

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

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

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

Notes for compilers:

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

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

Full name: Gombobaatar Sundev and Ch. Uuganbayar

EAAF SITE CODE FOR OFFICE USE ONLY:

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Mongolian Ornithological Society

Address: Astra Building -1148, Sukhbaatar District,
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mongolianbirds@mail.com; nawawen@gmail.com;

2. Date this sheet was completed *:

02/04/2016

3. Country *:

Mongolia

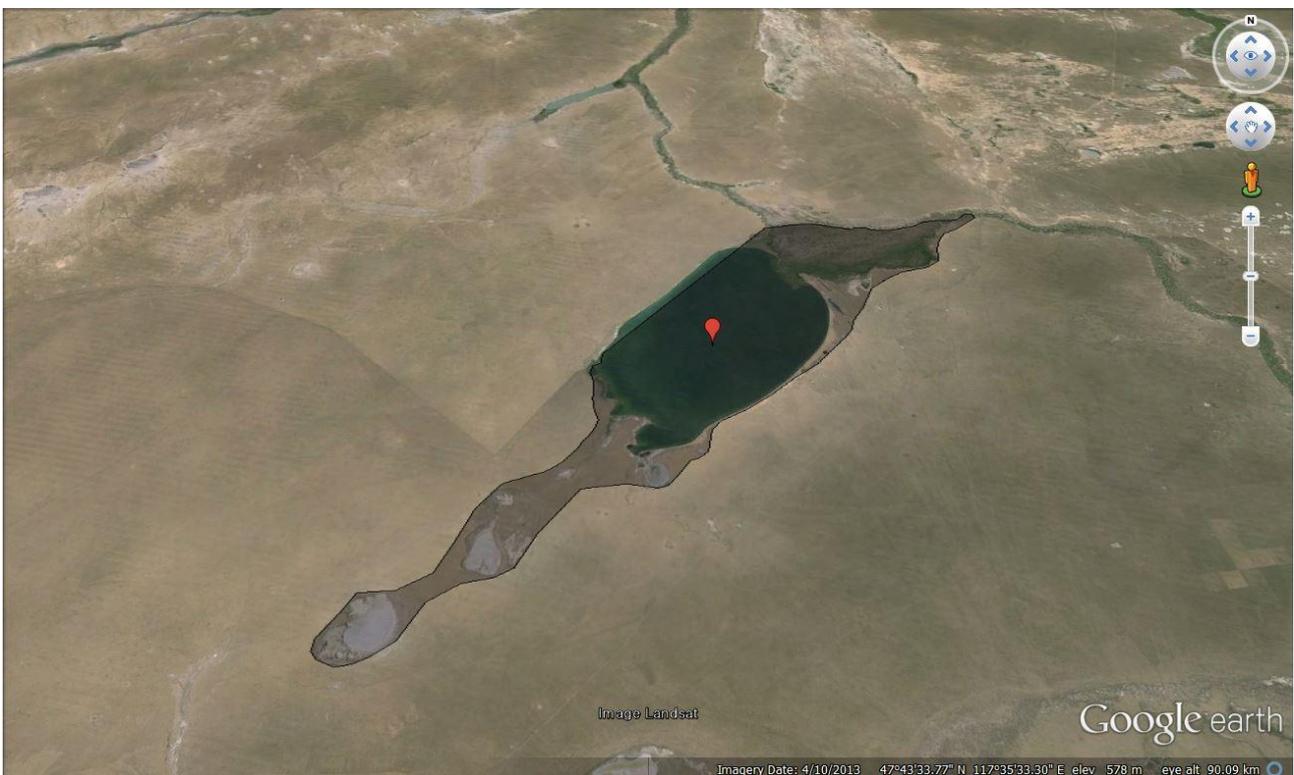
4. Name of the Flyway Network site *:

Buir Lake

5. Map of site *:

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

[Buir Lake \[https://www.google.com/maps/d/viewer?mid=1gK9XCgFzx7jEN1ieC2ouByDSG7M\]](https://www.google.com/maps/d/viewer?mid=1gK9XCgFzx7jEN1ieC2ouByDSG7M)



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

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

47° 47' 54.2" N; 117° 41' 37.6" E

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

581 m a.s.l.

