Ramsar Information Sheet

Published on 28 August 2020

China

Tianjin Beidagang Wetlands

Designation date	3 February 2020
Site number	2425
Coordinates	38°47'39"N 117°21'30"E
Area	1 130,00 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

Located in Bohai Bay Southeast of Tianjin in China, Beidagang Wetlands is one part of the Beidagang Provincial Wetland Nature Reserve. The greater reserve includes Beidagang Reservoir, Shajingzi Reservoir, Qianquan Reservoir, the lower reaches of Duliujian River and coastal beaches, which is a representative in the transitional area of coastal wetlands and inland wetlands in North China and the biogeographic region. The Site itself is located on the flood plain of the lower reaches of Duliujian River before flowing into the Bohai Sea in an area with the best integrity and authenticity of natural ecosystems. The most concentrated distribution of water birds in the reserve, where abundant wetland habitats such as tributaries of Duliujian River, marshes and meadows are distributed, occur in the Site. It is an important station for migrating birds on the East Asia - Australasia migration route, providing an important food supply and stopover/wintering location for multiple species of threatened birds such as Ciconia boyciana, Grus monacha, Ichthyaetus relictus, Grus japonensis, Platalea minor. On average, 2417 individuals of Ciconia boyciana inhabit this site every year, accounting for 80% of the population in the region.
The Site and other wetlands in the reserve not only play an important role in the filtering and purification of the water from the upper urban area and the industrial zone, but also have important significance in the wind protection, flood regulation and storage, water conservation, and biodiversity maintenance.
Close cooperation has been established with the Paulson Foundation, Riel Center, WWF and International Crane Foundation, indicating that the Site is a "natural laboratory" and species gene pool for wetland research in North China and has important scientific and research value. The Paulson Foundation has identified it as one of 11 waterfowl habitats that need urgent protection along the coast of China.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Shixin YAO
Institution/agency	Management Center of Tianjin Beidagang Wetland Nature Reserve
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2.1.2 - Period of collection of data and information used to compile the RIS

From year	2017
To year	2019

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Tianjin Beidagang Wetlands
Unofficial name (optional)	天津北大港国际重要湿地

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<1 file(s) uploaded>

Former maps	0

Boundaries description

The Site is 3.2% of Tianjin Beidagang Wetland Nature Reserve, and located between the two branches of the Duliujian River in the experimental area of the reserve, west to the Bianjie Road, east to a dyke in the reserve, north to North Guanhu Road and south to South Dyke Road. On the other hand, the total area of the reserve is 34887 ha with river channels and reservoirs in the rest of the reserve.
The Site basically realizes closed management with less human interference, and the integrity and authenticity of the natural ecosystem are better than other regions with more concentrated distribution of water birds. The water conservancy facilities are perfect, contributing to scientific and reasonable ecological water supply.
This Reserve may adjust the boundary in the future, and the Site with its better natural ecosystem and more waterbirds will be maintained in this Reserve throughout, no matter how the boundary of the Reserve will change.

2.2.2 - General location

a) In which large administrative region does the site lie?	Tianjin, People's Republic of China
b) What is the nearest town or population centre?	Dagang street and Zhongtang town

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries?	Yes ○ No ◉
b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?	Yes ○ No ◉

2.2.4 - Area of the Site

Official area, in hectares (ha):	1130
Area, in hectares (ha) as calculated from GIS boundaries	1129.543

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Udvardy's Biogeographical Provinces	Evergreen sclerophyllous forests, scrubs or woodlands, Oriental Deciduous Forest Biogeographic Province, Palaearcitc Realm

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

<no data available>

☑ Criterion 2 : Rare species and threatened ecological communities

☑ Criterion 5 : >20,000 waterbirds

Overall waterbird numbers: 465101

Start year: 2017

Source of data: Monitoring Project on Ecological Environment and Migratory Bird Resource of Tianjin Beidagang Wetlands supported by Paulson Foundation and Hern Charity Foundation

