

Ramsar Information Sheet

Published on 8 July 2020 Update version, previously published on : 1 January 2012

China Maidika



Designation date Site number

1 December 2004 1438 Coordinates 31°01'N 92°50'55"E Area 43 496,00 ha

https://rsis.ramsar.org/ris/1438 Created by RSIS V.1.6 on - 8 July 2020

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

Geographically, this Ramsar site is situated between the Tangla Mountains and the Nojin Tangla Mountains on the Qinghai-Tibet Plateau, known as "Roof of the world". The wetland is among the highest-altitude wetlands in the world (above 4800 m). The wetland is the most representative and typical plateau complex wetland composed of lakes, marshes and meadows. With unique natural environments, abundant water resource and productive grasslands, this Ramsar Site provides good breeding and perching habitats for plateau animals and waterbirds. It serves as a very important site for the wildlife of the Tibet Plateau. According to the survey, there are about 83 bird species inhabiting in the wetland, including some such rare birds as Black-necked crane (Grus nigricollis) and Pallas's fish-eagle (Haliaeetus leucoryphus). Particularly, it is of great significance for the migration and breeding of the migratory birds such as Tadorna ferruginea and Anser indicus. In addition, some rare mammal species such as Panthera uncia live in this Ramsar site. As the source of the Lhasa River, Maidika wetland plays a critical role in prevention of seasonal flood, the water regulation and storage of the Lhasa River, maintaining water quality and ecological security of the Lhasa River.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Daoyong CHEN
Institution/agency	Chali Forestry Bureau of Tibet, China
Postal address	6 Renmin South Road Chali County Nakchu District Tibet P.R. China
E-mail	157782994@qq.com
Phone	+86 0 13908969621
Fax	+86 896 3632291

2.1.2 - Period of collection of data and information used to compile the RIS

From year	2013
To year	2015

2.1.3 - Name of the Ramsar Site

Official name (in English, French or	Maidika
Sponich)	Maruna
Spanish)	

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A Changes to Site boundary Yes O No (

(Update) B. Changes to Site area No change to area

2.1.5 - Changes to the ecological character of the Site

^(Update) 6b i. Has the ecological character of the Ramsar Site (including no pplicable Criteria) changed since the previous RIS?

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<2 file(s) uploaded>

Former maps 0

Boundaries description

This Ramsar Site is located in the core area of Maidika Wetland Nature Reserve.

2.2.2 - General location

a) In which large administrative region does the site lie? This Ramsar site is administratively located in Chali County of Nakchu District, Tibet Autonomous Region, Western China.

b) What is the nearest town or population centre? Nakchu 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 O No O

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?

2.2.4 - Area of the Site

Official area, in hectares (ha): 43496

Area, in hectares (ha) as calculated from GIS boundaries

2.2.5 - Biogeography

Biogeographic regions				
Regionalisation scheme(s)	Biogeographic region			
Udvardy's Biogeographical Provinces	Cold-winter (continental) deserts and semideserts, Tibetan Biogeographic Province, Palaearctic			

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided	Madika is a typical plateau wetland. As the source of the Lhasa River, the wetland plays a critical role in prevention of seasonal flood, water regulation and storage of the Lhasa River, maintaining water quality and ecological safety of the Lhasa River. The large area of the wetland in this Ramsar site has a strong effect on regulating regional climate of the Lhasa River Basin. Also, the wetland plays an important role in water supply for the surrounding residents.
Other ecosystem services provided	This Ramsar site presents typical alpine wetlands in Tibetan Biogeographic Province, Palaearctic Realm. This site is unique in this biogeographic region because it contains a large compound wetland system which is composed of alpine lakes, swamp-meadows and rivers.

