/intermittent/irregular rivers/streams/creeks.**
- O -- **Permanent freshwater lakes** (over 8 ha); includes large oxbow lakes.
- P -- **Seasonal/intermittent freshwater lakes** (over 8 ha); includes floodplain lakes.
- Q -- **Permanent saline/brackish/alkaline lakes.**
- R -- **Seasonal/intermittent saline/brackish/alkaline lakes and flats.**
- Sp -- **Permanent saline/brackish/alkaline marshes/pools.**
- Ss -- **Seasonal/intermittent saline/brackish/alkaline marshes/pools.**
- Tp -- **Permanent freshwater marshes/pools**; ponds (below 8 ha), marshes and swamps on inorganic soils; with emergent vegetation water-logged for at least most of the growing season.
- Ts -- **Seasonal/intermittent freshwater marshes/pools on inorganic soils**; includes sloughs, potholes, seasonally flooded meadows, sedge marshes.
- U -- **Non-forested peatlands**; includes shrub or open bogs, swamps, fens.
- Va -- **Alpine wetlands**; includes alpine meadows, temporary waters from snowmelt.
- Vt -- **Tundra wetlands**; includes tundra pools, temporary waters from snowmelt.
- W -- **Shrub-dominated wetlands**; shrub swamps, shrub-dominated freshwater marshes, shrub carr, alder thicket on inorganic soils.
- Xf -- **Freshwater, tree-dominated wetlands**; includes freshwater swamp forests, seasonally flooded forests, wooded swamps on inorganic soils.
- Xp -- **Forested peatlands**; peat swamp forests.
- Y -- **Freshwater springs; oases.**
- Zg -- **Geothermal wetlands**
- Zk(b) – **Karst and other subterranean hydrological systems**, inland

Note: “floodplain” is a broad term used to refer to one or more wetland types, which may include examples from the R, Ss, Ts, W, Xf, Xp, or other wetland types. Some examples of floodplain wetlands are seasonally inundated grassland (including natural wet meadows), shrublands, woodlands and forests. Floodplain wetlands are not listed as a specific wetland type herein.

### Human-made wetlands

- 1 -- **Aquaculture** (e.g., fish/shrimp) **ponds**
- 2 -- **Ponds**; includes farm ponds, stock ponds, small tanks; (generally below 8 ha).
- 3 -- **Irrigated land**; includes irrigation channels and rice fields.
- 4 -- **Seasonally flooded agricultural land** (including intensively managed or grazed wet meadow or pasture).
- 5 -- **Salt exploitation sites**; salt pans, salines, etc.
- 6 -- **Water storage areas**; reservoirs/barrages/dams/impoundments (generally over 8 ha).
- 7 -- **Excavations**; gravel/brick/clay pits; borrow pits, mining pools.
- 8 -- **Wastewater treatment areas**; sewage farms, settling ponds, oxidation basins, etc.

- 9 -- **Canals and drainage channels, ditches.**  
Zk(c) -- **Karst and other subterranean hydrological systems**, human-made

## **Annex 3: IUCN Protected Areas Categories System**

IUCN protected area management categories classify protected areas according to their management objectives. The categories are recognised by international bodies such as the United Nations and by many national governments as the global standard for defining and recording protected areas and as such are increasingly being incorporated into government legislation.

### **Ia Strict Nature Reserve**

Category Ia are strictly protected areas set aside to protect biodiversity and also possibly geological/geomorphical features, where human visitation, use and impacts are strictly controlled and limited to ensure protection of the conservation values.

### **Ib Wilderness Area**

Category Ib protected areas are usually large unmodified or slightly modified areas, retaining their natural character and influence without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition.

### **II National Park**

Category II protected areas are large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible, spiritual, scientific, educational, recreational, and visitor opportunities.

### **III Natural Monument or Feature**

Category III protected areas are set aside to protect a specific natural monument, which can be a landform, sea mount, submarine cavern, geological feature such as a cave or even a living feature such as an ancient grove. They are generally quite small protected areas and often have high visitor value.

### **IV Habitat/Species Management Area**

Category IV protected areas aim to protect particular species or habitats and management reflects this priority. Many Category IV protected areas will need regular, active interventions to address the requirements of particular species or to maintain habitats, but this is not a requirement of the category.

