Designation date: 11/01/2002 Ramsar Site no. 1154.

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.

Xi Dongting Lake (Mupinghu) 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:

There is some adjustment to the division of the wetland types in this sheet. The types of Tp and Xf are removed, which makes the division more accurate. The construction of the Three Gorge Project could produce some influences on the wetland due to the modification of the hydrological conditions.

Ramsar Criterion 6 is 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.

This Ramsar wetland has the same boundary as the natural wetlands and a part of artificial wetlands within Xi Dongting Lake (Mupinghu) Nature Reserve.

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.

Centre: 29°01' N, 112°05' E

Extent: 28°53′-29°06′ N, 111°57′-112°13′ 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.

Xi Dongting Lake (Mupinghu) Nature Reserve is geographically located in the west part of Dongting Lake Basin and administratively located in Hanshou County, Changde, Hunan Province, Central China. It is about 50 km north to Changde City and 16 km southeast to the Hanshou county seat.

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

Average: 39.5 m, Maximum: 58.6 m, Minimum: 20.5 m.

11. Area: (in hectares)

35 000 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.

The Ramsar site lies in Hanshou County, Hunan Province, Central China, mainly protecting waterfowls and their habitats. The reserve is an important habitat in the migratory route of birds in East Asia. There are seven bird species listed in the national first-class protected birds such as *Grus leucogeranus*, *Ciconia boyciana* and *Ciconia nigra*, and 22 species listed in the national second-class protected birds such as *Cygnus columbianus* and *Platalea leucorodia*.

This Ramsar site is a reed marsh wetland of inland lake, located in the last part of the downstream area of Yuan River and Li River. Widely distributed shoals, rivers and lakes and vast waters form the unique geomorphology and wetland landscape. The wetland is represented as a typical lake in flood seasons while as shoals in dry seasons, which is the main characteristic of the site. There are many ecosystem types such as river, rivulet, lake, sedge, reed, beach, paddy field, fish pond and wave-shelter forest, with reed (*Phragmites australis*) as the dominant plant which

occupies about 60% of the total wetland area.

The well developed water system and large thruput of flood water make the wetland hold strong self-purifying capability. The period of water exchange of the lake is less than 20 days. There are rich biological resources in this unique wetland. Every year, over 20 000 individuals of wintering birds inhabit here, with aigrets and anseriformes as the dominant species.

Because of the typical and primitive ecosystem as well as rich biodiversity, this wetland plays an important role in biodiversity conservation in the world. It is also an important base for studying wetland ecosystems. The beautiful natural environment makes the wetland a favorite ecotourism place. Tens of thousands of tourists are attracted to visit here every year.

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

Xi Dongting Lake plays an important role in flood regulation. With a water exchange period less than 20 days, it is represented as a typical regulation/storage lake in the mid-downstream area of the Yangtze River. Besides the Yuan River and Li River, the Yangtze water infloods into this wetland from Taiping and Songzi estuary. Therefore, the wetland has valuable functions of flood control, maintenance of high level of water quality, regulation and stabilization of regional climate. Overall, it is the guarantee of the sustainable development of local economy.

Criterion 2

According to the IUCN Redlist, the site regularly holds 1 critically endangered species, 5 endangered species and 6 vulnerable threatened bird species (12 species in total), as shown in the following table.

Species Latin Name	IUCN Category
Grus leucogeranus	CR
Anser cygnoides	EN
Tringa guttifer	EN
Ciconia boyciana	EN
Acipenser sinensis	EN
Mergus squamatus	EN
Grus vipio	VU
Aythy baeri	VU
Grus monacha	VU
Anas formosa	VU
Otis tarda	VU
Anser erythropus	VU

Criterion 3:

The wetland of Xi Dongting Lake is an important part of Dongting Lake Wetlands and is listed in the "Global 200" (200 ecological areas worldwide with the highest priority for preservation) by WWF. This area is also an important component as well as a representative of the wetland group in the mid-downstream area of the Yangtze River.

It is a critical wintering site for waterfowls, and the major breeding site for freshwater fish and many other aquatics. The site holds a great abundance of animal resources, including 2 340 species of birds, 121 species of fish, and 416 species of wetland plants. In addition, it is the important breeding site for migratory fish, the major genetic resource pool of freshwater fish of China, especially the major production place of the four most common cultivated fish in China (i.e. *Mylopharyngodon piceus*, *Ctenopharyngodon idellus*, *Hypophthalmichthys molitrix* and *Aristichthys mobilis*). Besides, it is the natural distribution area and genetic resource pool of wild soybean (*Glycine soja*).