☑ Criterion 6 : >1% waterbird population

3.2 - Plant species whose presence relates to the international importance of the site

<no data available>

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
Birds																		
CHORDATA / AVES	*Anas poecilorhyncha*	Spot-billed Duck; Indian Spot-billed Duck	☐	☐	☑	☐	☐	☑	☐	☐	25792	2017-2019	25.8	LC	☐	☐		Crit 6: 1 % threshold for hartingtoni is 1000 as of 2012.
CHORDATA / AVES	*Anser anser*	Greylag Goose	☐	☐	☑	☐	☐	☑	☐	☐	47667	2017-2019	67.1	LC	☐	☐		Crit 6: 1 % threshold for rubrirostris, E Asia (non-bre) is 710 as of 2012.
CHORDATA / AVES	*Anser cygnoides*	Swan Goose	☑	☐	☑	☐	☐	☑	☐	☐	38462	2017-2019	56.6		☐	☑	Crit 2: VU	Crit 6: 1 % threshold for C & E Asia is 680 as of 2012.
CHORDATA / AVES	*Anser erythropus*	Lesser White-fronted Goose	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☑		
CHORDATA / AVES	*Anser fabalis*	Bean Goose	☐	☐	☑	☐	☐	☑	☐	☐	41667	2017-2019	37.9	LC	☐	☐		Crit 6: 1 % threshold for serrirostris:C&E Siberia is 1100 as of 2012.
CHORDATA / AVES	*Aquila clanga*	Greater Spotted Eagle	☑	☐	☐	☐	☐	☐	☐	☐					☐	☑	National Protection Class II Crit 2: VU	
CHORDATA / AVES	*Aquila heliaca*	Eastern Imperial Eagle; Asian Imperial Eagle	☑	☐	☐	☐	☐	☐	☐	☐				VU	☑	☑	National Protection Class I	