### **V Protected Landscape/ Seascape**

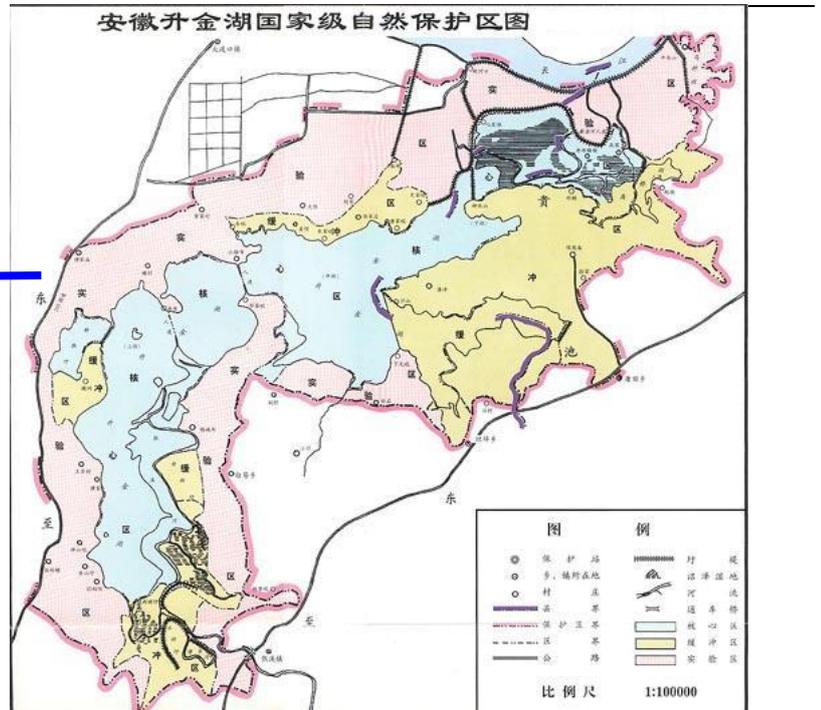
A protected area where the interaction of people and nature over time has produced an area of distinct character with significant, ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values.

### **VI Protected area with sustainable use of natural resources**

Category VI protected areas conserve ecosystems and habitats together with associated cultural values and traditional natural resource management systems.

### 30. Appendices

#### Appendix 1: Location Map and boundary of Shengjin Hu National Nature Reserve, Anhui Province, People's Republic of China.



**Appendix 2** : Shorebird species recorded in Shengjin Hu Nature Reserve since 1992 (species in red have exceeded the 1% criteria)

	Chinese name	English name	Date	Location	Maximum Count
1	黑翅长脚鹬	Black-winged Stilt	Recorded		Recorded
2	反嘴鹬	Pied Avocet	27/11/2002	大洲	503
3	凤头麦鸡	Northern Lapwing	10/11/1998	三千亩	1,0000+
4	灰头麦鸡	Grey-headed Lapwing	17/7/2004	余干	473
5	灰斑鹬	Grey Plover	08/01/2004	破坝	6
6	长嘴剑鹬	Long-billed Plover	Recorded		Recorded
7	金眶鹬	Little Ringed Plover	27/11/1998	大洲、小西湖	103
8	环颈鹬	Kentish Plover	08/01/2004	新胜圩	30
9	扇尾沙锥	Common Snipe	08/01/2004	破坝	37
10	黑尾塍鹬	Black-tailed Godwit	27/11/2002	大洲	798
11	白腰杓鹬	Eurasian Curlew	08/01/2004	横洲	1
12	鹤鹬	Spotted Redshank	12/12/1998	柞树墩	1000
13	红脚鹬	Common Redshank	08/01/2004	破坝	904
14	青脚鹬	Common Greenshank	17/11/1998	大洲	157
15	白腰草鹬	Green Sandpiper	18/01/1995	全湖区	320
16	矶鹬	Common Sandpiper	08/01/2004	唐田圩	2
17	黑腹滨鹬	Dunlin <sup>4</sup>	27/10/1995	联合	10000+
18	流苏鹬	Ruff	13/11/1996	金山圩	1
19	红胸滨鹬	Red-necked Stint	Recorded		Recorded
20	林鹬	Wood Sandpiper	21/1/2003	联合	11
21	中杓鹬	Whimbrel	12/11/1996	大洲	3
22	泽鹬	Marsh Sandpiper	Recorded		Recorded
23	水雉	Pheasant-tailed Jacana	17/07/2004	上湖	348