☑ Criterion 2 : Rare species and threatened ecological communities

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

<no data available>

Phylum	Scientific name	Common name	Species qualifies under criterion 2 4 6 9	Species contributes under criterion 3 5 7 8	Pop. Size	% occurrence 1)	IUCN Red A List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Birds											
CHORDATA / AVES	Aquila nipalensis	Steppe Eagle	eoo				EN			Nationa Protection Class II	
CHORDATA / AVES	Aythya ferina	Common Pochard	eooo		ו		VU				
CHORDATA / AVES	Falco cherrug	Saker Falcon	Ø000		ו		EN		×	National protection class II	
CHORDATA / AVES	Grus nigricollis	Black-necked Crane	Rooo		ו		W	V	×	National protection class I	
CHORDATA / AVES	Haliaeetus Ieucoryphus	Pallas's Fish Eagle	Rooo		ו		W		×	National protection class I	
Others											
CHORDATA / MAMMALIA	Moschus chrysogaster	alpine musk deer	Rooo		נ		EN	V		National protection class I	
CHORDATA / MAMMALIA	Uncia uncia	Snow leopard	eoo]		EN	×	×	National protection class I	

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

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 flora in this Ramsar site is mostly composed of herbaceous plants (accounting for 97.5%). The dominant vegetation types including alpine shrub, alpine meadow, alpine cushion vegetation, swamp vegetation and aquatic vegetation. In the wetland, zonal alpine meadow vegetation develops along the valleys, lakes and mountain slopes. Some alpine dwarf shrubs dominated by Caragana versicolor are distributed on local shady slopes. There are 12 major formations, including Form. Caragana versicolor-Pentaphylloides fruticosa, Form. Kobresia pygmaea, Form. Kobresia spp-Polygonum sphaerostachyum, Form. Kobresia pygmaea-Stipa purpurea, Form. Potentilla anserine, Form. Arenaria musciformis, Form. Androsace tapete, Form. Kobresia littledalei, Form. Carex stenophylla, Form. Triglochin maritimum, Form. Potamogeton pectinatus and Form. Hippuris vulgaris. The shallow-water areas (10-100cm water depth) are usually represented as Potamogeton pectinatus communities which are habitat for many fish species. This site can provide abundant food and good habitats for aquatic and swamp-dependent animals. There are about 83 species of birds, including a variety of rare and threatened species.

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 >> Mt Permanent rivers/ streams/ creeks		0	837.41	
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		3	1989.69	Unique
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		1	9616.81	Unique
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		2	3647.76	Unique
Fresh water > Marshes on inorganic or peat soils >> Va: Montane wetlands		4	994.84	Unique
Fresh water > Marshes on inorganic soils >> W: Shrub- dominated wetlands		0	331.61	

4.3 - Biological components

4.3.1 - Plant species

Other	noteworth	nyplant	species
r			

Scientific name	Common name	Position in range / endemism / other
Androsace graminifolia		Tibetan endemic species
Corydalis chrysosphaera		Tibetan endemic species
Juniperus pingii	Ping's juniper	IUCN NT
Potentilla gracillima		Tibetan endemic species
Rheum rhomboideum		Tibetan endemic species

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	Aegypius monachus	Cinereous Vulture				National protection class
CHORDATA/AVES	Anser albifrons	Greater White-fronted Goose				National protection class II
CHORDATA/AVES	Aquila chrysaetos	Golden Eagle				National protection class I
CHORDATAAVES	Aquila rapax	Tawny Eagle				National protection class
CHORDATA/AVES	Asio flammeus	Short-eared Owl				National protection class
CHORDATA/AVES	Athene noctua	Little Owl				National protection class
CHORDATA/AVES	Bubo bubo	Eurasian Eagle-Owl				National protection class
CHORDATA/AVES	Buteo hemilasius	Upland Buzzard				National protection class
CHORDATA/AVES	Circus cyaneus	Northern Harrier				National protection class
CHORDATA/AVES	Gypaetus barbatus	Bearded Vulture				National protection class I
CHORDATA/AVES	Gyps himalayensis	Himalayan Vulture				National protection class II
CHORDATA/AVES	Milvus migrans	Black Kite				National protection class II
CHORDATA/AVES	Tetraogallus tibetanus	Tibetan Snowcock				National protection class II
CHORDATA/MAMMALIA	Canis lupus	gray wolf;Wolf				National protection class II
CHORDATAMAMMALIA	Cervus elaphus	wapiti or elk				National protection class II
CHORDATA/AVES	Circus aeruginosus	Western Marsh Harrier				National protection class
CHORDATA/AVES	Circus macrourus	Pallid Harrier				National protection class II National protection class II
CHORDATAMAMMALIA	Equus kiang	Kiang;Tibetan Wild Ass				National protection class I
CHORDATA/AVES	Falco subbuteo	Northern Hobby				National protection class
CHORDATA/AVES	Falco tinnunculus	Eurasian Kestrel;Common Kestrel				National protection class II
CHORDATAMAMMALIA	Lutra lutra	European Otter				National protection class II
CHORDATAMAMMALIA	Lynx lynx	Eurasian Lynx				National protection class II
CHORDATAMAMMALIA	Ovis ammon	argali				National protection class II
CHORDATAMAMMALIA	Procapra picticaudata	Tibetan gazelle				National protection class II
CHORDATAMAMMALIA	Pseudois nayaur	bharal				National protection class
CHORDATAMAMMALIA	Ursus arctos	Brown Bear;Grizzly Bear				National protection class II

