

Site Nomination for Peat Site Profiles in Southeast Asia	
Category:	Protected Area
Name of Site:	U Minh Thuong National Park
Country:	Vietnam
GPS Point:	Latitude: 9°31' - 9°39' N Longitude: 105°03' - 105°07' E
Location & Access:	U Minh Thuong National Park is located in U Minh Thuong District, Kien Giang Province.
Total Area:	8509.00 hectare(s)
Background of Site:	<p>UMTNP covers a total area of 21,800ha and is divided into a core zone and a buffer zone. The core zone covers an area of 8,509 ha, consisting of 2,851ha of Melaleuca forest and Melaleuca mixed with Phragmites grassland, 2,428ha of grasslands and 1,737ha of Melaleuca in various stages of re-growth after fire. The remaining 493ha is made up of open water areas. The buffer zone, surrounding the core zone and covering an area of 13,291ha, is largely cleared agricultural land, but it contains a water-bird breeding colony in the north-western corner where there is a small forest area covering 1,200ha that is home to c. 11,000 water birds.</p> <p>UMTNP lies 0.5-0.7m above sea level. Soils have been formed by deposition of alluvial sediment from the Mekong River system. With soil formation, mangrove forests evolved, depositing masses of organic material that gradually raised the soil depth to a point where there was no longer a tidal impact and Melaleuca ecosystems began to form. The Melaleuca forests continued to return masses of organic material to the soil and brought about the appearance of two main soil types: peat soil and acid sulphate soil.</p> <p>UMTNP supports one of the last two significant areas of peat swamp forest remaining in Vietnam (the other one being U Minh Ha), and is recognised as one of the three highest priority sites for wetland conservation in the Mekong Delta. The U Minh Thuong peat swamp forest also plays a crucial role in the prevention of acidification of topsoil and surface water, storing fresh water, serving as a spawning and nursery area for fish and shellfish, and filtering surface water. As such, it also provides significant environmental and livelihood benefits for surrounding communities</p>
Significant Value of Site:	<ul style="list-style-type: none"> - Biodiversity - Hydrology - Soil/Carbon <p>Notes:</p> <p>UMTNP supports a range of wetland habitats, including a semi-natural Melaleuca forest, seasonally inundated grassland and open swamp. Most of buffer zone consists of paddy fields with small patches of Melaleuca plantation. The Melaleuca forest is home to an important breeding colony of waterbirds. UMTNP has a number of other biodiversity values, including being one of only three sites in the world known to support a population of Hairy-nosed Otter (<i>Lutra sumatrana</i>). The wetland forest of the U Minh region supports some of the highest avian biodiversity in the Mekong Delta.</p> <p>Water birds: A total of 185 bird species from 43 families have been recorded, including thirteen species which are listed in the IUCN Red List of Global Conservation Concern as having important conservation value.</p> <p>Amphibians and reptile: Seven species of amphibians representing three families have been recorded. All amphibians were characteristic of disturbed habitats and are of low conservation significance. Previous surveys recorded 34 species of reptiles representing ten families. Eight of these reptile species are listed in the Vietnam Red Data Book and four are listed in the IUCN Red List. The Yellow-headed Temple Turtle <i>Hieremys annandalii</i> found here is listed as endangered in the IUCN Red List 2000. Several specimens were identified in captivity in the buffer zone area as pets or for trade.</p> <p>Other mammals: 24 species of mammals belonging to 10 families and 7 orders were identified. Ten of these 24 mammal species are nationally or globally threatened, including 4 species listed in the Red Data Book of Vietnam (2000), 5 species listed in the IUCN Red List (2000) and 5 species listed in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).</p>