Criterion 4:

It is an important migratory stopover for the rare birds such as Cranes and Storks.

Criterion 5:

The wetland provides wintering habitats for 113 species of waterfowls, with the individuals ranging from 30 000 to 60 000. Totally, 35 347 waterfowl individuals falling into 52 species and 42 345 individuals falling into 58 species were recorded in the winter surveys during 2003-2004 and 2004-2005, respectively.

Criterion 6:

There were 3 species of waterfowls recorded in the waterfowl survey in 2006's winter. The abundance exceeded 1% of the global abundance (as seen in the table below).

Scientific Latin Name	individuals	1% abundance
Ciconia nigra	36	5
Anser fabalis	3249	800
Platalea leucorodia	287	100

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:

Central China region, Sino-India sub-division, Oriental 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: The site, a subsidence basin on the Jiangnan Axis of Yangtze Platform, is located on the southwestern hollow side of Dongting Lake formed in Cainozoic Era. The main layer is Quaternary deposit. Holocene sediments are dominant in Quaternary deposit. The geographic feature can be divided into several types such as deposition, erosion deposition and hillock.

Soil types: The main soil-forming parent material is deposit from rivers. Because of the differences in topography, water, vegetation and soil-forming processes, the soil type significantly varies with regions. In the highlands along rivers and lakes, fluvo-aquic soil is the dominant soil type. While in the lowlands, the major soil types are bog meadow soil and bog soil with pH value ranging between 7 and 7.3.

Origins: Natural wetlands (53.6% of the total wetland area) are mainly composed of shallow lakes, rivers and reed marshes. Artificial wetlands (46.4%) are composed of ponds, pools, irrigated lands and agricultural flood-lands.

Hydrology: There exist complex water systems. Besides the Yuan River and Li River, the Yangtze water infloods into this wetland from Taiping and Songzi estuary. Also, there are eight rivers in the small mountain area (part of the Xuifeng Mountains) in the south of Hanshou County flowing into the wetland from the south to the north, such as Cangshui River, Langshui River, Longchi River and Yanbaoshan River. The vertical distribution of water temperature exhibits several temperature layers. Generally, the temperature difference between the top layer and bottom layer is less than 1.0 ℃. The annual average water temperature is 17.35 ℃. The water temperature is generally higher than the air temperature except from June to August. Due to the relatively strong water flow and wind, the water turbulence is so intensive that the water here has never been frozen in the past 50 years.

Water resource: As the main upstream rivers of the wetland, Yuan River and Li River are the permanent water resource. In flood seasons, the Yangtze water infloods into this wetland from Taiping and Songzi estuary. In addition, the eight rivers in Hanshou County such as Cangshui River, Langshui River, Longchi River and Yanbaoshan Rive are the seasonal water resources.

Water quality: The water quality of the wetland varies slightly between III and IV level (national criterion of China), with a pH value of 7.0. The water transparency ranges from 0.2 to 0.4 m.

Water depth: The water depth greatly varies with seasons. The mean water depth of the lake ranges from 2 to 6 m in dry seasons and 9 to 17 m in flood seasons. The average water depth of the marshes ranges between 0 and 85 cm in normal seasons, while between 4 and 6 m in flood seasons. The mean elevation of the low water level and high water level are 27 m and 37 m, respectively. The highest water level occurs in July-August, and the lowest level occurs from December to March of next year. September-November is the normal season. Also, water depth varies with regions, with the highest, lowest and average levels being 18 m, 1.2 m and 6.0 m, respectively.

Downstream area: The Xi Dongting Lake is connected with the southern Dongting Lake through a narrow channel in the south of Chishan Island. The water storage of the Xi Dongting Lake reaches over 50 billions cubic meters per year, which could make a contribution to the regulation of the downstream water level.

Climate: Located at the transitional region of central to northern subtropical zone, the

Ramsar site has mild climate, with rich sunshine, abundant rainfall and distinctive seasonal variation. The annual average temperature is 16.6-16.8 ℃, the annual average precipitation is 1200-1350 mm and the frost-free period is 274 days. Rainstorm is the main climatic disaster in this region. It happens every year, with the mean frequency of three to four times per year. Most of the rainstorms occur during May-August.

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 area is about 170 000 km^2. The west part of the catchment lies across the west Dongting plain located in the downstream area of Yuan River and Li River; the north part covers the Taiping and Songzi estuarine plains of the Yangtze River; the south part includes the low mountain areas in the south of Hanshou County where eight rivers (such as Cangshui River and Yanbaoshan Rive) can be found.