**Appendix 3 : Other waterbird species recorded in Shengjin Hu Nature Reserve since 1992.**

	<b>Chinese name</b>	<b>English name</b>	<b>Recorded date</b>	<b>Recorded location</b>	<b>Largest number recorded</b>
24	小 PT	Little Grebe	5/11/2003	全湖	143
25	赤颈 PT	Red-necked Grebe	Recorded		Recorded
26	凤头 PT	Great-crested Grebe	08/01/2004	横洲	17
27	普通鸬鹚	Great Cormorant	18/02/2001	白联圩、大洲	1112
28	苍鹭	Grey Heron	28/12/2001	三千亩	1000
29	大白鹭	Eastern Great Egret	18/2/2001	大洲、白联圩	1216
30	中白鹭	Intermediate Egret	17/12/1998	三千亩、新店	137
31	草鹭	Purple Heron	Recorded		Recorded
32	牛背鹭	Cattle Egret	Recorded		Recorded
33	池鹭	Chinese Pond-Heron	Recorded		Recorded
34	白鹭	Little Egret	08/01/2004	上湖	43
35	夜鹭	Black-crowned Night-Heron	18/10/1995	施畈、横洲	413
36	黑鹳	Black Stork	08/01/2004	神山头	17
37	东方白鹳	Oriental Stork	10/12/1995	烂稻陈	167
38	白琵鹭	Eurasian Spoonbill	22/3/2001	大洲	1107
39	白鸮	White Ibis	13/11/1994	金山圩	1
40	小天鹅	Tundra Swan	08/01/2004	赤岸、小西湖	4333
41	鸿雁	Swan Goose	21./01/1994	上湖、三千亩	30000
42	豆雁	Bean Goose <sup>1</sup>	08/01/2004	小西湖	2996
43	白额雁	White-fronted Goose	17/01/1994	金山	5000
44	灰雁	Greylag Goose	25/11/1993	施畈	7
45	赤麻鸭	Ruddy Shelduck	22/2/1994	烂稻沉	500
46	翘鼻麻鸭	Common Shelduck	08/01/2004	横洲	17
47	鸳鸯	Mandarin Duck	Recorded		Recorded
48	赤颈鸭	Eurasian Wigeon	16/10/1997	赤岸、大洲	3000
49	罗纹鸭	Falcatad Duck	08/01/2004	横洲、刘湾	8
50	赤膀鸭	Gadwall	Recorded		Recorded
51	花脸鸭	Baikal Teal	Recorded		Recorded
52	绿翅鸭	Common Teal	11/10/1995 年	金山圩	20000
53	绿头鸭	Mallard	08/01/2004	裕丰圩、横洲	700
54	斑嘴鸭	Spot-billed Duck	17/11/1998	裕丰圩	1989
55	针尾鸭	Northern Pintail	08/01/2004	横洲	4670
56	白眉鸭	Garganey	Recorded		Recorded
57	琵嘴鸭	Northern Shoveler	08/01/2004	横洲	100
58	红头潜鸭	Common Pochard	08/01/2004	横洲	45
59	青头潜鸭	Baer's Pochard	Recorded		Recorded
60	凤头潜鸭	Tufted Duck	Recorded		Recorded
61	白秋沙鸭	Smew	08/01/2004	横洲	32
62	红胸秋沙鸭	Red-breasted Merganser	Recorded		Recorded
63	普通秋沙鸭	Goosander	9/11/1996	大洲	11

	Chinese name	English name	Recorded date	Recorded location	Largest number recorded
64	白鹤	Siberian Crane	2/3/1994	烂稻陈	81
65	白枕鹤	White-naped Crane	17/12/1993	大洲	600
66	灰鹤	Common Crane	5/1/1999	烂稻陈	4
67	白头鹤	Hooded Crane	22/2/1994	烂稻	462
68	大鸨	Great Bustard	02/03/1994	大洲	7
69	普通秧鸡	Water Rail	Recorded		Recorded
70	白胸苦恶鸟	White-breasted Waterhen	Recorded		Recorded
71	黑水鸡	Common Moorhen	20/08/2004	上湖	203
72	骨顶鸡	Common Coot	15/10/1996	大洲	10000+
73	黑尾鸥	Black-tailed	08/01/2004	毕村	7
74	银鸥	Herring Gull	Recorded		Recorded
75	红嘴鸥	Common Black-headed Gull	15/1/1994	白密圩	2000
76	红嘴巨鸥	Caspian Tern	Recorded		Recorded
77	须浮鸥	Whiskered Tern	20/08/2004	上湖	1200
78	普通燕鸥	Common Tern	13/02/1995	上湖	1
79	白额燕鸥	Little Tern	15/12/1999	联合	1
80	白翅浮鸥	White-winged Tern	27/11/2001	大洲	4

