# Information Sheet on Ramsar Wetlands (RIS)

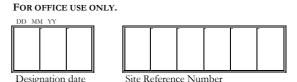
Categories approved by Recommendation 4.7 of the Conference of the Contracting Parties.

#### 1. DATE THIS SHEET WAS COMPLETED / UPDATED:

18 June 2001

#### 2. COUNTRY:

Thailand



#### 3. NAME OF WETLAND:

Bung Khong Long Non-Hunting Area

# 4. GEOGRAPHICAL COORDINATES:

 $17^{\circ} 18' - 17^{\circ} 58'$  North,  $103^{\circ} 59' - 104^{\circ}$  East

### 5. ELEVATION:

160-170 meters

#### **6. AREA**:

2,213.92 ha

#### 7. OVERVIEW:

Bung Khong Long is one of the largest freshwater lake in the northeastern part of Thailand. This lake lies in north-south position with the length of about 13 km. And the width of above 2 km. Bung Khong Long supports high diversity of aquatic plants and wetland wildlife especially migratory birds during winter. Besides its ecological importance, the site also supports local people as one of the main fisheries resources.

#### 8. WETLAND TYPE:

Please now rank these wetland types by listing them from the most to the least dominants: OP

Bung Kong Long is permanent fresh water lake and surrounded by seasonal floodplain.

## 9. RAMSAR CRITERIA:

Please specify the most significant criterion applicable to the site: 2

#### 10. MAP OF SITE INCLUDED:

Yes.

#### 11. NAME AND ADDRESS OF THE COMPILER OF THIS FORM:

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#### 12. JUSTIFICATION OF THE CRITERIA SELECTIED UNDER POINT 9:

Criteria # 2: 2 species of fish, namely *Krytopeterus bicirrhis* and *Clarias batrachus* have been classified as nationally vulnerable species while *Betta smaragdina* and *B. splendens* have been classified as species threatened in the wild of Thailand.

For avian fauna, nationally endangered species include *Ardea cinerea*, *A. purpurea* and *Milvus migrans* while *Aythya nyroca* and *Nanellus duvaucelli* have been classified as vulnerable species of Thailand. *Aythya nyroca* is also globally recorded as a near threatened species. Other 3 species of bird, namely *Nettapus coromandealianus*, *Haliastur indus* and *Vanellus cinercus* are classified as nationally near-threatened species.

Criteria # 4: Bung Khong Long is one of the most important wetland for wintering birds in the northeastern part of Thailand. During winter about 33 species of non-breeding migrants utilize Bung Khong Long as their winter habitat.

Criteria # 7: Bung Kong Long supports nationally endemic fish species such as *Clupeichthys aesamensis, Boraras micros, Rasbora spilocerca, Brachygobius sp. Odontobutis aurarmus and Tetraodon leiurus*, and nationally endangered bird species include *Ardea cinerea, A. purpurea* and *Milvus migrans*. (Khon Kaen University, Department of Environmental Science, 1997, 2000).

Criteria # 8: Bung Khong Long is an important wetland that supplies food source for fish and also provides a spawning ground for fish species existing in this lake.

#### 13. GENERAL LOCATION:

Situated at the border between Amphoe Sega and Amphoe Bung Khong Long, Nong Khai Province. It is approximately 200 Km far from Amphoe Muang, Nong Kai Province

#### 14. PHYSICAL FEATURES:

The site is a part of flood plain of Song Khram River. It is also a part of watershed area which receives the alluvial sediment especially during the rainy season. The immediate surrounding area of the site includes flat plains of slightly undulating with 2- 5% slope. Geologically the site is underlain by Maha Sarakham Formations during Jurassic and Cretaceous period. The soil in the site is alluvial soil with low to moderate fertility.

Tropical monsoon climate with an average annual rainfall of 1,367 mm (range 929-1,998), 87.5% of which falls during the southwest monsoon from May to October. The mean annual temperature is 26.8°C (maximum 43.9°C, minimum 2.5°C) The climate is characterized by a short cool season and longer, hotter dry season.

#### 15. HYDROLOGICAL VALUES:

Bung Khong Long is a rather shallow-water lake, the deepest being about 6 meter in the rainy season. The lake receives and stores flood water from the surrounding catchment area. Water from Bung Khong Long flows down to Song Khram river and eventually to the Mekhong river

#### 16. ECOLOGICAL FEATURES:

Bung Khong Long has a variety of aquatic flora and fauna. Aquatic flora communities can be classified into 3 types :

- 1. Shallow water community of submerged plants, floating plants and emergent plants.
- 2. Open-water community of submerged plants
- 3. Overlaying dense and floating community, this type of community has both upland plants and aquatic plants, and as its name implied, it can drift from place to place due to the wind.

As for wildlife, this area acts as sanctuary for about 65 species of birds in which 32 species are non-breeding visitors. About 27 species of fishes have been recorded in this area and 7 species of economic fishes.

There are about 23 species of aquatic plants found in Bung Khong Long in which 3 types of aquatic plant community can be classified as shallow-water community, open-water communities and overlaying dense and floating communities. These plant communities contain aquatic plants of varied life forms such as submergent plants which are dominated by algae for instance *Hydrilla verticillata*, *Chara zeylanica*, *Cerotophyllum dermersum* and *Blyxa echinosperma*, floating plants for instance *Salvinia cucullata* and emergent plants for instance *Nelumbo nucifera*, *Eleocharis dulcis*, *Lepironia articulata* and *Nymphaea lotus*.