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA / AVES	*Ardea purpurea*	Purple Heron	☐	☐	☑	☐	☐	☑	☐	☐	1328	2017-2019	1.3	LC	☐	☐		Crit 6: 1 % threshold for manilensis, E & SE Asia is 1000 as of 2012.
CHORDATA / AVES	*Aythya baeri*	Baer's Pochard	☑	☐	☐	☐	☐	☐	☐	☐				CR	☐	☑		
CHORDATA / AVES	*Aythya ferina*	Common Pochard	☑	☐	☑	☐	☐	☑	☐	☐	13680	2017-2019	4.6	VU	☐	☐		Crit 6: 1 % threshold for E Asia (non-bre) is 3000 as of 2012.
CHORDATA / AVES	*Botaurus stellaris*	Eurasian Bittern	☐	☐	☑	☐	☐	☑	☐	☐	2675	2017-2019	2.7	LC	☐	☐		Crit 6: 1 % threshold for stellaris, S & E Asia (non-bre) is 1000 as of 2012.
CHORDATA / AVES	*Calidris tenuirostris*	Great Knot	☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☑		
CHORDATA / AVES	*Chroicocephalus saundersi*	Saunders's Gull	☑	☐	☐	☐	☐	☐	☐	☐					☐	☑	Crit 2: VU	
CHORDATA / AVES	*Ciconia boyciana*	Oriental Stork; Oriental White Stork	☑	☐	☑	☐	☐	☑	☐	☐	2417	2017-2019	80.6	EN	☑	☑	National Protection Class I	Crit 6: 1 % threshold for E Asia is 30 as of 2012.
CHORDATA / AVES	*Clangula hyemalis*	Oldsquaw; Long-tailed Duck	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		
CHORDATA / AVES	*Cygnus columbianus*	Tundra Swan	☐	☐	☑	☐	☐	☑	☐	☐	7503	2017-2019	7.5	LC	☐	☐	National Protection Class II	Crit 6: 1 % threshold for jankowskii is 1000 as of 2012.
CHORDATA / AVES	*Cygnus cygnus*	Whooper Swan	☐	☐	☑	☐	☐	☑	☐	☐	3738	2017-2019	6.2	LC	☐	☐	National Protection Class II	Crit 6: 1 % threshold for E Asia is 600 as of 2012.
CHORDATA / AVES	*Cygnus olor*	Mute Swan	☐	☐	☑	☐	☐	☑	☐	☐	123	2017-2019	8.2	LC	☐	☐	National Protection Class II	Crit 6: 1 % threshold for East Asia is 15 as of 2012.
CHORDATA / AVES	*Egretta eulophotes*	Chinese Egret	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☑	National Protection Class II	
CHORDATA / AVES	*Egretta garzetta*	Little Egret	☐	☐	☑	☐	☐	☑	☐	☐	11357	2017-2019	1.1	LC	☐	☐		Crit 6: 1 % threshold for garzetta, E, SE Asia is 10000 as of 2012.
CHORDATA / AVES	*Emberiza aureola*	Yellow-breasted Bunting	☑	☐	☐	☐	☐	☐	☐	☐				CR	☐	☑		
CHORDATA / AVES	*Emberiza rustica*	Rustic Bunting	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		
CHORDATA / AVES	*Falco cherrug*	Saker Falcon	☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☑	National Protection Class II	
CHORDATA / AVES	*Fulica atra*	Eurasian Coot	☐	☐	☑	☐	☐	☑	☐	☐	64667	2017-2019	3.2	LC	☐	☐		Crit 6: 1 % threshold for atra, E, SE Asia (non-bre) is 20000 as of 2012.
CHORDATA / AVES	*Grus grus*	Common Crane	☐	☐	☑	☐	☐	☑	☐	☐	2737	2017-2019	18.2	LC	☐	☐	National Protection Class II	Crit 6: 1 % threshold for C China (non-bre) is 150 as of 2012.
CHORDATA / AVES	*Grus japonensis*	Red-crowned Crane	☑	☐	☐	☐	☐	☐	☐	☐				EN	☑	☑	National Protection Class I	