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude	Dwc: Subarctic (Severe, dry
climate with cold winters	winter, cool summer)
H: Highland	H: Highland (-)

4.4.2 - Geomorphic setting

a) Mnimum elevation above sea level (in metres) 4800	
a) Maximum elevation above sea level (in metres) 5000	
Entire river basin	
Upper part of river basin 🗹	
Mddle part of river basin	
Lower part of river basin	
More than one river basin \Box	
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. the source of the Lhasa River

4.4.3 - Soil

No available information 📝

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

Please provide further information on the soil (optional)

The main soil types include alpine frigid desert soil, alpine meadow soil, sub-alpine meadow soil, bog soil and swamp meadow soil.

4.4.4 - Water regime

Mator	normanonco
vvaler	

Presence?	Changes at RIS update
Usually permanent water	
present	

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from rainfall		No change
Water inputs from groundwater		No change
Water inputs from surface water	X	No change

Water destination

Presence?	Changes at RIS update
To downstream catchment	No change
Feeds groundwater	No change

Stability of water regime

 Presence?
 Changes at RIS update

 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.

The water supply of this site is mainly from alpine melting water, groundwater and rainfall. Among these three ways, alpine melting water contributes the most. Water area is relatively small in winter. The main runoffs are not frozen and there only exits shore ice. Except the main streams with relatively deep water, the water in this site is generally shallow (the maximum depth<3m).

4.4.5 - Sediment regime
Sediment regime unknown
4.4.6 - Water pH
Unknown
4.4.7 - Water salinity
Fresh (<0.5 g/)
Fresh (<0.5 g/)
Fresh (<0.5 g/)
4.4.7 - Water salinity
Fresh (<0.5 g/)
Fre

Please describe whether, and if so how, the landscape and ecological

characteristics in the area surrounding the Ramsar Site differ from the i) broadly similar (i) significantly different O site itself.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services		
Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Drinking water for humans and/or livestock	Medium
Wetland non-food products	Livestock fodder	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance	
Maintenance of hydrologi regimes	cal Groundwater recharge and discharge	High	
Erosion protection	Soil, sediment and nutrient retention	High	

Cultural Services

Ecosystem service		Examples	Importance/Extent/Significance
	Recreation and tourism	Nature observation and nature-based tourism	Low
	Spiritual and inspirational	Aesthetic and sense of place values	High
	Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High
	Scientific and educational	Long-term monitoring site	Medium

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 High matter	
Nutrient cycling Carbon storage/sequestration		High

 Within the site:
 1996

 Outside the site:
 4000

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

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 D 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

Within the Ramsar Site	In the surrounding area
×	×
	Within the Ramsar Site

Provide further information on the land tenure / ownership regime (optional):

a) within the Ramsar site:

State ownership; the reserve has the right of utilization. b) in the surrounding area State ownership; partly contracted.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:	Bureau of Maidika Wetland in Chali County
Provide the name and title of the person or people with responsibility for the wetland:	Lunzhu, Director
Postal address:	6 Renmin South Road Chali County Nakchu District Tibet P.R. China
E-mail address:	jialixianlinyeju@163.com

5.2 - Ecological character threats and responses (Management)

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

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Livestock farming and ranching	Low impact		×	No change	×	No change