8. Area *:

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

1,171 km² or 117,100 ha

9. General overview of the site *:

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

This is one the largest freshwater lakes in eastern Mongolia, bordering with China. Many small lakes are located west of the lake. Buir Lake and the surrounding wetlands are important breeding and resting sites of migratory waterbirds. The lake and its vicinity support flora and fauna of the *Daurian Stipa* grassy dry steppe. It feeds and regulates the rivers (e.g. Khalkh River) and lakes in its vicinity. The region has major herds of Mongolian Gazelle (*Procapra gutturosa*) and 236 bird species, including globally threatened species. The lake basin belongs to the Mongol-Daguur eco-region, which is one of the 200 global eco-regions for its conservation importance. There are no major human settlements in the lake vicinity except for a small settlement of local fishermen. Climate change and fishing are the major factors impacting the lake.

10. Justification of Flyway Site Network criteria *:

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

- it regularly supports > 20 000 migratory waterbirds; or,
- it regularly supports > 1 % of the individuals in a population of one species or subspecies of migratory waterbird; or,
- it supports appreciable numbers of an endangered or vulnerable population of migratory waterbird
- it is a "staging site" supporting > 5 000 waterbirds, or > 0.25% of a population stage at the site.

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

- a. Convention on Wetlands (Ramsar, Iran, 1971) criteria for internationally important sites for migratory waterbirds. That is:

Criterion 2: Buir Lake wetlands site supports globally threatened species: Swan Goose *Anser cygnoid*, Common Pochard *Aythya ferina* and White-naped Crane *Antigone vipio* (all VU). Also it supports Near Threatened species,

such as Falcated Duck *Mareca falcata*, Black-tailed Godwit *Limosa limosa* and Asian Dowitcher *Limnodromus semipalmatus* (Gombobaatar et al. 2011).

Criterion 5: The wetland regularly supports over 40,000 waterbirds (Batchuluun et al. 2012).

Criterion 6: It supports 1% of individuals of Great Cormorant *Phalacrocorax carbo* (4.5%; 5,486 individuals), Swan Goose (1.8%; 1,226 individuals), Ruddy Shelduck *Tadorna ferruginea* (1.9%; 1,143 individuals), and Pacific Golden-Plover *Pluvialis fulva* (1.8%; 1,303 individuals) (Batchuluun et al. 2012).

b. The staging criteria as applied under the Asia - Pacific Migratory Waterbird Conservation Strategy. That is:

- i. The wetland supports 0.25% of global individuals in a population of the following species in single season: Great Crested Grebe *Podiceps cristatus* (0.3%; 531 individuals), Great Cormorant (2.5%; 3,031 individuals), Eurasian Spoonbill *Platalea leucorodia* (0.4%; 40 individuals), Swan Goose (0.96%; 653 individuals), Ruddy Shelduck (1.2%; 737 individuals), Red-crested Pochard *Netta rufina* (3.4%; 4,232 individuals), Common Pochard *Aythya ferina* (0.3%, 1,219), Pacific Golden Plover (1.41%; 1,003 individuals), Common Teal *Anas crecca* (0.38%; 4,200 individuals), Kentish Plover *Charadrius alexandrinus* (0.31%; 134 individuals) and Asian Dowitcher (0.29%; 67 individuals) (Batchuluun et al. 2012).
- ii. None

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

11. Wetland Types *:

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

Inland wetland:

- L -- Permanent inland deltas.
- M -- Permanent rivers/streams/creeks; includes waterfalls.
- O -- Permanent freshwater lakes (over 8 ha); includes large oxbow lakes.
- Tp -- Permanent freshwater marshes/pools; ponds (below 8 ha), marshes and swamps on inorganic soils; with emergent vegetation water-logged for at least most of the growing season.