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA / AVES	*Grus leucogeranus*	Siberian Crane	☑	☐	☐	☐	☐	☐	☐	☐					☑	☑	National Protection Class I Crit 2: CR	
CHORDATA / AVES	*Grus monacha*	Hooded Crane	☑	☐	☐	☐	☐	☐	☐	☐				VU	☑	☑	National Protection Class I	
CHORDATA / AVES	*Grus vipio*	White-naped Crane	☑	☐	☐	☐	☐	☐	☐	☐					☑	☑	National Protection Class II Crit 2: VU	
CHORDATA / AVES	*Himantopus himantopus*	Black-winged Stilt	☐	☐	☑	☐	☐	☑	☐	☐	19960	2017-2019	20	LC	☐	☐		Crit 6: 1 % threshold for himantopus, E & SE Asia is 1000 as of 2012.
CHORDATA / AVES	*Ichthyaetus relictus*	Relict Gull	☑	☐	☐	☐	☐	☐	☐	☐					☑	☑	National Protection Class I Crit 2: VU	
CHORDATA / AVES	*Larus argentatus*	European Herring Gull	☐	☐	☑	☐	☐	☑	☐	☐	41321	2017-2019	67.7	LC	☐	☐		Crit 6: 1 % threshold for mongolicus is 610 as of 2012.
CHORDATA / AVES	*Melanitta fusca*	White-winged Scoter; Velvet Scoter	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐		
CHORDATA / AVES	*Mergus merganser*	Common Merganser	☐	☐	☑	☐	☐	☑	☐	☐	35733	2017-2019	50.3	LC	☐	☐		Crit 6: 1 % threshold for orientalis, E Asia (non-bre) is 710 as of 2012.
CHORDATA / AVES	*Mergus squamatus*	Scaly-sided Merganser	☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☐	National Protection Class I	
CHORDATA / AVES	*Numenius madagascariensis*	Far Eastern Curlew; Eastern Curlew	☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☑		
CHORDATA / AVES	*Otis tarda*	Great Bustard	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☑	National Protection Class I	
CHORDATA / AVES	*Oxyura leucocephala*	White-headed Duck	☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☑		
CHORDATA / AVES	*Phalacrocorax carbo*	Great Cormorant	☐	☐	☑	☐	☐	☑	☐	☐	3137	2017-2019	3.1	LC	☐	☐		Crit 6: 1 % threshold for sinensis, E, SE Asia (non-bre) is 1000 as of 2012.
CHORDATA / AVES	*Platalea leucorodia*	Eurasian Spoonbill	☐	☐	☑	☐	☐	☑	☐	☐	5307	2017-2019	53.1	LC	☐	☐	National Protection Class II	Crit 6: 1 % threshold for E Asia is 100 as of 2012.
CHORDATA / AVES	*Platalea minor*	Black-faced Spoonbill	☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☑	National Protection Class II	
CHORDATA / AVES	*Podiceps auritus*	Horned Grebe	☑	☐	☐	☐	☐	☐	☐	☐				VU	☐	☐	National Protection Class II	
CHORDATA / AVES	*Podiceps cristatus*	Great Crested Grebe	☐	☐	☑	☐	☐	☑	☐	☐	6220	2017-2019	17.8	LC	☐	☐		Crit 6: 1 % threshold for cristatus, E Asia (non-bre) is 350 as of 2012.
CHORDATA / AVES	*Recurvirostra avosetta*	Pied Avocet	☐	☐	☑	☐	☐	☑	☐	☐	19117	2017-2019	19.1	LC	☐	☐		Crit 6: 1 % threshold for E Asia is 1000 as of 2012.
CHORDATA / AVES	*Tadorna ferruginea*	Ruddy Shelduck	☐	☐	☑	☐	☐	☑	☐	☐	7297	2017-2019	10.3	LC	☐	☐		Crit 6: 1 % threshold for E Asia (non-bre) is 710 as of 2012.

1) Percentage of the total biogeographic population at the site

3.4 - Ecological communities whose presence relates to the international importance of the site

<no data available>

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

The Beidagang Wetland Reserve, located in the Bohai Bay, is a product of sea-land changes since the middle and late Holocene. It has formed numerous lagoons, dished depressions and harbors, which are rare and unique in the east coast of China and even the west coast of the Pacific Ocean. The Beidagang Wetlands Ramsar Site are mainly composed of permanent freshwater marshes, rivers and ponds. Wetland plant communities such as Suaeda salsa, Phragmites communis, Typha angustifolia and Scirpus planiculmis are distributed on the floodplain formed by the tributaries of Duliujian River in the Site, which provides an important stopover, foraging and habitat environment for a large number of waterfowls on the East Asia - Australasia migration route. As one of the areas with the most abundant biodiversity, there are cranes, storks, herons, geese and ducks, gulls and other wetland birds inhabiting the Site, including abundant threatened bird species.
At the same time, the Site also plays an important role in flood discharge, flood detention, drought and flood resistance and climate regulation, which has high scientific and academic value for the study of the process of sea - land changes, wetland ecology and the protection of endangered wildlife.

4.2 - What wetland type(s) are in the site?

