Information Sheet on Ramsar Wetlands (RIS) - 2009-2012 version

Available for download from http://www.ramsar.org/ris/key_ris_index.htm.

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

- 1. The RIS should be completed in accordance with the attached Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands. Compilers are strongly advised to read this guidance before filling in the RIS.
- 2. Further information and guidance in support of Ramsar site designations are provided in the Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance (Ramsar Wise Use Handbook 14, 3rd edition). A 4th edition of the Handbook is in preparation and will be available in 2009.
- 3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar

Secretariat. Compilers should provide an electronic (New possible, digital copies of all maps.	MS Word) copy of the RIS and, where
1. Name and address of the compiler of this form:	FOR OFFICE USE ONLY.
Mr. Jung Uisuk Deputy Director, Nature Policy Division, Nature Conservation Bureau, Ministry of Environment, Government Complex, Joongang-dong 1, Gwacheon-si, Gyeonggi-do, Republic of Korea	DD MM YY Designation date Site Reference Number
2. Date this sheet was completed/updated: March 31, 20	011
3. Country: Republic of Korea	
4. Name of the Ramsar site: The precise name of the designated site in one of the three official lang Alternative names, including in local language(s), should be given in paren	
Ungok Wetland	
5. Designation of new Ramsar site or update of existing	g site:
This RIS is for (tick one box only): a) Designation of a new Ramsar site ✓; or b) Updated information on an existing Ramsar site □	
6. For RIS updates only, changes to the site since its de	esignation or earlier update:
a) Site boundary and area	

The Ramsar site boundary and site area are unchanged: \Box

or	
If the site boundary has changed:	
i) the boundary has been delineated more accurately ; or	
ii) the boundary has been extended ; or	
iii) the boundary has been restricted**	
and/or	
If the site area has changed:	
i) the area has been measured more accurately \square ; or	
ii) the area has been extended \square ; or	
iii) the area has been reduced**	
** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.	
b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:	
7. Map of site:	
Refer to Annex III of the Explanatory Note and Guidelines, for detailed guidance on provision of suitable maps, including digital	
maps.	
a) A map of the site, with clearly delineated boundaries, is included as: i) a hard copy (required for inclusion of site in the Ramsar List): ✓;	
ii) an electronic format (e.g. a JPEG or ArcView image) ✓;	
iii) a GIS file providing geo-referenced site boundary vectors and attribute tables \checkmark .	
b) Describe briefly the type of boundary delineation applied:	
e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.	
The boundary of the site follows the Wetland Conservation Area.	
8. Geographical coordinates (latitude/longitude, in degrees and minutes): Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.	
Approximate center coordinates of Ungok Lake: 35°27'51.14"N 126°38'24.21"E	
Approximate range: North Latitude: 35° 27' 07"~ 35° 28' 33" East Longitude: 126° 37' 56"~ 126° 39' 44"	
9. General location: Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.	
Jurisdictionally located at 407 Ungok-ri, Asan-myeon, Gochang-gun, North Jeolla Province.	

10. Elevation (in metres: average and/or maximum & minimum): 40 m above sea level

11. Area: (in	nectares): .	L / ソ.	. /	na
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12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Ungok Wetland consists of Ungok Lake and Obaygol low-moor (Obaygol wetland). Obaygol low-moor was used for rice paddy cultivation, overtime the site was completely abandoned. With little human interference, Obaygol low-moor has undergone ecological succession.

Species found here inlcude the Eurasian Otter (*Lutra Lutra*), Leopard Cat (*Felis bengalensis*), Common buzzard (*Buteo buteo*) Chinese Goshawk/Chinese Sparrowhawk (*Accipiter soloensis*) and the Common Kestrel (*Falco tinnunculus*).

13. Ramsar Criteria:

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the Explanatory Notes and Guidelines for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked

1	•	2 •	3 •	4 •	5 •	6 •	7	8 •	9
		\checkmark							

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Criterion 2

The site supports national and internationally threatened species.

Common name	Scientific name	IUCN	CMS	CITES	National
		status			status
Eurasian Otter	Lutra Lutra	NT	-	App I	ED Level I ¹
Leopard Cat	Felis bengalensis/ Prionailurus bengalensis	LC	-	AppII	ED Level II ²
Chinese Water Deer	Hydropotes inermis	VU	-	-	-
Seoul Frog	Pelophylax chosenicus/ formerly called Rana nigromaculata	VU	-	-	-

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Holarctic floristic kingdom -East Asiatic Floristic Region

b) biogeographic regionalisation scheme (include reference citation):

¹ Designated by the Ministry of Environment as endangered, level I refers to level of endangerment

² Designated by the Ministry of Environment as endangered, level II refers to level of endangerment

Yoshoka, K. 1973. Plant Geography. pp.10~19. Konglip Publishing Co., Tokyo. Yamazaki, T. 1983. Outline of Biology (Higher Plants A1), pp.79-96. Nakayama Sho. Tokyo.

