Lung Ngoc Hoang Nature Reserve

Alternative site name(s)

Phuong Ninh Forest Enterprise

Province(s)

Can Tho

Area

6.000 ha

Coordinates

9°41' - 9°45'N, 105°39' - 105°43'E

Agro-ecological zone

Mekong Delta

Decreed by government

Yes

Management board established

Yes

Investment plan prepared

Yes

VCF eligibility criteria met

B, C

Social screening criteria met

None

Conservation needs assessment prepared

No

Operational management plan prepared

No

Tracking tool completed

No

Map available

Yes

Management history

Lung Ngoc Hoang is situated in Phung Hiep district, Can Tho province. Prior to 2002, the site was designated as a production forest, under the administration of Phuong Ninh Forest Enterprise (Buckton et al. 1999). On the basis of a proposal by the provincial authorities, Lung Ngoc Hoang was decreed as a 2,805 ha nature reserve, following Decision No. 12/TTg of the Prime Minister, dated 14 January 2002. An investment plan has prepared for the new nature reserve, and approved by MARD, and a management board has been established, with 58 permanent members of staff and 17 contracted staff (Can Tho Provincial FPD in litt. 2003). Lung Ngoc Hoang is included on a list of Special-use Forests to be established by the year 2010, prepared by the FPD of MARD, as a 6,000 ha nature reserve (FPD 2003); this list has not yet been approved by the government.

Topography and hydrology

Lung Ngoc Hoang Nature Reserve is situated in the flat Mekong Delta region. An extensive network of canals runs throughout the site.

Biodiversity values

There are three major vegetation types at Lung Ngoc Hoang Nature Reserve. The most widespread vegetation type is *Melaleuca* forest, most of which is commercial plantation with few biodiversity values. There are several small patches of open swamp and grassland, which have greater biodiversity value, although much is now planted with *Melaleuca* saplings. Approximately one third of the site is given over to rice and sugar cane cultivation (Buckton *et al.* 1999).

The grassland areas include some large areas of *Eleocharis dulcis* meadow, associated with which are *Cynodon dactylon*, and patches of naturally regenerating *Melaleuca*. Three other grassland types are to be found at the site: *Scleria poaeformis* meadow, which includes some *Eleocharis dulcis* and members of the Poaceae; *Hymenachne acutigluma* meadow, which predominates along some of the canal banks; and *Phragmites vallatoria* meadow, which occurs as occasional patches of tall, dense stands (Buckton *et al.* 1999).

The aquatic plant community of the canals is comprised mainly of *Eichhornia crassipes*, *Pistia stratiotes*, *Salvinia cucullata*, *Ipomoea aquatica*, *Ludwidgia adscendens*, *Centrostachys aquatica*, *Azolla pinnata*, *Spirodela polyrrhiza* and *Lemna aequinoxialis* (Buckton *et al.* 1999).

The diversity of wetland birds recorded at Lung Ngoc Hoang is low. No globally threatened or nearthreatened species have been reliably reported from this site. Large wetland birds are scarce at Lung Ngoc Hoang, only a few egrets and herons have been recorded here during the dry season. During the wet season, however, a few more wetland species have been documented, including Bronze-winged Jacana *Metopidius indicus* and Black Bittern *Dupetor flavicollis*. The avifauna of the *Melaleuca* plantation areas is species poor, consisting mainly of Pied Fantail *Rhipidura javanica*, Olive-backed Sunbird *Nectarinia jugularis* and Oriental White-eye *Zosterops palpebrosa* (Buckton *et al.* 1999). No significant records of other faunal groups have been made at the site.

Conservation issues

The principal threat to the habitat at Lung Ngoc Hoang is commercial harvesting of *Melaleuca*, which has two impacts on biodiversity. First, harvesting itself results in continual disturbance to bird populations. Second, planting of *Melaleuca* in areas of grassland and open swamp is leading to a reduction in the area of natural habitat at the site. A further threat may be direct persecution of birds: anecdotal reports suggest that people in surrounding agricultural areas deliberately poison birds with treated bait, in order to protect their crops (Buckton *et al.* 1999).

Other documented values

No information.

Related projects

Until 1999, the national 327 Programme was the main source of investment funding for the activities of the forest enterprise management board, including habitat protection work. Since 1999, this funding source has been replaced by the national 661 Programme.

Conservation needs assessment

A conservation needs assessment has not been conducted for the site.

Operational management plan

An operational management plan has not been prepared for the site.

Eligibility against VCF criteria

The site is ineligible for VCF support because it does not meet the criteria for supporting forest biodiversity of international importance.

Criterion	Eligibility
$A_{\rm I}$	
A_{II}	
B_{I}	Decision No. 12/TTg, dated 14/01/02
B_{II}	Nature Reserve
B_{III}	Under provincial management
C _I	Management board established
C _{II}	

Social screening requirements

A social screening report has not been prepared for the site.

Criterion	Eligibility
A	
В	
С	
D	

Literature sources

Buckton, S. T., Nguyen Cu, Ha Quy Quynh and Nguyen Duc Tu (1999) The conservation of key wetland sites in the Mekong Delta. Hanoi: BirdLife International Vietnam Programme.

Buckton, S. T., Nguyen Cu, Ha Quy Quynh and Nguyen Duc Tu (2000) [The conservation of key wetland sites in the Mekong Delta]. Hanoi: BirdLife International Vietnam Programme. In Vietnamese.

Lao Dong [Labour] (2001) [Investment of nearly 74 billion dong for rehabilitation of 11,641 ha of wetlands at Lung Ngoc Hoang]. Lao Dong [Labour] 26 October 2001. In Vietnamese.

Vietnam News (2002) Lung Ngoc Hoang recognised as a marine reserve. Vietnam News, 18 January 2002.