12. Jurisdiction *:

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

State Protected Area Administration of the Ministry of Nature, Environment and Tourism and Khalkh Gol or Sumber sum of Dornod Province.

13. Management authority *:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland and the title and/or name and email address/phone number of the person or persons in this office with direct responsibility for managing the wetland.

Mr P. Tsogtsaikhan, a focal point of EAAFP of the Ministry of Environment, Green Development and Tourism

Tel: 976-99075559

Email: tsogtsaikhan@mne.gov.mn

Local Governor, Khalkh Gol or Sumber sum, Dornod Province

Mongolian Ornithological Society

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14. Bibliographical references *:

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

Baasanjav G., and Tsend-Ayush, Ya. 2001. *Fish of Mongolia*. Ulaanbaatar, Mongolia. p. 69-74 (in Mongolian)

Batchuluun, D., Tseveenmyadag, N., Bodisaikhan, Kh. and Dashnyam, Sh. 2012. *Report on Avian influenza surveillance study in 2009-2011*. Ulaanbaatar, Mongolia. p.148-150. (in Mongolian and English)

- Biodiversity conservation action plan for Mongolia*. 1996. The Ministry for Nature and Environment, Ulaanbaatar, Mongolia.
- Bold, A., Eregdendagva, D. 1970. *Species composition of birds of lake Boyr, Revers Khalhyn-gol and Numrug*. Scientific Proceedings of the Institute Biology, Mongolian Academy of Sciences 5:47-57. (In Mongolian)
- Li, D. Z. W. and Mundkur, T. 2007. *Numbers and distribution of waterbirds and wetlands in the Asia-Pacific region*. Wetlands International.
- Davies, J. 1989. Mongolian People's Republic. Pp.1-30 in: Scott, D.A. 1989. *A directory of Asian wetlands*. IUCN. Gland, Switzerland and Cambridge, U.K.
- Wetlands International. 2006. *Waterbird Population Estimates*. Fourth edition.
- Dulmaa, A., Nansalmaa, B. 1977. *Some biological aspects of Mongolian large lakes (Arctic Basin)*. Ulaanbaatar, Mongolia. (in Mongolian)
- Gombobaatar, S. and Jargalsaikhan P. 2011. *Birds of Khurkh-Khuiten Valley*. Mongolian Ornithological Society, National University of Mongolia, Ministry of Nature, Environment, and Tourism. Ulaanbaatar. p.1-99. (in Mongolian)
- Gombobaatar, S. (compiler), Brown, H.J., Sumiya, D., Tseveenmyadag, N., Boldbaatar, Sh., Baillie, J.E.M., Batbayar, G., Monks, E.M., Stubbe, M. (editors). 2011. *Summary Conservation Action Plan for Mongolian Birds. Regional Red List Series Vol. 8*. Zoological Society of London, Mongolian Ornithological Society and National University of Mongolia. (in English)
- Piechocki, R. 1968. Contributions of avifauna in Mongolia. T. I. Non-Passeriformes. *Mitt. Zool. Mus. Berlin* 44: 149-292. (in German)
- Tseveenmyadag, N. 1998. *Waterbirds of Eastern Mongolia*. Proceedings of International Workshop on Wetland conservation in Mongolia and North-East Asia. Ulaanbaatar, Mongolia. p.149-156.
- Tseveenmyadag, N., Bold, A., Fomin, V.E., and Ostapenko, B.A. 2000. *Birds in the Onon, Ulz and Khalkhgol river basins*. Scientific Proceedings of the Institute of Biology, Mongolian Academy of Sciences 22:153-160. (in Mongolian)
- Tugarinov, A. Ya. 1932. *Birds of East Mongolia on the results of the 1928 year expedition in Proc. of Mongolian Commission*. Acad. Sci. Publ. House, Leningrad (1): 46 pp. (in Russian)

15. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Buir Lake and the surrounding region is considered representative of the Central Asian Stipa-steppe zone and as a region of the eastern edge of the Mongolian steppe. Lake Buir is 40.0 km long, 21.0 km wide, and has a 118 km long shoreline. Its maximum depth is 10.4 m and water volume is 3.73 km³. The main tributary is the Khalkh River and excess water goes to the Orshuun river, which flows to Lake Dalai-Nuur in China (Tsegmid, 1969). There are a number of small lakes east and south of Buir lake, such as Bayan, Khar, Nariin, Zuun Zakhiin, Zakhiin, Baruun Zakhiin, Takhi, Khukh Us and Shart lakes. Bayan Lake (6.3 km²) is located south of Buir Lake. Its altitude is 587 m a.s.l. It directly connects to Buir Lake and contains many small lakes and ponds. In addition, small Bayannuur Lake (1.1 km²) serves as a bridge between Buir and Bayannuur Lakes at 583 m a.s.l. (Tserensodnom, 1971 & 2000). Water temperature of the lake is 25-28oC in the summer. It freezes from November to April, with ice thickness of 1.1-1.5 m. Mineralization of the lake varies 298.7-365.9 mg/l in the western part of the lake and 200.5-294.1 mg/l in the east, PH = 8.5.

16. Physical features of the catchment area:

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

The total lake watershed area is 20,200 km². Generally, the basin is around 600-800 m a.s.l., mostly dominated by steppe terrain and mountains of 800-1,300 m altitude in the upper catchment. The Khalkh River is a main tributary of the lake and is fed 20% from underground water, 25% from snowmelt, and 55% from rainfall. The mean winter precipitation is 172 mm and 250-300 mm for summer. The mean warm season temperature is 15.4oC, maximum is 25.3oC, while the mean cold season temperature is -8.63oC, with minimum -23.8oC. Dark brown, meadow, marsh soils are mainly dominant in the surroundings of the lake. The Khalkh and Orshuun Rivers' soil type are meadows, meadow-dark, and chestnut. This unique ecosystem in eastern Mongolia provides habitat to many globally threatened species.

17. Hydrological values:

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

The lake belongs to the Amur River Basin, which covers the eastern part of Mongolia, the Russian Far East and the north-eastern part of China. The wetland is therefore of fundamental importance as a source of water for the area.

18. General ecological features:

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

Steppe plant communities surround the wetland. Bushy plants (*Papurus* spp. etc.) grow in the Khalkh River delta. The natural scenery north-east of the lake is extremely beautiful. The surroundings of Buir Lake contain many species of plants and animals, including globally threatened migratory species. Salty small lakes and mud occur in the low depressions and there are salty valleys in the south and south-west of the lake.

19. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the SIS.*

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

Buir Lake is surrounded by the steppe vegetation system, Daguur type in the north, Mongolian type in the south and Manchurian (China) vegetation type in the east. The wetlands contain 100 species of humid-arid plants, 102 species of humid plants, 19 water plants, 28 species of wetland plants, and 64 species of salt plants. White Peony *Paeonia lactiflora*, False spirea *Sorbaria sorbifolia*, Gas plant *Dictamnus dasycarpus*, Common valerian *Valeriana officinalis*, Bunge *Anemarrhena asphodeloides*, and *Lilium dahuricum* are listed in the Mongolian Red Book (1997) and are found in the area.