16. Physical features of the site:

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

Geology, soil and hydrology

The surroundings of Ungok Wetland consists of rhyolite, tuff, granitite, and blastoporphyritic granite. Rhyolite and tuff erupted during the Cretaceous period and granitite and blastoporphyritic granite formed during the Jurassic period of the mid Mesozoic Era.

The soil is mostly inorganic and has a large amount of water. The substrate beneath the soil is impermeable and plays a role in preserving water.

When the water level increases in Ungok Lake, various wetlands and swamps are created in the surrounding areas of Ungok Wetland. Crossed basin provides hydrogeomorphological conditions, favourable for retaining water. Heavy snowfall during winter helps to maintain moist soil conditions throughout the year.

Climate (Data for 49 years 1960~2009)

According to Köppen Climate Classification System, Ungok Wetland is subtropical (Cf). Average annual temperature: 13.5 °C, average temperature of the coldest month: 0.3 °C (January), average temperature of the hottest month: 26.2 °C (August), average annual precipitation: 1,249.7mm, and average annual wind speed: 2.2 m/s. Source: Gwangju Weather Station.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type). Same as 16

18. Hydrological values:

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

Water in Ungok Wetland is categorized into three types: 1) spring water from beneath the ground, 2) surface water and 3) snowmelt runoff.

Diverse vegetation communities in the wetland play a key role in retaining water. They act as a buffer to prevent ecosystem being damaged during localized torrential rainfall. Permeable weathering soil around the wetland is suitable for retaining water.

19. Wetland Types

a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the Explanatory Notes & Guidelines.

Marine/coastal: A · B · C · D · E · F · G · H · I · J · K · Zk(a)

Inland: L • M • N •
$$\boxed{\mathbb{Q}}$$
 • P • Q • R • Sp • Ss • Tp Ts • $\boxed{\mathbb{U}}$ • Va • Vt • $\boxed{\mathbb{W}}$ • Xf • Xp • Y • Zg • Zk(b)

Human-made: 1 • 2 • 3 • 4 • 5 • $\boxed{6}$ • 7 • 8 • 9 • Zk(c)

b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

W > 6 > O > U

20. General ecological features:

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

Flora

459 kinds of Tracheophytes are distributed throughout Ungok Wetland in Gochang-gun, North Jeolla Province. They are categorized into 107 families, 287 genera, 399 species, 1subspecies, 3 forma and 56 varieties

There are various vegetation communities such as Salix koreensis, Carex dimorpholepis, Carex neurocarpa, Scirpus fluviatilis, Carex dispalata, Penthorum chinense, and Persicaria nodosa.

Many kinds of plants and diverse vegetation communities live in Ungok Wetland. Obaygol wetland is a relatively small area, however has diverse ecological landscapes. It is home to many kinds of plant communities and animals, a condition maintained by the wetlands capacity to reserve water. *Salix koreensis* and *Populus tomentiglandulosa* makes up 44% of wetland plants, it is found in Obaygol wetland and in surround forest areas.

Mammals

Apart from the species mentioned in criteria 2, there are 4 orders, 9 families, and 11species, examples include, Japanese Mole (*Mogera wogura*) Ussuri Shrew (*Crocidura lasiura*), Racoon Dog (*Nyctereutes procyonoides*), Siberian Weasel (*Mustela sibirica*), Wild Boar (*Sus scrofa*), Sciurus vulgaris, Striped Field Mouse (*Apodemus agrarius*) and the Eurasian Harvest Mouse (*Micromys minutus*).

Birds

48 kinds of birds are found here, a few species are listed in section 22.

Amphibians

Amphibians include: Oriental Fire-bellied Toad (Bombina orientalis), Seoul Frog (Pelophylax chosenicus/Rana nigromaculata, Japanese Wrinkled Frog (Glandirana rugosa) and American Bullfrog (Lithobates catesbeianus/Rana catesbeiana).

Reptiles

Reptiles include: Tsushima Ground Skink (Scincella vandenburghi/Leiolopisma laterale), Mountain Grass Lizard (Takydromus wolteri), Dione Ratsnake (Elaphe dione), Natrix tigrina lateralis, and Agkistodon ussuriensis.

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Penthorum chinense is a species protected by the Korea Forest Service, under a seperate classification from national status and Natural Monument.

