

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 of the Conference of the Contracting Parties.

1. Date this sheet was completed/updated:

04/28/2001

2. Country:

the People's Republic of China

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Designation date

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Site Reference Number

3. Name of wetland:

Nan Dongting Wetland and Waterfowl Nature Reserve.

4. Geographical coordinates: 112°40'E □ 28°50'N

5. Elevation: (average and/or max & min.) average 30m □
max 33.5m □ min 28.5m**6. Area:** 168,000 ha

7. Overview: (general summary, in two or three sentences, of the wetland's principal characteristics)

This wetland is located at the south part of Dongting Lake, which is the largest lake on the plain area in the middle reaches of the Yangtze River. The wetland supports important habitats for White storks and White cranes, and rich fauna and flora of high economic value. Besides, it plays an important part in the regulation and storage of floodwater from the Yangtze River.

8. Wetland Type (please circle the applicable codes for wetland types; in the present document, the Ramsar Classification System for Wetland Type" is found on page 9)

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)

Please now rank these wetland types by listing them from the most to the least dominant:

O . 2 . M . 4 . Tp . Xf . 3 . 1 .

9. Ramsar Criteria: (please circle the applicable Criteria; the *Criteria for Identifying Wetlands of International Importance* are reprinted beginning on page 11 of this document.)

1 • 2 • 3 • 4 • 5 • 6 • 7 • 8

Please specify the most significant criterion applicable to the site: 2

10. Map of site included? Please tick yes

(Please refer to the *Explanatory Note and Guidelines* document for information regarding desirable map traits).

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

Name: Dai Meibing

Compiler: The Management Bureau Of Nan Dong Ting Lake Nature Reserve

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Please provide additional information on each of the following categories by attaching extra pages (please limit extra pages to no more than 10):

12. Justification of the criteria selected under point 9, on previous page. (Please refer to the *Criteria for Identifying Wetlands of International Importance* appended to this document)

Criterion 2: the wetlands provides ideal habitats for 6 species of National first-class migratory birds under the state protection for wintering such as white storks *Ciconia boyciana*(E), black storks *Ciconia nigra* (E), white cranes *Grus Leucogeranus* (E), hooded cranes *Grus monacha* (E), great bustards *Otis tarda* and Chinese mergansers. Besides, the Chinese sturgeons *Mergus squamatus*(R), which are the National first-class fish species under the state protection, is inhabiting in the wetlands

Criterion 3: these wetlands are inland subtropical wetlands with rich biodiversity and a large number of migratory waterfowl for wintering. According to the preliminary survey, there are 118 species of birds inhabiting/wintering here. The wetland consists of man-made wetland, intertidal zone, shallow open water area and grassy marsh.

Criterion 5: the number of the waterfowls coming for wintering reaches over 20,000.

Criterion 6: the number of Lesser white-fronted geese coming for wintering is more than 7,000.

Science and research report of the Nan Dongting Lake NR, 1996
The Master Plan, the Nan Dongting Lake NR, 1997

13. General location: (include the nearest large town and its administrative region)

This wetland is located at the Dongting Lake in the north part of Hunan Province, which is 5km from Yiyang City. Its administrative region includes Ruanjian City, Ziyang District, Heshan District and Datonghu District.

14. Physical features: (e.g., geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate)

Geology and geomorphology: The wetland is situated at the middle reaches of the Yangtze River, During the Mesozoic era the fracture zone occurred due to the movement of the Yanshan Mountain. Under the alluvial role by the Yangtze River and the four rivers of Xiang, Zi, Ruan and Feng, the geosyncline and curst gradually become river-lake covering materials, consequently forming a flat lake basin. Its elevation is west high and east low. The terrene is like a basin-shaped plain with moderated elevation change. The rivers crisscross the wetland. The water level changes greatly with different seasons. A lake would take shape when the water level rises but islets appear when the water level drops.

Origin: the wetland consists of two types of wetland: Natural and man-made. The natural part is shaped like a flat lake basin under the alluvial role by the four rivers of Xiang, Zi, Ruan, and Feng and the man-made part is comprised of the farmland and fishponds reclaimed from the wetlands.

