





Tien Hai Nature Reserve

Alternative site name(s)

Con Vanh

Province(s)

Thai Binh

Status

Decreed

Management board established

Yes

Latitude

20⁰15' - 20⁰22'N

Longitude

106⁰34' - 106⁰38'E

Bio-unit

06a - Tropical South China



Conservation status

The establishment of a nature reserve at Tien Hai was decreed on 5 September 1994 by Decision No. 4895/KGVX of the Government Office (Anon. 1995b). Subsequently, an investment plan for the site was prepared by FIPI in August 1995, which defined a 12,500 ha nature reserve (Anon. 1995a). This investment plan was approved by the former Ministry of Forestry in October 1995 (Anon. 1995b). Tien Hai is included on the 2010 list (FPD 1998).

Tien Hai Nature Reserve lies on the northern bank of the Red River mouth, while, on the southern bank, lies Xuan Thuy Nature Reserve. These two nature reserves can be considered part of a contiguous ecological unit (Pedersen and Nguyen Huy Thang 1996). On 20 September 1988, Xuan Thuy was designated as Vietnam's first Ramsar Site (Ramsar 2000). On 24 January 1995, the Ministry of Environment, Science and Technology issued official document 14/Tmg, to expand the Ramsar Site to include Vanh and Thu islands, Tien Hai district (Anon. 1995a). However, the two sites are currently managed separately, with Tien Hai being under the management of Thai Binh Provincial DARD (FIPI 1998).

Topography and hydrology

Tien Hai Nature Reserve is situated at the mouth of the Red River, in the south of Tien Hai district, Thai Binh province. The site is bordered by the Red River (also called the Ba Lat river) to the south, the Lan river to the north and the main sea dyke to the west. There are two sandy islands within the nature reserve: Vanh island, which covers 2,000 ha and Thu island, which covers 50 ha. Thu island is situated about 4 km from the mainland, and the intervening intertidal area comprises sand-flats. Vanh island is separated from the mainland by a deep-water channel, the banks of which are covered by mangrove, most of which is included within aquacultural ponds. There is another extensive area of aquacultural ponds on the north bank of the Red River (Pedersen and Nguyen Huy Thang 1996).

Biodiversity value

The site supports 12 habitat types, of which the most important are sand dune, reedbed and mangrove. In addition, the intertidal mudflats are an important habitat for feeding shorebirds. The mangrove at the site is dominated by *Kandelia candel*, and mostly enclosed within aquacultural ponds. The sandy islands support *Casuarina equisetifolia* plantations (Pedersen and Nguyen Huy Thang 1996).

During a survey of the coastal zone of the Red River Delta in 1996, Pedersen and Nguyen Huy Thang (1996) recorded the globally critically endangered Black-faced Spoonbill *Platalea minor* at Tien Hai Nature Reserve. However, the authors assessed the conservation importance of Tien Hai to be significantly lower than that of Xuan Thuy Nature Reserve.

Conservation issues

Pedersen and Nguyen Huy Thang (1996) identified lack of reserve infrastructure, including staff, and an inadequate management plan as constraints to conservation management of Tien Hai Nature Reserve. In particular, the authors recommended land-use zoning within the nature reserve to reduce human pressure on the most critical areas, and clearer definition of the eastern boundary of the nature reserve. Furthermore, the authors recommended afforestation with mangrove or Casuarina equisetifolia does not take place within the nature reserve, because the management objectives of coastal protection and land reclamation may conflict with that of coastal wetland conservation.

The high numbers of people collecting shellfish in the nature reserve is an indication of the importance of this economic activity. It is not known, however, whether levels of exploitation are sustainable (Pedersen and Nguyen Huy Thang 1996). Pedersen and Nguyen Huy Thang (1996) observed hunting inside the nature reserve but were unable to collect any information on the level of hunting pressure.

Other documented values

Inside the nature reserve, local communities are engaged in a number of economic activities, including aquaculture, livestock raising, fishing and collection of shellfish. Between 21 and 25 April 1996, 920 people were observed collecting shellfish in an intertidal area of 900 ha, in the north of the nature reserve. The principal species being collected were *Lingula* sp., *Glauconome chinensis*, *Meretrix* sp., *Mactra quadrangularis* and *Cyclina sinensis*. The average daily harvest was estimated at 1.9 tonnes, with an estimated value of US\$529 (Pedersen and Nguyen Huy Thang 1996).

Related projects

A mangrove afforestation project has been implemented at Tien Hai Nature Reserve by the Mangrove Ecosystem Research Division (MERD) of the Centre for Natural Resources and Environmental Studies (CRES), with financial support from the Danish Red Cross

MERD of CRES are currently developing a medium-sized Global Environment Facility (GEF) project throught UNDP. This project, which is entitled Conservation of Coastal Wetlands in the Red River Delta, Vietnam, is expected to be implemented at five sites in three provinces: Ninh Binh, Nam Dinh and Thai Binh. The objective of this project will be the long-term conservation and sustainable use of biodiversity in the coastal zone of the Red River Delta.

Literature sources

ADB (1999) Draft coastal and marine protected areas plan. Hanoi: Asian Development Bank.

Anon. (1995a) [Investment plan for Tien Hai Nature Reserve, Thai Binh province]. Hanoi: Forest Inventory and Planning Institute. In Vietnamese.

Anon. (1995b) Management plan for Tien Hai Nature Reserve, situated in Tien Hai district, Thai Binh province. Unofficial translation by BirdLife International.

FIPI (1998) [Database for establishment of a wetland protected areas network in Vietnam]. Hanoi: Forest Inventory and Planning Institute. In Vietnamese.

Pedersen, A. and Nguyen Huy Thang (1996) The conservation of key coastal wetland sites in the Red River Delta. Hanoi: BirdLife International Vietnam Programme.

Ramsar (2000) The list of wetlands of international importance as of 17 November 2000. Website of the Bureau of the Convention on Wetlands.