Overall, the catchment area has the geology and geomorphology of alluvial plain, with obvious valleys and river channels. There are also some dunes and sands. The valleys and lowlands are covered with water all year around. Reeds grow in the lowlands, outside which meadows, farmlands, woodlands and residential areas are distributed.

The main soil types include bog soil, fluvo-aquic soil and aeolian soil. Bog soil and fluvo-aquic soil are widely distributed in the lowlands by the rivers or those permanently covered with water. The main land use types are agriculture, fishery, forestry, shipping transportation and residential areas.

The catchment belongs to humid continental subtropical monsoon climate, characterized by warm and humid weather, plentiful sunlight, abundant wind and rain and distinctive seasonal variation. The mean annual temperature is 17 ℃.

18. Hydrological values:

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

The wetland can recharge groundwater of about 470 millions cubic meters and regulate flood water of 5.25 billions cubic meters. Thus it could play important roles in water level control for Xi Dongting Lake, stabilizing shoreline, trapping silts from Yuan River and Li River, impurity filtration and regulating local climate.

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	Tp	Ts	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.

O: Permanent freshwater lakes: with the total area of 21 710 ha, accounting for 81% of the site.

Human-made wetlands composed of ponds, pools, irrigated lands and agricultural flood-lands cover 3466 ha, accounting for 13% of the site.

M: Permanent rivers cover 1784 ha, accounting for 6% of the site.

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.

The wetlands are mainly composed of permanent freshwater marshes, shallow lakes and shoals, with *Phragmites Australis*, *Cyperus glomeratus*, *Polygonum hydropiper* and *Cyperus glomeratus* as the dominant plant species. The soil is rich of organic matters. The insects and fish are rich both in species and individual number and serve as foods for birds. Aigrets, gooses and ducks, gulls, cranes, and many other wetland bird species assemble here. Therefore, the wetland is not only the important habitats but also the important hiding place for the birds.

In the dry seasons of winters, the wetlands are mainly covered by meadows, with *Cyperus glomeratus* and *Polygonum hydropiper* as the constructive species. The height of the communities is relatively low. Many bird species live here, such as *Grus leucogeranus*, *Ciconia nigra*, *Platalea leucorodia* and *Anser fabalis*.

In the shallow lakes, there are plenty of aquatic grasses. The grasses, fish and zoobenthoses are the important foods of waterfowls. These areas are the important feeding grounds of migratory birds in winter. In addition, this region provides many freshwater productions to local people, such as fish, shrimps and trumpet shells.

There are a few farmlands, woodlands and residential areas distributed in the site where there lives a variety of typical domestic birds such as *Passer montanus*, *Hirundo rustica* and *Hirundo dauric*. Also, there are 9 shrimp species, 48 shell species, 90 zooplankton species in the site, composing a relatively integrated food chain together with many species of fish and aquatic grass.

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 Ramsar site could be divided into 4 main habitat types: shallow lake, reed marsh, meadow and farmland. Usually, *Phragmites australis* and *Cyperus glomeratu* act as the constructive species. The abundant plant species provide favorable habitats for the waterfowls and fish. In surveys, a total of 416 vascular plant species falling into 260 genera of 87 families were recorded, including 19 Pteridophyta species in 16 genera of 14 families, 2 Gymnosperm species in 2 genera of 1 families, 395 Angiosperm species in 242 genera of 72 families which can be divided into 3 vegetation type groups and 70 associations (34 associations in the meadow type, 13 associations in the marsh type and 23 associations in the aquatic type). Besides, a rare species of great genetic value, wild bean (*Glycine soja*) is found in the wetland.

The natural vegetation is mainly composed of hygrophytes. From the water to the land, the vegetation type varies in the order of submerged plants, floating plants, emerged plants, sedge meadows, *Artemisia integrifolia* shrubs, deciduous broad-leaved forests and evergreen broad-leaved forests. The main hygrophyte communities are reed community, Triarrhena community, sedge community, *Potamogeton octandrus* community, *Cyperus microiria* community, etc. Reeds and Triarrhena plants are the most valuable economic plants in the reserve. Reed production supports local agricultural economy the most.

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.***

The Ramsar site is an ideal habitat of wild animals. According to the surveys in recent years, 217 bird species in 58 families of 15 orders were recorded, including 121 species of winter migratory bird, 39 species of summer migratory bird, 56 species of residential bird and 1 species of staging bird. Considering the additional 16 bird species recorded historically, the wetland totally holds 234 bird species falling into 58 families of 15 orders. The birds in the wetland have four main characteristics as follows. Firstly, the dominant species are hygrophilous or semi-hygrophilous. There are 83 waterfowl species (accounting for 61% of the total). Secondly, migratory bird species are dominant among all the bird species. Thirdly, the bird fauna is complex, including 4 representative species of world fauna and 7 representative species of China fauna. Fourthly, most of the bird species do not breed in this wetland, but only 49% of the total bird species breed here.