Hydrology: the wetland can get plentiful rainfall with the average annual precipitation at 1300-1400mm. The rainy seasons are March through August, during which the rainfall will make up 70% of the yearly total. There is not very much rainfall between September and February, only 30% of the yearly total. The average runoff from the Yangtze River and the three rivers of Zi, Ruan and Feng is 973 million cubic meters. About 224.529 billion cubic meter of water flows through the wetland. Flood control must be conducted in the communities of the surrounding areas during the rainy season. Severe floods occur three times every decade.

Soil Type: formed by the sedimentation of mud and sand brought by the Yangtze River and the four rivers of Xiang, Zi, Ruan and Feng, the soil is thick and fertile. The soil permeability is high and its PH value is between 6.0-7.0.

Water quality: Since the wetlands is at the lake area through which many rivers flow, the water quality is good, thus classified as Grade II according to the government standards.

Depth, fluctuation and stability: the depth of the lake is 15.6m at its deepest point during the rainy season, but only 2m during the dry season. The lake looks like a line in winter and spring, but like a stretch of sea in summer and autumn.

Catchment area: the catchment area in the rainy season is about 89,000ha. 65.4% of the total area of the wetlands, but 38,000ha.in the dry season, only 27.9%.

Downstream area: the wetlands is a storage for the floodwater from the Yangtze River, which alleviate the pressure for the areas and cities, especially Wuhan, along the lower and middle reaches of the Yangtze River.

Climate: the wetland is situated at the subtropical zone with the average annual temperature at 17 degree C. the annual rainfall is between 1300mm and 1400mm. The total annual rainy days are between 135 and 160. The rainy day concentrate in summer and spring, but less in autumn and winter. The total number of sunshine hours is 1600 on average annually.

15. Hydrological values: (groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.) the wetland can regulate and store the floodwater from the Yangtze river and the four rivers of Xiang, Zi, Ruan and Feng, degrade the toxic substances brought by the rivers, trap sediment, change the climate in the area and improve aquaculture.

16. Ecological features: (main habitats and vegetation types)

Since the wetland characterized by its flat topography, thick and fertile soil and big change of seasonal water levels, the plants are distributed in strip with the change of water levels. The plants can be classified as submerged plant, floating plant and erecting plant. The predominant plant communities include *Common bladderwort*, *Myriophyllum* communities, *lotus*, *Polygonum*, *Bryophyte*. The exotic species are *polar* and *metasequoia*

17. Noteworthy flora: (indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc.)

In the wetlands many types of plants of important economic value are grow like ramie reed, cotton, and rices are *artemisia*, *lotus* and *Zizania caduciflora*. It is one of the important producers in China producing ramie, reed cotton, and rice. *Artemisia*, which is growing naturally, is favored by people. *Lotus* and *zizania caduciflora* are erecting plants, which are to be planted in a big way under the agriculture development project (calamity reduction)

Science and research report of the Nan Dongting Lake NR, 1996

The Master Plan of Nan Dongting Lake NR, 1997

18. Noteworthy fauna: (indicating, e.g., which species are unique, rare, endangered, abundant or biogeographically important; include count data, etc.)

the site locates in the heartland of China with so many river confluence into the basin. So the presence of wildlife are typical representatives of type of the families in the middle reach of Yangtze River. According to record, there are in this wetlands 160 species of birds in 42 families of 16 orders, 114 species of fish in 23 families of 12 orders and 29 species of reptile of 8 families. Listed as the first-class animals under the state protection are white fronted crane, white storks, black storks, great bustard, Chinese mergansers, Chinese sturgeon and beluga. About 35 species of animals are listed as the second class animals under the state protection. The number of the waterfowls coming to the wetlands for wintering reaches 10 millions.

Science and research report of Nan Dongting Lake NR, 1996

The Master Plan of Nan Dongting Lake NR, 1997

19. Social and cultural values: (e.g., fisheries production, forestry, religious importance, archaeological site, etc.)

the wetlands has provided a very good ecological environment, which has made the place well known and meanwhile played an active role in attracting investment and developing the local economy and even the economy of the province as a whole.

