

# Information Sheet on Ramsar Wetlands (RIS) – 2006-2008 version

Available for download from [http://www.ramsar.org/ris/key\\_ris\\_index.htm](http://www.ramsar.org/ris/key_ris_index.htm).

*Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8<sup>th</sup> Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX.22 of the 9<sup>th</sup> 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 7, 2<sup>nd</sup> edition, as amended by COP9 Resolution IX.1 Annex B). A 3<sup>rd</sup> edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

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### 1. Name and address of the compiler of this form:

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Designation date

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Site Reference Number

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### 2. Date this sheet was completed/updated:

8 August 2008

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### 3. Country:

Japan

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### 4. Name of the Ramsar site:

The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.

Oyama Kami-ike and Shimo-ike

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### 5. Designation of new Ramsar site or update of existing 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

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### 6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area

The Ramsar site boundary and site area are unchanged:

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 ; or
- ii) the area has been extended ; 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:**

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**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 .

**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.

Waterfront line (at planned water level of the pond)

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**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.

Kami-ike: 38°44'N, 139°45'E

Shimo-ike: 38°45'N, 139°45'E

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**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.

Located approximately 9 km west of Tsuruoka City (population: c. 140,000), which is approximately 60 km southwest of Yamagata City (capital of Yamagata Prefecture, population: c. 250,000)

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

12 m

**11. Area:** (in hectares)

39 ha (Kami-ike 14 ha, Shimo-ike 25 ha)

**12. General overview of the site:**

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

Having existed as irrigation reservoirs for the last 400 years, Kami-ike and Shimo-ike are rich in biodiversity with 18 fish species. They serve as wintering habitat for Tundra Swans (*Cygnus columbianus*) and several species of ducks every year, and they also serve as feeding ground for Ospreys (*Pandion haliaetus*), Little Grebes (*Tachybaptus ruficollis*) and herons (Ardeidae spp.) throughout the year.

**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

**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:** Oyama Kami-ike and Shimo-ike supports the below species which are categorized as VU or higher risk on the IUCN and/or Japan Red Lists.

Species	IUCN status <sup>1</sup>	Japan Red List <sup>2</sup>	Species Conservation Law <sup>3</sup>
<b>Birds</b>			
Bean Goose ( <i>Anser fabalis</i> )	LC	VU	
Baikal Teal ( <i>Anas Formosa</i> )	VU	VU	
White-tailed Eagle ( <i>Haliaeetus albicilla</i> )	LC	EN	Yes
Steller's Sea Eagle ( <i>Haliaeetus pelagicus</i> )	VU	VU	Yes
Grey-faced Buzzard-eagle ( <i>Butastur indicus</i> )	LC	VU	
Eastern Marsh Harrier ( <i>Circus spilonotus</i> )	LC	EN	
Peregrine Falcon ( <i>Falco peregrinus</i> )	LC	VU	Yes
Ruddy Crake ( <i>Porzana fusca</i> )	LC	VU	
Jungle Nightjar ( <i>Caprimulgus indicus jotaka</i> )	LC	VU	
Ashy Minivet ( <i>Pericrocotus divaricatus divaricatus</i> )	LC	VU	
<b>Fish</b>			
Far Eastern Brook Lamprey ( <i>Lethenteron reissneri</i> )		VU	

<sup>1</sup> = IUCN Red List of Threatened Species

<sup>2</sup> = Red List of Threatened Wildlife in Japan. Ministry of the Environment.

<sup>3</sup> = Designated under the Law for Conservation of Endangered Species of Wild Fauna and Flora (Species Conservation Law)

(Abbreviations: CR = Critically endangered; EN = Endangered; VU = Vulnerable; Yes = noted as a Domestic Endangered Species)

**Criterion 5:** More than 20,000 ducks overwinter in Kami-ike and Shimo-ike, along with approximately 4,000 swans and 800 geese. These Anatidae species include mallard (*Anas platyrhynchos*), Spot-billed Duck (*Anas poecilorhyncha*), Teal (*Anas crecca*), Pintail (*Anas acuta*), Bean Goose (*Anser fabalis*), Tundra Swans (*Cygnus columbianus*).