Human intrusions and disturbance						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities		Low impact	×	No change	×.	No change

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	Low impact	Low impact	×	No change	×.	No change
Problematic native species	Low impact	Low impact	×	No change	V	No change

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Droughts	Low impact	Low impact	×	No change	×	No change

Please describe any other threats (optional):

a) within the Ramsar site:

Influenced by climate change, the water supply of wetland is declining, which may exert some adverse influence on the wetlands.

b) in the surrounding area:

The grazing activities in the surrounding areas could produce some potential negative impacts on the wetlands.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Nature Reserve	Tibet Maidika National Nature Reserve		partly

5.2.3 - IUCN protected areas categories (2008)

а	Strict	Nature	Reserve	×
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- 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
Catchment management initiatives/controls	Implemented
Improvement of water quality	Proposed
Habitat manipulation/enhancement	Proposed
Hydrology management/restoration	Proposed
Re-vegetation	Implemented
Soil management	Implemented
Land conversion controls	Proposed
Faunal corridors/passage	Proposed

Species

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

Human Activities

Measures	Status
Research	Implemented
Communication, education, and participation and awareness activities	Implemented
Management of water abstraction/takes	Partially implemented
Regulation/management of wastes	Partially implemented
Livestock management/exclusion (excluding fisheries)	Partially implemented
Harvest controls/poaching enforcement	Implemented
Regulation/management of recreational activities	Implemented

Other:

In June 2007, Central-South Planning and Design Institute carried out a series of comprehensive scientific investigations on Maidika wetland, including the background of natural resources and environment in the reserve, and compiled a comprehensive investigation report. The reserve bureau has actively carried out the knowledge education activities on natural protection in the surrounding communities, which has raised the scientific awareness of wetland protection among the community. Besides, jointly organized by the China National Radio and Wetland Protection and Management Center of the State Forestry Administration, the series of reports in "China wetland Report" conducted a comprehensive survey interview to the Maidika Wetland Reserve, objectively and truly reporting the wetland protection present situation, the achievement and the challenge of Maidika, which could greatly improve the public awareness of Maidika Wetlands.

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

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

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

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

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

In June 2007, Central-South Planning and Design Institute carried out a series of comprehensive scientific investigations on Maidika wetland, encompassing the investigations on topography, hydrology, vegetation, flora, fauna, etc.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Central-South Planning and Design Institute. 2012. Original Design of Wetland Protetion and Restoration Project in Maidika Wetland Nature Reserve.

Kunming Survey and Design Institute of the State Forestry Administration. 2014. Comprehensive Scientific Investigation Report of Maidika Wetland Nature Reserve, Tibet

Kunming Survey and Design Institute of the State Forestry Administration. 2014. Master Plan of Tibet Maidika Wetland Nature Reserve 2015-2025.

Ma GR, Bao DM, Cao CX, et al. 2016. Evaluation of China's International Important Wetland Ecosystem. Science Press.

Monitoring Station of Maidika Ramsar Site. 2013. Work Summary of Monitoring Station of Maidika Ramsar Site in 2013.

Monitoring Station of Maidika Ramsar Site. 2014. Work Summary of Monitoring Station of Maidika Ramsar Site in 2014.

Monitoring Station of Maidika Ramsar Site. 2015. Work Summary of Monitoring Station of Maidika Ramsar Site in 2015.

Udvardy M. 1975. Classification of the Biogeographical Provinces of the World. IUCN Occasional Paper No. 18.

Wang HY. 2014. Economic Evaluation of Wetland Ecosystem in Tibet Maidika Nature Reserve. Forestry construction, 4: 26-29.

Yu PP. 2016. Current Situation and Countermeasures of Wetland Environmental Protection in Maidika, Tibet. Agricultural Technical Services, 1: 198-203.

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

ii. a detailed Ecological Character Description (ECD) (in a national format)

iii. a description of the site in a national or regional wetland inventory

iv. relevant Article 3.2 reports

v. site management plan

vi. other published literature

<no data available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



crowd of wetland birds (Xu Zhigao, 16-05-2008)



landscape of Maidika wetland (*Xu Zhigao, 10-10-*2007)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2004-12-01