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		1	476.7	
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools		2	349.9	

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
2: Ponds		3	303.4	

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Glycine max		National Protection Class II

Invasive alien plant species

Scientific name	Common name	Impacts	
Sporobolus alterniflorus		Actual (minor impacts)	No change

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	*Accipiter nisus*	Eurasian Sparrowhawk				National Protection Class II
CHORDATA/AVES	*Aix galericulata*	Mandarin Duck				National Protection Class II
CHORDATA/AVES	*Anser albifrons*	Greater White-fronted Goose				National Protection Class II
CHORDATA/AVES	*Anthropoides virgo*	Demoiselle Crane				National Protection Class II
CHORDATA/AVES	*Aquila chrysaetos*	Golden Eagle				National Protection Class I
CHORDATA/AVES	*Asio flammeus*	Short-eared Owl				National Protection Class II
CHORDATA/AVES	*Asio otus*	Long-eared Owl				National Protection Class II
CHORDATA/AVES	*Athene noctua*	Little Owl				National Protection Class II
CHORDATA/AVES	*Buteo hemilasius*	Upland Buzzard				National Protection Class II
CHORDATA/AVES	*Buteo japonicus*	Eastern Buzzard				National Protection Class II
CHORDATA/AVES	*Buteo lagopus*	Rough-legged Hawk;Rough-legged Buzzard;Roughleg				National Protection Class II
CHORDATA/AVES	*Ciconia nigra*	Black Stork				National Protection Class I
CHORDATA/AVES	*Circus cyaneus*	Northern Harrier				National Protection Class II
CHORDATA/AVES	*Circus melanoleucos*	Pied Harrier				National Protection Class II
CHORDATA/AVES	*Circus spilonotus*	Eastern Marsh Harrier				National Protection Class II
CHORDATA/AVES	*Elanus caeruleus*	Black-winged Kite				National Protection Class II
CHORDATA/AVES	*Falco amurensis*	Amur Falcon				National Protection Class II
CHORDATA/AVES	*Falco columbarius*	Merlin				National Protection Class II
CHORDATA/AVES	*Falco peregrinus*	Peregrine Falcon				National Protection Class II
CHORDATA/AVES	*Falco subbuteo*	Eurasian Hobby				National Protection Class II
CHORDATA/AVES	*Falco tinnunculus*	Eurasian Kestrel;Common Kestrel				National Protection Class II
CHORDATA/AVES	*Haliaeetus albicilla*	White-tailed Eagle				National Protection Class I
CHORDATA/AVES	*Hydrocoloeus minutus*	Little Gull				National Protection Class II
CHORDATA/AVES	*Milvus migrans*	Black Kite				National Protection Class II
CHORDATA/AVES	*Otus sunia*	Oriental Scops-Owl;Oriental Scops Owl				National Protection Class II
CHORDATA/AVES	*Pandion haliaetus*	Western Osprey;Osprey				National Protection Class II
CHORDATA/AVES	*Pelecanus crispus*	Dalmatian Pelican				National Protection Class II
CHORDATA/AVES	*Pernis ptilorhynchus*	Crested Honey Buzzard				National Protection Class II
CHORDATA/AVES	*Plegadis falcinellus*	Glossy Ibis				National Protection Class II

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude climate with cold winters	Dwa: Humid continental (Humid with severe, dry winter, hot summer)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 4

a) Maximum elevation above sea level (in metres): 5

Entire river basin ☐

Upper part of river basin ☐

Middle part of river basin ☐
Lower part of river basin ☑
More than one river basin ☐
Not in river basin ☐
Coastal ☐

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

Haihe River Basin.

4.4.3 - Soil

Mineral ☑
Organic ☐
No available information ☐

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes ○ No ◉

Please provide further information on the soil (optional)

The soil types in the reserve are salinized tidal soil and coastal saline soil.

4.4.4 - Water regime

Water permanence

Presence?	
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	
Water inputs from rainfall / snowfall	☐	No change
Water inputs from surface water	☑	No change

Water destination

Presence?	
Feeds groundwater	No change
To downstream catchment	No change

Stability of water regime

Presence?	
Water levels largely stable	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology:

Located in the middle area of the two branches of Duliujian river, the Site belongs to the floodplain wetlands formed by the tributaries of the river. The water level of the area is regulated by diverting water from Duliujian River through water conservancy facilities such as Hongni River Sluice and Wanjia Wharf Pump Station, so as to carry out ecological water replenishment.