There are 121 fish species falling into 23 families of 12 orders, which can be categorized into four ecotypes (i.e. limnicolous fishes, migratory fishes (between sea and river), semi-migratory fishes (between river and lake) and rivulet fishes). There exist 54 Cyprinidae species, 13 Bagridae species, 9 Cobitidae species, 5 Serranidae species and 5 Salangidae species, accounting for 48.6%, 11.7%, 8.1%, 4.5% and 4.5%, respectively. And other fish families hold 25 species with less than 3 species in each family. Many rare species live here, such as *Acipenser sinensis, Psephurus gladius*, *Macrura reevesii*, *Hemisalanx prognathu*, *Myxocyprinus asiaticus* and *Siniperca roulei*.

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:

This wetland is an important base of agriculture, fishery and livestock breeding industry. The population of this area is 90 126 within 21 343 households, including an agricultural population of 65 781. The Gross National Production (GNP) of this area is 667.86 millions RMB. Woodlands cover 5 273 ha (forest coverage is 8.5 %), holding a stocking volume of 395 thousand cubic meters.

Hanshou County has great historical and cultural accumulation over 2500 years. Many famous ancient people (such as QU Yuan, LI Bai and LIU Yuxi, the famous Chinese ancient poets) performed their well-known stories in the wetland and the legends become the essence, while the fishery culture becomes the highlight of the culture of Xi Dongting Lake.

In the surrounding areas of Xi Dongting Lake, many cultural relics were excavated, such as stone tools from neolithic age, bronze bells from Zhou Dynasty, bronze swords from Warring States Period and golden/silver containers from East Han Dynasty, which could be local tourism resources of great endemic characteristics.

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 site is co-managed by the related departments of Hanshou County government such as Water Conservation Institute, Hydropower Bureau, Aquatic Product Bureau and Bureau of the Nature Reserve.

b) in the surrounding area: state and collective ownership.

State ownership. The collectivities of local villages and towns have right to use the lands.

25. Current land (including water) use:

a) within the Ramsar site:

The wetland provides water to over 90 000 dwellers for living, and to local 10 factories for industrial production. It could play an important role in water regulation both in flood and dry seasons. The reserve can be divided into core area (24%), buffer area (29%) and experiment area (57%). Human activities are forbidden in the core area. Part of the shoals in the buffer area and experiment area has been developed into ecological shelter forests and timber forests. The water areas provide natural fishing ground and shipping transportation for thousands of fishermen. Part of the waters is used to develop freshwater aquaculture. Some grasslands are used for livestock grazing.

b) in the surroundings/catchment:

The artificial wetlands in the surrounding areas are mainly farmlands. Local agriculture is in a slow transitional process from traditional agriculture to modern agriculture. In the water-covered areas, fishery production is changing from traditional fishing to modern aquaculture.

The 800 ha water area in the Qingshan Lake is the only organic aquaculture base in the whole Dongting Lakes. In November, 2006, it won the quality attestation from Organic Food Development and Certification Center (OFDC) of China.

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 accretion of silt deposition in the surrounding areas could produce some influences on the wetland in terms of hydrological conditions.

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.

Approved by the government of Hunan Province, the Provincial Natural Reserve of Xi Dongting Lake in Hanshou was founded in January, 1998. The administrative level of the reserve was promoted in 2006. “Master plan of Muping Lake Nature Reserve in Hunan Province” was made in 1999. In collaboration with WWF, the reserve carried out a demonstration project of returning farmland to the lake and wetland restoration in Qingshan Lake in 2002. Through the project, Qingshan Lake is under closed management. Till 2006, the eco-environment of Qingshan Lake Wetland was effectively restored and protected. In collaboration with WWF, the reserve also established a wetland propaganda and education center in Jiangjiazui Town. The center covers an area of 0.5 ha, with a total of 500-m^2 construction area. Many propaganda and education activities have been carried out in the center. During 2003-2006, dynamic monitoring of birds and fish resources was developed.

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:

Since the reserve was established in 1998, “Law of the People’s Republic of China on the Protection of Wildlife”, “Regulations on Nature Reserves” and “Regulations on Wetland protection in Hunan Province” were strictly implemented. The core area and buffer area are being well protected, and the exploitation and utilization of the wetlands in these areas are strictly restricted. Illegal hunting and fishing activities in the wetland are strictly forbidden as well as any construction project which could produce negative impacts on the wetland. Human disturbances are maximally decreased.