**Criterion 6:** Approximately 20,000 mallards (*Anas platyrhynchos*) and 1,000 – 3,000 Tundra Swans (*Cygnus columbianus*) overwinter in Kami-ike and Shimo-ike, which is greater than 1% of their regional population in East Asia (i.e., 15,000 for Mallards and 900 for Tundra Swans).

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**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:**

2.15.6 Oriental Deciduous Forest

**b) biogeographic regionalisation scheme** (include reference citation):

Udvardy, M. D. F. (1975). *A classification of the biogeographical provinces of the world*.

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**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: Located at the foot of Mt. Takadate (274 m), which consists mainly of andesite.

Origin: Artificially created 400 years ago at the foot of Mt. Takadate.

Hydrology: Ten streams from Mt. Takadate flow into the site throughout the year.

Soil type: Brown Forest Soil: 60%, Podzolic Soil: 9%, Regosol: 1%, Others (Rock etc.): 30% . pH: 4.7

Water quality: Fresh water.

Average nitrogen concentration: Shimo-ike: 0.98 - 1.33 (mg/l), Kami-ike: 0.72 - 0.85 (mg/l)

Water depth: 1 m (June - January) - 3 m (February - May)

Water permanence: Permanent

Fluctuations in water level: Seasonal fluctuation from irrigation (1 m in winter – 3 m in spring)

Downstream area: 725.3 ha (paddy field: 717.9 ha, wetland: 7.4 ha)

General climate: Temperature: average 13.1 °C, highest recorded 35.9 °C, lowest recorded -4.8 °C.

Precipitation: 2,291 mm/yr. Maximum daily precipitation: 83mm/day. Sunshine hours: 1,504 hr/yr.

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**17. Physical features of the catchment area:**

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

Surface area: 200 ha.

General geology and geomorphological features: The deciduous forest on the west of the ponds mostly consisting of beech (*Fagus crenata*) on Mt. Takadate is often covered by mist because of its proximity to the Sea of Japan, thus provides secure water supply.

General soil type: Moderately moist Brown Forest Soil.

Climate: Mild and the natural disasters such as typhoon are rare. Temperature: average 13.1 °C, highest recorded 35.9 °C, lowest recorded -4.8 °C. Precipitation: 2,291 mm/yr. Maximum daily precipitation: 83mm/day. Sunshine hours: 1,504 hr/yr.

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### 18. Hydrological values:

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

As irrigation reservoirs, Kami-ike and Shimo-ike provides stable water supply to the agricultural field, and Shimo-ike also provides water to the adjacent wetland.

### 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 • Q • P • Q • R • Sp • Ss • Tp Ts • U • Va •  
Vt • W • Xf • Xp • Y • Zg • Zk(b)

Human-made: 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c)

#### 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.

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### 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.

The entire area of Kami-ike and Shimo-ike serves as the habitat for aquatic plants, birds and fish species. Being shallow, the lotus (*Nelumbo nucifera*) covers most of the water surface. In winter, Anatidae species such as Mallard (*Anas platyrhynchos*), White-fronted Goose (*Anser albifrons*), Bean Goose (*Anser fabalis*) and Tundra Swan (*Cygnus columbianus*) migrate and overwinter. The fish species are mostly cyprinoid fish (Cyprinidae). The ecosystem service includes recreation opportunity.

### 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.*

The locally endangered flora Japanese Bluestar (*Amsonia elliptica*) (NT on Japan Red List), “Hangeshou” (*Saururus chinensis*).

### 22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12, 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.*

### 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:

- Both Kami-ike and Shimo-ike are used for irrigating surrounding rice paddies.
- Shimo-ike is visited for the purpose of environmental education.
- Kami-ike is used for commercially cultivating lotus, which is a local specialty.