4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site ☐
Significant accretion or deposition of sediments occurs on the site ☑
Significant transportation of sediments occurs on or through the site ☐
Sediment regime is highly variable, either seasonally or inter-annually ☐
Sediment regime unknown ☐

4.4.6 - Water pH

Acid (pH<5.5) ☐
Circumneutral (pH: 5.5-7.4) ☐
Alkaline (pH>7.4) ☑
Unknown ☐

4.4.7 - Water salinity

Fresh (<0.5 g/l) ☑
Mixohaline (brackish)/Mixosaline (0.5-30 g/l) ☐
Euhaline/Eusaline (30-40 g/l) ☐
Hyperhaline/Hypersaline (>40 g/l) ☐
Unknown ☐

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic ☐
Mesotrophic ☑
Oligotrophic ☐
Dystrophic ☐
Unknown ☐

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ○ ii) significantly different ◉

Surrounding area has greater urbanisation or development ☐
Surrounding area has higher human population density ☐
Surrounding area has more intensive agricultural use ☐
Surrounding area has significantly different land cover or habitat types ☑

Please describe other ways in which the surrounding area is different:

There are reservoirs, rivers and coastal beaches surrounding the Site within the reserve; while surrounding the reserve there are urban areas to the east and farmland and village to the west.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Wetland non-food products	Reeds and fibre	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
Erosion protection	Soil, sediment and nutrient retention	High
Pollution control and detoxification	Water purification/waste treatment or dilution	High
Climate regulation	Local climate regulation/buffering of change	High
Biological control of pests and disease	Support of predators of agricultural pests (e.g., birds feeding on locusts)	High
Hazard reduction	Flood control, flood storage	High
Hazard reduction	Coastal shoreline and river bank stabilization and storm protection	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	High
Spiritual and inspirational	Inspiration	Low
Scientific and educational	Educational activities and opportunities	High
Scientific and educational	Long-term monitoring site	High
Scientific and educational	Major scientific study site	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part	High
Soil formation	Sediment retention	High
Soil formation	Accumulation of organic matter	High
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	High
Nutrient cycling	Carbon storage/sequestration	High

Within the site: 1000s

Outside the site: 10000s

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes ◉ No ○ Unknown ○

Where economic studies or assessments of economic valuation have been undertaken at the site, it would be helpful to provide information on where the results of such studies may be located (e.g. website links, citation of published literature):

Wel Li, et al. 2017. Study on Beidagang wetland value based on ecological value theory. Journal of Green Science and Technology, 12(24).

4.5.2 - Social and cultural values

i) the site provides 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) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland ☐

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples ☐

iv) 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 ☐

<no data available>

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	☑	☑

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: Management Center of Tianjin Beidagang Wetland Nature Reserve
Management Committee of Tianjin Beidagang wetland Nature Reserve

Provide the name and/or title of the person or people with responsibility for the wetland: Chenghai SHANG Director

Postal address: Dagang Century Avenue 62-2, Binhai New District, Tianjin, P.R. China

E-mail address: sch9288@163.com

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Commercial and industrial areas	Medium impact		☐	☑

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Drainage	Low impact		☑	☑

Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Oil and gas drilling		Medium impact	☐	☑

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Fishing and harvesting aquatic resources	Low impact	Low impact	☑	☑

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	Low impact		☐	☑

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Dams and water management/use	Low impact	Low impact	☑	☑

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Invasive non-native/ alien species	Low impact	Low impact	☐	☑

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Industrial and military effluents	Low impact	Low impact	☐	☑
Agricultural and forestry effluents	Low impact	Low impact	☐	☑

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Storms and flooding	Medium impact	Medium impact	☑	☑