The reserve established the scientific research and monitoring system in 2003. Synchronized surveys for birds are carried out in every spring, summer and winter. Especially in winters, daily monitoring persists throughout the wintering period of the waterfowls. These works can provide scientific basis for the management of the reserve. A community-condominium committee was established in collaboration with Jiangjiazui Town and Yangtaohu Town in 2004. Under the condominium of the communities and the reserve, the resources of the Qingshan lake Wetland, where the policy of “returning farmland to the lake” was implemented, was effectively protected and organic fishery was developed.

This site is not listed in the Montreux record.

28. Conservation measures proposed but not yet implemented:

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

An application for establishing integrated management systems through a three-class management network (i.e. department, station and point) has been submitted to the local government. A proposal has been submitted to the People’s Congress of County for establishing laws of wetland management and conservation. A wetland compensation plan has also been submitted to some relevant departments.

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 cooperated with Hunan Normal University in monitoring the wetland resource and making ecotourism plan of Xi Dongting Lake, cooperated with the relevant departments of the local government in monitoring and managing the silts in the lake and controlling schistosomiasis in the region, and cooperated with local communities in studying wetland restoration, ecological balance and coordinated development between wetland protection and economic construction.

From 2003 to 2005, funded by WWF, the reserve continuously conducted dynamic monitoring of birds, fish and plants for 3 years. Most conditions of bird, fish and plant resources are clarified. In 2000, funded by WWF, a monitoring, a computer, a micro-camcorder and two binocular telescopes have been equipped. In 2005, a station of migratory bird observation was

established for studying epidemic diseases. Some equipments and funds were provided to the station.

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.

In 2000, the reserve printed about 10 000 copies of propaganda booklet introducing the reserve. In 2004, about 3 000 copies of a propaganda book entitled as “The sing of wetlands” were published to introduce the wetland culture. In 2005, propaganda films entitled as “Step into the Ramsar site: the Xi Dongting Lake Nature Reserve” and “Water town in the dream” were produced. Since 2002, eight photography exhibitions on wetland have been organized in the county and the communities.

In 2003, an environmental education base was established. Many activities on environmental education and training have been developed in collaboration with many schools. The Third High School of Hanshou County and the Chenjunti Primary School are taken as the experimental schools of environmental education. Since 2000, 28 propaganda boards have been put up in the main roads and docks to introduce the objectives, significances and contents of this nature reserve and some relative protection policies, laws and rules of China. Besides, media such as television and newspaper have also been used for environmental educations.

31. Current recreation and tourism:

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

In 2005, approved by Ministry of Construction of China, National Urban Wetland Park of Qingshan Lake was established within the reserve for eco-tourism. In 2006, a section of tourism management was established by the bureau of the reserve. To explore and utilize the tourism resource, a private company was also established with a joint-stock form. In the company, there are 159 employees, 25 cruise ships, 2 yachts, 1 shopping center, 4 appointed hotels and 5 restaurants with the forms of enjoying fishers’ or farmers’ lives. The company has a reception capacity of over 300 people. Till now, the company has received 56 000 tourists, with an income more than 390 000 RMB.

32. Jurisdiction:

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

Territorial: Hanshou County government.

Functional: State Forestry Administration. The direct superior is Forestry Administration of Huan 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: Bureau of Provincial Xi Dongting Nature Reserve

Address: South Yanjiang Road 167, Chengguan Town, Hanshou, Hunan Province
Zip: 415900
Principal: Deyun Gan (director)
Tel.: +86-(0)736-2468998 (Bureau office)
+86-(0)736-2870193 (Propaganda and Education Center)

34. Bibliographical references:

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

[1] Dou Hongsheng et al., 2000. Dongting Lake. Beijing: Press of Chinese Science and Technology University.

[2] Yu Xunlin, 2006. Scientific Investigation Report of Vegetation in Xi Dongting Lake Wetland. Summarizing Report of the Project about Vegetation Investigation Funded by WWF.

[3] Peng Pingbo, 2005. Investigation of bird resource in west Dongting Lake national reserve. Journal of Huan Environment – Biological Polytechnic. 11 (3): 231-235 .

[4] Peng Pingbo, 2006. Scientific Investigation Report of Fish Resource Dynamic in Xi Dongting Lake. Summarizing Report of the Project about Fish Resource Investigation Funded by WWF.