Other plant species include: Wood Fern (Dryopteris gymnophylla) Sagittaria aginashi, Pseudoraphis ukishiba, Lilium distichum, Iris ensata var., Chloranthus japinocus, Salix glandulosa, Betula schmidtii, Chinese Cork Oak (Quercus variabili), Penthorum chinense, Mallotus japonicas, lex macropoda, Grevia biloba var., Yellow Floatingheart, (Nymphoides peltata) Veronica tenella, Utricularia pilosa, Scabiosa mansenensis, Meliosma oldhamii, Artemisia viridissima, Glyceria leptolepis, Carex arenicola, Korean Sweetheart Tree (Euscaphis japonica)

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.

Table lists some species considered to be nationally important.

Common name	Scientific	IUCN	CMS	CITES	National	Natural
	name	status			status	Monument ³
Common	Buteo buteo	LC	-	-	ED Level	-
buzzard					II	
Common	Falco	LC	-	-	ED Level	✓
Kestrel	tinnunculus				II	
Chinese	Accipiter	LC	-	-	-	✓
Goshawk/	soloensis					
Chinese						
Sparrowhawk						

23. Social and cultural values:

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

The surrounding area of Ungok Wetland has Gochang Dolmen Sites⁴, the biggest dolmen community in Asia. A Dolmen Site is thought to be home to human beings who lived by hunting and gathering during prehistoric times. Gochang Dolmen Sites have been registered as World Heritage (C-977) in 2000. Ungok Wetland has a significant meaning for its close relation to the history of human beings dating thousands of years.

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?

If Yes, tick the box \square 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:

³ Natural Monument refers to those species considered to be linked with Korean cultural heritage and is thus protected under National Law.

⁴ Dolmen Sites refer to Neolithic stone formations consisting of a horizontal stone supported by several vertical stones.

iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland: 24. Land tenure/ownership: a) within the Ramsar site: Owned by the government: 15.5% Owned by the local government: 0.3% Private: 84.2% b) in the surrounding area: Owned by the government: 7% Owned by the local government: 14% Private: 79% 25. Current land (including water) use: a) within the Ramsar site: A part of the site was designated as an 'Electric Source Development Area' under the Electric Source Development Promotion Act. The amount and quality of water is being managed in order to supply water for Yeonggwang Nuclear Power Plant. In addition, a part of Ungok Wetland was designated as an 'Agricultural Conservation Land' under the Agricultural Land Act. b) in the surroundings/catchment: The surroundings of Ungok Wetland is mostly natural forest. Dolmen World Heritage Site is located here. It is designated and managed as Cultural Properties Protection Areas. 26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects: a) within the Ramsar site: Ungok Wetland used to be a farmland and thus in the past, the ecosystem was disturbed. However, now it is undergoing natural succession after having been neglected for a long time. Efforts are made to minimize ecological interference. b) in the surrounding area: N/A 27. Conservation measures taken: a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site: In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations. National category: Wetland Conservation Area (11th March 2011) (Partly) Electric Source Development Area (Partly) Agricultural Conservation Land Area. b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

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

Ia \square ; Ib \square ; II \square ; III \square ; IV \square ; V \square ; VI \square

N/A

d) Describe any other current management practices:

A plan for wetland protection and management is now being established. Designation as a UNESCO Biosphere Reserve is now being proposed.

Restoring ecosystems in affected areas, in the site and surrounding the site. The basic plan for restoration and primary survey was established in September 2009.

28. Conservation measures proposed but not yet implemented:

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

UNESCO Biosphere Reserve is now being proposed.

29. Current scientific research and facilities:

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

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

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

We are promoting the values of wetland through various programs such as an eco trail connected to the educational course of Dolmen World Heritage and Jilmajae 100-ri trail. They are being constructed to educate visitors about wetland flora and fauna in Ungok Wetland.

31. Current recreation and tourism:

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

The number of visitors to Ungok Wetland and to the adjacent Dolmen Site is increasing every year. Annual visitors: 48,000 people in 2008, 139,000 in 2009.

32. Jurisdiction:

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

Territorial jurisdiction: Gochang-gun Office

Functional jurisdiction: Ministry of Environment, Ministry of Strategy and Finance, Ministry of Land, Transport and Maritime Affairs, Cultural Heritage Administration of Korea

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Department of Nature Environment, Jeonju Regional Environmental Agency, Ministry of Environment

- Address: 104, Heemang2-gil, Wansan-gu, Jeonju-si, North Jeolla Province
- Postcode: 560-870
- Tel: +82-63-270-1851
- Email: jinubaek@me.go.kr

Department of Environment and Hygiene, Gochang-gun Office

- Address: 275-3, Gyochon-ri, Gochang-eup, Gochang-gun, North Jeolla Province
- Postcode: 585-801
- Tel: +82-63-560-2316
- Email: hyki2254@korea.kr

34. Bibliographical references:

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

Gochang-gun, North Jeolla Province. 2010. In-depth analysis on Ungok Wetland ecosystem for Ramsar registration. pp. 170

Please return to: Ramsar Convention Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • e-mail: ramsar@ramsar.org