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  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:

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**24. Land tenure/ownership:**

a) within the Ramsar site:

- Publicly-owned water body

b) in the surrounding area:

- Mostly owned by the national government (national forest) and local governments.
- Partially owned by private sectors.

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**25. Current land (including water) use:**

a) within the Ramsar site:

- Both Kami-ike and Shimo-ike are used for irrigation.
- Kami-ike is used for commercially cultivating lotus.
- This site is selected as one of 1,000 monitoring sites by the Ministry of the Environment in its project "Monitoring Sites 1000," and Anatidae monitoring has been implemented.
- The Department of Agriculture of Yamagata University has been studying for three years with a view to improve water quality.

b) in the surroundings/catchment:

- The natural recreation forest is established on the adjacent Mt. Takadate (274 m), which is used by all generations for bird watching and forest bathing.

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**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:

b) in the surrounding area:

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**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.

Special Protection Area of National Wildlife Protection Area (Wildlife Protection and Appropriate Hunting Law): \*from October 2008

Capture of wildlife (birds and mammals) is in principle prohibited in the area. It is required to obtain permissions from the Minister of the Environment when installing artificial structures, reclaiming the water body or logging.

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

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

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

A plan is being formulated with consultation among relevant national agencies, local governments and stakeholders, for the management of the Special Protection Area of National Wildlife Protection Area. It will be officially approved and enter into force in October 2008.

d) Describe any other current management practices:

- The Department of Agriculture of Yamagata University has been studying the site for three years with a view to improve water quality.
- In 2000 and 2001, the Ministry of the Environment and the land improvement district cooperatively eradicated the Largemouth Bass (*Micropterus salmoides*) by draining the water. Since then, signs have been installed and the patrol is carried out by the inland water inspectors to prevent illegal release of alien fish.

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**28. Conservation measures proposed but not yet implemented:**

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

None

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**29. Current scientific research and facilities:**

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

- Monitoring Sites 1000 (Anatidae monitoring) (Field researcher: *Oura no shizen wo mamoru kai*, 3-5-10, Oyama, Tsuruoka City, Yamagata)
- Research on improvement of water quality - The Department of Agriculture of Yamagata University

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**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.

- Nature observing events are held six times a year by a local NPO
- Nature observing cabin, installed by Tsuruoka City, is utilized for environmental studies

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**31. Current recreation and tourism:**

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

Kami-ike and Shimo-ike are used for observing geese or wild ducks in winter, and for viewing the lotus bloom in summer. They are also used for sightseeing along with neighboring sightseeing spots or Mt. Takadate from spring to autumn. Local residents visit the site for leisure purposes. Bird-watching parties are held throughout the year.

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**32. Jurisdiction:**

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

(terrestrial)  
Yamagata Prefecture

(functional)  
Ministry of the Environment (National Wildlife Protection Area)  
Yamagata Prefecture (Prefectural National Park)

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**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.

Yuzo Ito, Director, Wildlife Division  
Tohoku Regional Environmental Office, Ministry of the Environment  
3-2-23 Honmachi, Aoba-ku, Sendai City, Miyagi Prefecture, 980-0014, Japan

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**34. Bibliographical references:**

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

- Ministry of the Environment. (2006). *Review of Red List on Birds, Reptiles, Amphibians and Invertebrates other insects*. Press release on 12 December, 2006.
- Ministry of the Environment. (2007). *Review of Red List on Mammals, freshwater and brackish water fish, insects, mollusks and plants I and II*. Press release on 3 August, 2007.
- Ministry of the Environment. (2008). *Designation Plan on Oyama Kami-ike and Shimo-ike National Wildlife Protection Area and Special Protection Area*.
- Tsuruoka no Shizen Editorial Committee. (1988). *Tsuruoka no Shizen* (Nature of Tsuruoka)
- Oyama-Choshi Publishing Committee. (1969). *Oyama-Choshi* (History of Oyama)

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