#### 17. NOTEWORTHY FLORA:

none

#### 18. NOTEWORTHY FAUNA:

From December 1998 to January 2000 surveys were conducted at Bung Khong Long and 66 species of fish, 67 species of birds, and 10 species of reptiles were recorded. Amphibian species are found at least 6 species.

From these species, 6 species of fish are nationally endemic species i.e. Clupeichthys aesamensis., Boraras micros, Rasbora spilocerca., Brachygobius sp., Odontobutis aurarmus and Tetraodon leiurus. 2 species of fish, namely Krytopeterus bicirrhis and Clarias batrachus have been classified as nationally vulnerable species while Betta smaragdina and B. splendens have been classified as species threatened in the wild of Thailand.

For avian fauna, nationally endangered species include *Ardea cinerea*, *A. purpurea* and *Milvus migrans* while *Aythya nyroca* and *Nanellus duvaucelli* have been classified as vulnerable species of Thailand. *Aythya nyroca* is globally recorded as a near threatened species. Other 3 species of bird, namely *Nettapus coromandealianus*, *Haliastur indus* and *Vanellus cinercus* are classified as nationally near-threatened species. Bung Khong Long is one of the most important wetland for wintering birds in the northeastern part of Thailand. During winter about 33 species of non-breeding migrants utilize Bung Khong Long as their winter habitat.

Reptiles 10 species are found in the site such as *Varanus bengalensis* and *Takydromus sexlineatus*.

(Khon Kaen University, Deprtment of Environmental Science 1997, Hilton-Taylor 2000)

#### 19. SOCIAL AND CULTURAL VALUES:

Bung Khong Long supplies raw water for the municipality to pr4oduce tap water used in amphoe Bung Khong Long. Besides, Bung Khong Long also supplies water for horticultural plantation and livestock. Bung Khong Long also acts as an important fishing ground for local fishermen.

# 20. LAND TENURE/OWNERSHIP OF:

As a non-hunting area, Bung Khong Long is state-owned freshwater lakes with surrounding privately-owned land mostly use either for agriculture and villages settlement.

#### 21. CURRENT LAND USE:

Bung Khong Long is currently used as for subsistent fishing by local people who can earn about 50-70 bath/day. Cultivation of vegetables in some areas adjacent to the site is another activity which depends on the water resource form the lake.

# 22. FACTORS (PAST, PRESENT OR POTENTIAL) ADVERSELY AFFECTING THE SITE'S ECOLOGICAL CHARACTER, INCLUDING CHANGES IN LAND USE AND DEVELOPMENT PROJECT:

The disturbance and threats occurring at Bung Khong Long can be classified into 3 categories:

- 1. Fishing several local fishermen fishing in the area that should be kept as sanctuary for resident and visitors, for aquatic and marsh birds such as the open water space between island of the lake and between each island and shoreline.
  - 2. illegal bird hunting during the night
- 3. Burning of habitat around the lake margin by those fishermen who use the fire for cooking and accidentally forget to extinguish it.

#### 23. CONSERVATION MEASURES TAKEN:

In August , 1982 Bung Khong Long was declared as a non-hunting area by the Royal Forest Department of Thailand. At present , the area of about 150 m. around Don Sawan which is when the office of the Non-hunting Area is situated , has been proclaimed as non fishery area to protect the aquatic birds from disturbances by fishery activities. The natural trail along the edge of Don Sawan of about 600 m. long was established in 1999 by the Non-hunting area office both for bird watching and for the studies of aquatic plants. For the private sector Don Mor Thong Monastery has established the area of about 0.64 sq.Km. which belongs to the Monastery as the "forgiven area" where birds and fishes can not be hunted or caught

# **24. CONSERVATION MEASURES PROPOSED BUT NOT YET IMPLEMENTED:**

none

#### 25. CURRENT SCIENTIFIC RESEARCH AND FACILITIES:

The office of Bung Khong Long Non-hunting Area, which is affiliated with the Royal Forest Department is located at the site. It is an important site for special project and case study of Khon Kaen University.

#### **26. CURRENT CONSERVATION EDUCATION:**

Bung Khong Long is a very important wetland for the study of birds and aquatic plants. At present nature trail was established by non hunting area office in order to promote studies about aquatic plants and marsh birds.

#### 27. CURRENT RECREATION AND TOURISM:

Bung Khong Long has low potential as tourist attraction place since birds can only be easily seen during winter and the only place to find birds with ease is along the nature trail only.

#### 28. JURISDICTION:

Nong Khai Province, Amphoe Bung Khong Long, Amphoe Seka. All concerned Tambon Administration Organizations, and The Royal Forest Department.

#### 29. MANAGEMENT AUTHORITY:

Bung Khong Long Non-Hunting Area Office, Wildlife Conservation Department, The Royal Forest Department. Amphoe Seka, Nong Khai Province, 43150.

#### **30. BIBLIOGRAPHICAL REFERENCES:**

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- Hilton-Taylor, C. 2000. 2000 IUCN Red List of Threatened Species, The IUCN Species Survival Commission. IUCN The World Conservation Union, 61 p.