**Note :** The species in red font meet the 1% criterion of international importance.

**Appendix 4** : Forest birds recorded in Shengjin Hu Nature Reserve since 1992.

	<b>Chinese name</b>	<b>English name</b>
81	山斑鸠	Oriental turtle Dove
82	珠颈斑鸠	Spotted Dove
83	黑枕绿啄木鸟	Grey-headed Woodpecker
84	四声杜鹃	Indian Cuckoo
85	大杜鹃	Eurasian Cuckoo
86	小鸦鹃	Lesser Coucal
87	草鸮	Grass Owl
88	长耳鸮	Long-eared Owl
89	短耳鸮	Short-eared Owl
90	普通夜鹰	Jungle Nightjar
91	白腰雨燕	Fork-tailed swift
92	斑鱼狗	Pied Kingfisher
93	戴胜	Eurasian Hoopoe
94	普通翠鸟	Common Kingfisher
95	蓝翅八色鸫	Fairy Pitta
96	云雀	Eurasian Skylark
97	小云雀	Oriental Skylark
98	家燕	Barn Swallow
99	金腰燕	Red-rumped Swallow
100	山鹊鸂	Forest Wagtail
101	白鹊鸂	White Wagtail
102	灰鹊鸂	Grey Wagtail
103	黄鹊鸂	Yellow Wagtail
104	田鸂	Paddyfield Pipit
105	树鸂	Oriental Tree Pipit
106	水鸂	Water Pipit
107	灰山椒鸟	Ashy Minivet
108	绿鹦嘴鹎	Swinhoe's Finch-billed Bulbul
109	白头鹎	Chinese Bulbul
110	虎纹伯劳	Tiger Shrike
111	牛头伯劳	Bull-headed Shrike
112	红尾伯劳	Brown Shrike
113	棕背伯劳	Long-tailed Shrike
114	黑枕黄鹂	Lack-naped Oriole
115	黑卷尾	Black Drongo
116	灰卷尾	Ashy Drongo
117	发冠卷尾	Hair-crested Drongo
118	灰椋鸟	White-cheeked Starling
119	丝光椋鸟	Silky Starling
120	八哥	Crested Myna
121	褐河乌	Brow Dipper
122	红嘴蓝鹊	Blue Magpie

123	喜鹊	Black-billed Magpie
124	小嘴乌鸦	Carrion Crow
125	白颈鸦	Collared Crow
126	寒鸦	Jackdaw
127	鹪鹩	Wren
128	红点颏,红喉歌鸲	Siberian Rubythroat
129	蓝喉歌鸲[蓝点颏]	Bluethroat
130	蓝歌鸲	Siberian Blue Robin
131	鹊鸲	Magpie Robin
132	红胁蓝尾鸲	Orange-flanked Bush-robin
133	北红尾鸲	Daurian Redstart
134	红尾水鸲	Plumbeous Water-Redstart
135	鹊鹑	Pied Harrier
136	赤腹鹰	Chinese Sparrow Hawk
137	雀鹰	Eurasian Sparrow Hawk
138	普通鵟	Common Buzzard
139	红隼	Common Kestrel
140	游隼	Peregrine Falcon
141	灰背鸫	Grey-backed Thrush
142	乌鸫	Eurasian Blackbird
143	斑鸫	Dusky Thrush
144	棕颈钩嘴鹎	Rufous-necked Scimitar Babbler
145	黑脸噪鹛	Black-faced Laughing Thrush
146	棕头鸦雀	Vinous-throated Parrotbill
147	短翅树莺	Chinese Bush Warbler
148	山树莺	Mountain Bush Warbler
149	黄眉柳莺	Yellow-browed Warbler
150	极北柳莺	Arctic Warbler
151	棕扇尾莺	Fan-tailed Warbler
152	白眉[姬]鹩	Yellow-rumped Flycatcher
153	白腹[姬]鹩	Blue-and-white Flycatcher
154	寿带[鸟]	Asian Paradise- Flycatcher
155	大山雀	Great Tit
156	攀雀	Penduline Tit
157	暗绿绣眼鸟	Japanese White-eye
158	山麻雀	Russet Sparrow
159	[树]麻雀	Eurasian Tree Sparrow
160	白腰文鸟	White-backed Munia
161	燕雀	Brambling
162	金翅[雀]	Grey-capped Greenfinch
163	黑尾蜡嘴雀	Yellow-billed Grosbeak
164	银喉[长尾]山雀	Long-tailed Tit
165	白头鹎	Pine Bunting
166	三道眉草鹀	Meadow Bunting
167	白眉鹀	Tristram's Bunting
168	小鹀	Little Bunting
169	黄眉鹀	Yellow-browed Bunting

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170	田鸫	Rustic Bunting
171	黄胸鸫	Yellow-breasted Bunting