20. Noteworthy fauna:

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

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

There are 25 species of mammals in the area surrounding the lake, of which 15 are abundant and 10 are rare. Among large mammals Siberian Roe Deer *Capreolus pygargus*, Gray Wolf *Canis lupus*, Red Fox *Vulpes vulpes*, Corsac Fox *Vulpes corsac*, Eurasian Badger *Meles meles*, and Raccoon Dog *Nyctereutes procyonoides* are considered abundant. Small mammals such as Daurian Pika *Ochotona daurica* and Tolai Hare *Lepus tolai* commonly occur. Thousands to millions

of Mongolian gazelle *Procapra gutturosa* migrate into the area during fall and spring. The Lake and its surrounding area support 236 species of birds. Of these, 37 species are sedentary and 199 species are migratory. Altogether, 115 species are breeding visitors, 59 species passage migrants, 7 species winter visitors, and 18 species vagrants (Tugarinov, 1932; Piechoki and Bolod 1972; Bold & Eregdendagva 1970; Fomin & Bold 1991; Tseveenmyadag, 1998; Tseveenmyadag & Bold 2000). Buir Lake, the most nourishing lake in Mongolia, supports 29 species of fish, such as Taimen *Hucho taimen*, Lenok *Brachymystax lenok*, Amur Grayling *Thymallus grubei*, Amur Pike *Esox reicherti*, Amur Ide *Leuciscus waleckii*, Flathead Asp *Pseudaspius leptoccephalus*, Mongolian Redfin *Erythroculter mongolicus*, a species of Ray-finned Fish *Culter alburnus*, European Carp *Cyprinus carpio* and Amur Catfish *Parasilurus asotus* (Baasanjav, 2001; Baasanjav & Tsend-Ayush, 2001). A total of 63 species of algae and plankton species inhabit Buir Lake, among them 25 species of diatom, 18 green, 14 blue green, 3 golden and 2 pirophit algae (Dulmaa & Nansalmaa, 1977).

21. Social, economic and cultural values:

a) Describe if the site has any general social, economic and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

The wetland has high potential for eco-tourism, recreation, environmental education, scientific research and fishing. However, eco-tourism has not yet developed due to lack of infrastructure. The fishing industry is more developed and has a relatively long history. A state owned fishing enterprise was established in 1954 on the Mongolian part of the lake. The fishery caught 380 tons of fish in 1956-1965, 150 tons in 1966-1975, 130 tons in 1976-1990, and 250-300 tons in 1992. In early 1990s, privatized fishing facilities started at the lake and established several small fishing companies (Baasanjav, 2001) that export the fish to China.

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? (Double-click the checkbox to check and choose “Checked” under “Default Value” from “Check Box Form Field Options” window)

If yes, tick the box and describe this importance under one or more of the following categories:

- I. Sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- II. Sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- III. Sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:

IV. Sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

22. Land tenure/ownership:

a) Within the Flyway Network site:

State owned but used by local governor

b) In the surrounding area:

The wetland and the surrounding areas are state owned

23. Current land (including water) use:

a) Within the Flyway Network site:

The general land use is nomadic animal husbandry. The herdsmen breed sheep, goats, horses and cattle in large numbers and camels in small numbers. There is no crop production or industry near the lake. There is no settlement within the wetlands, except a small fishing village on the eastern bank.

b) In the surroundings/catchment:

The Khalk Gol/Sumber sum is located outside the wetland, about 20 km NW of the lake. The sum's population is 30,641. Livestock of local herders graze around the wetland. Local people use the wetland to harvest hay in the autumn. There are 1,921 people of total labour, from which 500 (27%) have permanent job positions with salaries, 49% works for local administrations, 14% for schools, 8% for hospitals, and 29% for agricultural sectors.

24. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

a) Within the Flyway Network site

A Mongolian and Chinese joint company have been pumping oil in the west of the lake. While oil pumps are situated far from the lake, impact assessment and monitoring are necessary in the future.

b) In the surrounding area:

At present water pollution is relatively low thanks to the fact that there are no pollutant sources in this area. Drought is a major problem causing shrinking of the wetland area.

25. Conservation measures taken:

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

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

The local administration has not taken any tangible measures on the conservation of Buir Lake and its surrounding areas. Fish resources are extensively used. Complete assessments need to be conducted on fish resources and conservation measures.