The wetlands rare and endangered species of wildlife with a superior place for in habiting and breeding, and also provided a good place for the university/ college students to conduct scientific research and experimental activities. Additionally, eco-tourism can be carried out in the wetlands areas.

20. Land tenure/ownership of: (a) site (b) surrounding area

a. state-owned; b. the Nature Reserve Administration, Water Resource agency, farms and reed farms

21. Current land use: (a) site (b) surroundings/catchment

around the site :

The population within the wetlands is 14,000 including farmers and fisher lork. Their main activities are to fish and conduct aquaculture in the catchment area and grow economic crops in the mudflat area. About 130,000ha of reed has been planted in the mudflat area, producing 120,000 tons of reed annually. In the reclaimed area, such crops as rice, *ramie*, *cotton*, *Zizania caduciflora* and lotus are grown.

22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects: (a) at the site (b) around the site at the site

Sedimentation: Due to the severe damage of the vegetation at the upper reaches of the A :Yangtze ,large amounts of mud and sand flow into and accumulate at the wetland, which has increased the lake bed on a yearly basis.

Around the site: **Chemical pollution:** Due to the use of a large amount of pesticide for agricultural production in the surrounding area of the wetlands, the residuals from pesticide seep into the wetlands. Besides, there is industrial pollution, which is caused by wastewater discharged by the paper mills and pesticide factories in the surrounding area of the wetlands.

Over fishing and illedgal hunting occur.

23. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made: management practices; whether an officially approved management plan exists and whether it has been implemented)

the wetlands was established in 1997 as a provincial nature reserve with an area of 168,000ha the master plan, management plan and the eco-tourism plan for the Nature Reserve have been formulated and approved by the State Forestry Administration of China. Those plans are now under implementation.

Patrolling and protecting activities for wintering waterfowls are carried out in winter. The signs for publicity have been erected. The publicity activities have been regularly carried out for protecting the birds and improving public awareness

The projects for restoration of the damaged vegetation have been implemented at the upper reachea of the rivers and the program of converting the farmland back to lake has been also implemented.

24. Conservation measures proposed but not yet implemented: (e.g., management plan in preparation; officially proposed as a protected area, etc.)

Establishment of a national NR information and monitoring network is being formulated.

Information and technical exchanges are to be conducted among the NRs.

25. Current scientific research and facilities: (e.g., details of current projects; existence of field station, etc.)

The NR has now been equipped with binoculars, cameras and some pieces of equipment for survey activities. Regularly monitoring the quality of water and the numbers waterfowl within the site.

26. Current conservation education: (e.g., visitors centre, hides, info booklet, facilities for school visits, etc.)

Permanent publicity signs have been built. During the Bird Loving Week”, publicity activities are carried out in all the middle and primary schools in the region. Through the media of different kinds publicity on the importance of protecting wetlands are conducted.

27. Current recreation and tourism: (state if wetland is used for recreation/tourism; indicate type and frequency/intensity)

At present, a wetland-type resort has been opened for the public. Each year, as many as 24,000 tourists come to the site for bird watching and sightseeing.

28. Jurisdiction: (territorial, e.g. state/region, and functional, e.g. Dept of Agriculture/Dept. of Environment, etc.)

Territorial jurisdiction: the Yiyang Municipality of Hunannan Province.

Functional : Nan Dongting Wetland and Waterfowl NR Administration

The Lake Management Bureau of Ruanjiang Prefecture of Yiyang Municipality,
Hunan Province

29. Management authority: (name and address of local body directly responsible for managing the wetland)

Name: Nan Dongting Wetland and Waterfowl NR Administration,

Address: No. 17 Kangfulu Yiyang City

Tel: +86-737-4216686

E-mail: iy719068@mail.iy.hn.cn

Yiyang Municipality of Hanan Province

30. Bibliographical references: (scientific/technical only)

Science and research report of the NR, the NR, 1996

The Master Plan, the NR, 1997

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