Lang Sen Proposed Nature Reserve

Alternative site name(s)
Dong Thap Muoi
Province(s)
Long An
Status
Proposed
Management board established
No
Latitude
$10^0$45' - $10^0$49'N
Longitude
$105^0$45' - $105^0$49'E
Bio-unit
05a - Mekong Delta

Conservation status

Lang Sen was proposed as a nature reserve by Long An Provincial People's Committee in 1994, at which time an investment plan was prepared by Ho Chi Minh City Sub-FIPI (Anon. 1994). This investment plan proposed establishing a 1,124 ha nature reserve, with the name Dong Thap Muoi. A further 1,723 ha were proposed as a buffer zone (Anon. 1994).

The present status of Lang Sen is, however, unclear. The remaining areas of *Melaleuca* forest present at this site are classified as production forest. Adjacent areas of *Melaleuca* scrub and swamp, on the other hand, do not appear to have any official status at present. The site is currently under the administration of Vinh Hung District People's Committee (Buckton *et al.* 1999).

Topography and hydrology

Lang Sen is situated in the Mekong Delta region, in the area known as the Plain of Reeds. This area, which was originally dominated by seasonally inundated grasslands, has mostly been converted to agricultural land. Unlike the majority of the Mekong Delta region, Lang Sen proposed nature reserve is not drained by the Mekong River, but by the western branch of the Vam Co river. Acidification of the soil at Lang Sen appears to be severe: Buckton *et al.* (1999) recorded pH measurements as low as 3.5 in the main river channels.

Biodiversity value

During a survey of the key wetland sites in the Mekong Delta by BirdLife and the Institute of Ecology and Biological Resources (IEBR), Lang Sen was the only site visited where semi-natural *Melaleuca* forest occurs along a natural river channel, and, as such is, of notable biodiversity value (Buckton *et al.* 1999).

The semi-natural *Melaleuca* forest occurs in patches in swampy areas, together with *Syzygium* spp., *Eleocarpus hygrophilus*, *Ficus microcarpa* and *Cassia grandis*. The majority of the *Melaleuca* forest at the site is, however, plantation forest. The ground layer of the plantation forest includes *Lasia spinosa*, *Cayratia trifolia* and *Flagellaria indica* (Buckton *et al.* 1999).

Substantial areas of lotus swamp are also present at Lang Sen. This vegetation type is characteristic of the Plain of Reeds but is now seldom found anywhere to any great extent. The plant community of lotus swamp is dominated by lotus *Nelumbo nucifera*, as well as *Nymphaea nouchali*, *N. pubescens* and *N. tetragona*. *Eleocharis dulcis*, *Ludwidgia adscendens*, *Centrostachys aquatica*, *Hymenachne acutigluma*, *Coix aquatica* and *Leersia hexandra* also occur in the lotus swamp (Buckton *et al.* 1999).

Recorded levels of bird species richness and abundance at this site are relatively low, and wetland birds, in particular, are scarce. The commoner wetland bird species at the site include Little Cormorant *Phalacrocorax niger*, Chinese Pond Heron *Ardeola bacchus*, Cinnamon Bittern *Ixobrychus cinnamomeus*, Yellow Bittern *I. sinensis*, Black Bittern *Dupetor flavicollis* and Spot-billed Duck *Anas poecilorhyncha*. Many of the other species of bird recorded at this site are common residents of scrub throughout the Mekong Delta (Buckton *et al.* 1999).

Conservation issues

The area of habitat at Lang Sen with a relatively high biodiversity value is quite small. Furthermore, as the site does not yet have any effective protection, exploitation of the remaining areas of *Melaleuca* forest continues. The river channel and adjacent canals carry high levels of boat traffic and many people live in and around the site. As a result, the current levels of exploitation at Lang Sen are unsustainable. The provincial authorities have expressed an interest in establishing a protected area and have produced an investment plan. However, the site has yet to receive any significant protection, and the mature *Melaleuca* plantation is still being felled. Rice cultivation and human settlement surround and encroach the site, even the semi-natural *Melaleuca* forest, which has the greatest biodiversity value (Buckton *et al.* 1999).

Other documented values

Lang Sen proposed nature reserve is one of two large remaining semi-natural areas in the Plain of Reeds wetland ecosystem, the other one being Tram Chim National Park. Currently no visitor facilities exist for this area. However, if well managed and protected the site has potential for recreation, ecotourism, conservation education and scientific research.

Related projects

The national 661 Programme (which replaced the 327 Programme in 1999) remains the major source of investment funding for forestry activities in the area.

IUCN are currently implementing a full-scale GEF project entitled *Mekong River Basin Wetland Biodiversity Conservation and Sustainable Use*. The goal of this project is to assist countries in the Lower Mekong sub-region to incrementally develop new approaches to integrating the protection and sustainable use of wetland biodiversity with economic development. The project has selected demonstration sites in four different countries: Vietnam, Laos, Cambodia and Thailand. In Vietnam, the demonstration sites will be Lang Sen proposed nature reserve and Tram Chim National Park. The main demonstration activities implemented at Lang Sen will focus on ecotourism.

Literature sources

Anon. (1994) [Investment plan for Dong Thap Muoi Nature Reserve, Lang Sen, Vinh Hung district, Long An province]. Tan An: Long An Provincial Department of Agriculture and Rural Development and Ho Chi Minh City Sub-FIPI. In Vietnamese.

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.

Scott, D. A. (1989) A directory of Asian wetlands. Gland: IUCN.