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

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

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

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

No

d) Describe any other current management practices:

None

26. Conservation measures proposed but not yet implemented:

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

It is important to establish a regional and state protected area covering Buir Lake and the surrounding areas in order to protect wetlands for breeding and migratory waterbirds. However, due to an ambitious interest from local governor for fishing industry, the area has not legally protected.

27. Current scientific research and facilities:

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

There are no current research projects and field research facilities. However, some fish resource surveys were carried out by different organizations from Ulaanbaatar including the Mongolian Academy of Sciences. According to the survey in 2000, there was no indication of changes in fish body size compared to 1992 (Baasanjav, 2001). In the future, a detailed fish research is needed. The National University of Mongolia, Mongolian Ornithological Society, Mongol and Russian

Daurian Protected Area and Mongolian Academy of Sciences have been conducting extensive field surveys on migratory waterbirds for last few years.

28. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

There are no educational facilities, visiting centers or observation hides.

29. Current recreation and tourism:

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

There are no tourism and recreation sites at the moment. Few tourists and hikers come to the site for fishing, bird watching and hiking in the summer period.

30. Threats *:

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

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

Information Sheet on EAA Flyway Network Sites

renewable energy

Transportation and service corridors

roads and railroads

utility and service lines

shipping lanes

flight paths

Biological resource use

hunting and collecting terrestrial animals

gathering terrestrial plants

logging and wood harvesting

fishing and harvesting aquatic resources

Human intrusions and disturbance

recreational activities

war, civil unrest and military exercises

work and other activities

Natural system modifications

fire and fire suppression

dams and water management/use

other ecosystem modifications

Invasive and other problematic species and genes

invasive non-native/alien species

problematic native species

introduced genetic material

Pollution

household sewage and urban waste water

industrial and military effluents

agricultural and forestry effluents

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garbage and solid waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
air-borne pollutants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
excess energy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Geological events

volcanoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
earthquakes/tsunamis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
avalanches/landslides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Climate change and severe weather

habitat shifting and alteration	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
droughts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
temperature extremes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
storms and flooding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

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

(From the Partnership Text)

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

- a. Convention on Wetlands (Ramsar, Iran, 1971) criteria for internationally important sites for migratory waterbirds. That is:

Criterion 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.

Criterion 5: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.

Criterion 6: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.

- b. The staging criteria as applied under the Asia - Pacific Migratory Waterbird Conservation Strategy. That is:

i. A staging site should be considered internationally important if it regularly supports 0.25% of individuals in a population of one species or subspecies of waterbirds on migration.

ii. A staging site should be considered internationally important if it regularly supports 5,000 or more waterbirds at one time during migration.

- c. Under exceptional circumstances a site can be nominated if it supports migratory waterbirds at a level or stage of their life cycle important to the maintenance of flyway populations. Justification of such nominations will be considered by the Partnership on a case by case basis.

Annex 2: Ramsar Classification System for Wetland Type

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

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

Marine/Coastal Wetlands

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

Inland Wetlands

- L -- **Permanent inland deltas.**
- M -- **Permanent rivers/streams/creeks**; includes waterfalls.
- N -- **Seasonal/intermittent/irregular rivers/streams/creeks.**
- O -- **Permanent freshwater lakes** (over 8 ha); includes large oxbow lakes.
- P -- **Seasonal/intermittent freshwater lakes** (over 8 ha); includes floodplain lakes.
- Q -- **Permanent saline/brackish/alkaline lakes.**
- R -- **Seasonal/intermittent saline/brackish/alkaline lakes and flats.**

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

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

Human-made wetlands

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

Annex 3: IUCN Protected Areas Categories System

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

Ia Strict Nature Reserve

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

Ib Wilderness Area

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

II National Park

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

III Natural Monument or Feature

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

IV Habitat/Species Management Area

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

V Protected Landscape/ Seascape

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

VI Protected area with sustainable use of natural resources

Information Sheet on EAA Flyway Network Sites

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