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Provincial Nature Reserve	Tianjin Beidagang Wetland Nature Reserve		partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Beidagang Wetland Nature Reserve	http://datazone.birdlife.org/site/factsheet/beidagang-wetland-nature-reserve-iba-china-(mainland)	partly

5.2.3 - IUCN protected areas categories (2008)

Ia Strict Nature Reserve ☐

Ib Wilderness Area: protected area managed mainly for wilderness protection ☐

II National Park: protected area managed mainly for ecosystem protection and recreation ☐

III Natural Monument: protected area managed mainly for conservation of specific natural features ☐

IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention ☑

V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation ☐

VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems ☐

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Faunal corridors/passage	Implemented
Land conversion controls	Implemented
Soil management	Implemented
Re-vegetation	Implemented
Hydrology management/restoration	Implemented
Habitat manipulation/enhancement	Implemented
Improvement of water quality	Implemented
Catchment management initiatives/controls	Implemented

Species

Measures	Status
Threatened/rare species management programmes	Implemented
Control of invasive alien plants	Implemented

Human Activities

Measures	Status
Research	Implemented
Communication, education, and participation and awareness activities	Implemented
Regulation/management of recreational activities	Implemented
Fisheries management/regulation	Implemented
Regulation/management of wastes	Implemented
Management of water abstraction/takes	Implemented

Other:

In 2001, Beidagang provincial Wetland Nature Reserve was approved by Tianjin municipal government. In 2002, Management Office of the reserve was established. In 2015, the Management Center of Tianjin Beidagang Wetland Nature Reserve was established to fully exercise the regulatory function of the reserve.
The Management Measures for Beidagang Wetland Nature Reserve and Work Plan for Wildlife Protection in Binhai New District were formulated to strengthen the law enforcement and supervision, and the daily patrol. According to the Regulations on Wetland Protection in Tianjin Municipality, the reserve has gradually withdrawn the production and operation activities and established the ecological compensation mechanism on wetland protection.
The reserve has set up boundary markers and boundary posts, built six bird watching houses, four monitoring towers, six check points and two wharves to improve management capacity.
The reserve has also restored several shoal islands, eight square kilometres of low grass shallow marshes, two square kilometres of vegetation zone for water bird habitat. Technologies on artificial tending and floating island recovery were introduced to increase the habitat areas and improve the habitat quality for wild animal population. According to the monitoring of scientific research teams such as Beijing Forestry University and Beijing Normal University, the number of bird species in the reserve has increased from 249 in 2017 to 276 at present.
The replenishment mechanism combining multiple water sources was established to realise the normalisation of ecological regulation of water resources in the Site areas.
The popular science and education measures that have been implemented include: making a publicity and education plan, improving publicity and education facilities, setting up protection sign facilities, compiling relevant atlas and promotional films, and establishing the official website and App application system of the reserve.

5.2.5 - Management planning

Is there a site-specific management plan for the site? In preparation

Has a management effectiveness assessment been undertaken for the site? Yes ○ No ◉

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes ○ No ◉

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, but a plan is being prepared

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water regime monitoring	Proposed
Water quality	Proposed
Soil quality	Proposed
Plant community	Implemented
Plant species	Implemented
Animal community	Implemented
Animal species (please specify)	Implemented
Birds	Implemented

Through a series of measures such as the construction of scientific research and monitoring facilities and monitoring routine wetland resources and environmental dynamics, the reserve has established a relatively complete monitoring network system to realize the digitalization and intelligence of resource management in the reserve.
A tripartite cooperation mechanism has been established with the Wetland Performance Office of the State Forestry Administration and the Paulson Foundation, signing a framework Agreement on Wetland Protection Cooperation in Beidagang. A number of wetland and wildlife protection and monitoring projects have been launched.
In addition, projects such as "Ecological security dynamic monitoring and assessment", "Biodiversity monitoring and ecological environment assessment" and "Research on the spatial and temporal pattern of bird community diversity" were carried out.
A long-term cooperative relationship with Beijing Normal University, Beijing Forestry University and Tianjin Normal University has established to carry out long-term monitoring of the Beidagang wetland ecosystem, mainly including wetland vegetation biodiversity, aquatic animals, birds, fish resources, and wetland restoration research.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Planning and Design Institute of State Administration of Forestry and Grassland. 2017. Master plan of Tianjin Beidagang Wetland Nature Reserve (2017-2025).
Bin Wang, Zhe Cao, Zhen Zhang. 2008. Evaluation of ecological environment quality of Beidagang Wetland Nature Reserve. Environmental Science and Management.
Weidong Yang, HongChen, Qingchuan Zhu. 2013. Influencing factors and improvement measures of water quality in Beidagang Reservoir. Transactions of the Chinese Society of Agricultural Engineering.
Tianjin Forestry Bureau. 2010. Investigation report of wetland resources in Tianjin.
Tianjin Forestry Bureau, School of life sciences, Beijing Normal University. 2014. The second investigation report of terrestrial wildlife resources in Tianjin.
Institute of Botany, Institute of zoology of Chinese Academy of Sciences. 1990. Study on bioecology in Beijing Tianjin area. Beijing: China Ocean Press.
Tianjin Statistics Bureau. 2014. Tianjin statistical yearbook. Beijng: China Statistics Press
Tianjin Water Conservancy Bureau. 2009. Tianjin water resources bulletin in 2008.
Wei Yan, Hongyuan Li, Weiqing Meng, et al. 2009. Study on wetland ecotourism in Tianjin Based on biodiversity conservation. Environmental Protection and Circular Economy, (12):67-71.
Cui Hao, Hongyuan Li. 2012. Wetland plant community characteristics and vegetation succession process in Binhai New District of Tianjin. South-to-North Water Transfers and Water Science & Technology, 10(3): 77-81.
Xunqiang Mo, Hongyuan Li. 2010. Application of typical wild Halophytes in Tianjin Coastal Wetland. Urban Environment & Urban Ecology, 23(2): 14-22.
Hongyuan Li, Weiqing Meng. 2012. Environmental evolution and ecological restoration of coastal wetland. Beijing: Chemical Industry Press.
Jiayi Liu. 1995. List of plants in Tianjin. Tianjin: Tianjin Education Press.
Beijing Forestry University. 2017. Investigation report on wetland plant resources in Binhai New District, Tianjin.
Beijing Normal University. 2017. Investigation report on wetland animal resources in Binhai New District, Tianjin.
Planning and Design Institute of State Administration of Forestry and Grassland. 2017. Investigation report of wetland water resources in Binhai New District of Tianjin
Planning and Design Institute of State Administration of Forestry and Grassland. 2017. Investigation report of wetland resources in Binhai New District of Tianjin
Chinese Academy of Agricultural Sciences. 2017. Investigation report on wetland ecology and tourism resources in Binhai New District, Tianjin
Wei Li, et al. 2017. Study on Beidagang wetland value based on ecological value theory. Journal of Green Science and Technology, 12(24).
Udvardy M. 1975. Classification of the Biogeographical Provinces of the World. IUCN Occasional Paper No. 18.

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)
<1 file(s) uploaded>

ii. a detailed Ecological Character Description (ECD) (in a national format)
<no file available>

iii. a description of the site in a national or regional wetland inventory
<no file available>

iv. relevant Article 3.2 reports
<no file available>

v. site management plan
<no file available>

vi. other published literature
<no file available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:


Cygnus columbianus (*Beidagang Reserve, 01-10-2019*)


Ciconia boyciana (*Beidagang Reserve, 01-10-2019*)


Ciconia boyciana (*Beidagang Reserve, 01-10-2019*)


Grus grus (*Beidagang Reserve, 01-10-2019*)

6.1.4 - Designation letter and related data

Designation letter
<1 file(s) uploaded>

Date of Designation: 2020-02-03