Designated use (status/legal classification):	<p>- National Park/State Park</p> <p>Notes: Peatlands in U Minh Thuong is designed as National Park, where is responsible for conservation and rehabilitation of ecosystem and biodiversity.</p>
Major Issues:	<p>This site is undoubtedly one of the most important for biodiversity conservation in the delta. The core zone currently enjoys protection as a nature reserve, but the surrounding buffer zone is largely unprotected. During the survey period site staff began clearing canal bank vegetation in the centre of the core zone to provide land for planting of vegetable crops. The apparent aim of this was to establish a visitor facility in the core zone to demonstrate small-scale farming practices. This is unsuitable for the core zone of a nature reserve and would be better carried out in the buffer zone near the site headquarters. Although the area of Melaleuca plantation holding the waterbird colony is effectively protected under management by the local prison, this part of the site should be incorporated into the nature reserve to ensure its long-term integrity. As with U Minh Ha National Park, there is a risk from forest fires during the dry season, though watchtowers around the site allow for the early detection of fires, and the network of canals in the site provides firebreaks.</p> <p>The Melaleuca forest is an essential habitat for a significant component of the key bird species known to occur at the IBA. However, this key bird habitat is being lost at an increasing rate, as a result of forest fires. While fire is a natural part of the ecology of Melaleuca forest, an inappropriate hydrological management regime at the national park has led to low water levels during the dry season and drying out of the peat layer, thereby increasing the frequency and severity of fires, several of which occurred in 2002.</p> <p>Additional threats to the biodiversity of the site include illegal hunting, by both local people and organised groups of outsiders, and disturbance and easy access caused by the development of tourism infrastructure in the core zone of the national park, including the construction of a surfaced road into the centre of the core zone and the erection of a monument there.</p> <p>The construction of canals through peatlands, whether for fire fighting purposes or as a means to provide logging access or to convert land to agriculture, lowers the ground water level. Once peat dries out excessively, its natural sponge-like properties and hence its water regulating capacity is lost (and cannot be recovered) and it is susceptible to fire.</p> <p>A system of dykes and canals in and around the core zone was constructed for fire control. As a result, the core zone is dissected by six canals and surrounded by two more, while the buffer zone contains more than 21 canals. While fire is a natural part of the ecology of Melaleuca forest, an inappropriate hydrological management regime at the national park has led to low water levels during the dry season and drying out of the peat layer, thereby increasing the frequency and severity of fires, several of which occurred in 2002.</p> <p>A buffer zone development board was established by the Provincial Peoples Committee of Kien Giang Province to manage the buffer zone which covers an area of 13,291ha. There are about 20,000 people (3,675 families) living in the buffer zone. Families on average received a land area of 3.2ha. The majority of families in the buffer zone are of Kinh ethnicity, with a small percentage of Khmer. It is via the buffer zone development board that the park has a role in buffer zone development. The UMTNP Management Board helped implement the state-funded buffer zone program mostly through infrastructure development such as roads, electricity, health care clinics and schools.</p> <p>The Impact of Forestry on Peatlands From 1975 until the 1990s, some plantations and state-farm were established on peatlands leading to a direct loss of peatlands and their associated habitats. In some cases even today, forestry is having a detrimental impact not only on underlying but also adjacent peatland habitats. An audit of damage and threat to the U Minh site identified forestry as one of the most significant activities having a detrimental impact on the peatland areas at U Minh Thuong and U Minh Ha.</p> <p>Where forests exist on peat, the water level in the peat is lowered through drainage which causes the peat to dry out and crack. Research has also identified hydrological impacts on peatlands up to 50m beyond the edge of a forest, including changes in surface water flow and surface shape. Road building and the use of fertilizers and herbicides can also affect both underlying and adjacent peatlands, particularly in the buffer zone.</p>

	<p>The long-term future of peatlands depends very much on decisions that are made regarding the communities living around the peatlands and the economic development in the area.</p> <p>The problems have been the result of the following main causes:</p> <ol style="list-style-type: none"> 1) existing capacity for integrated management of peatlands are inadequate, resulting in ineffective management and its consequences; 2) lack of awareness of conservation values which result in poor support for site conservation efforts from national and local government; 3) lack of inter-sectoral cooperation in land use planning and little consideration for biodiversity conservation.
Site Jurisdiction & Administration:	U Minh Thuong National Park is managed by Management Board belongs to Kien Giang Provincial People Committee.
Peatland Type:	Lowland
Management activities:	<p>a) Past Since 1998, Care International and Kien Giang Provincial Department of Agriculture and Rural Development have been working in partnership to implement a Danida-funded integrated conservation and development project, the main aim of which is to conserve the existing biodiversity of UMT by strengthening local management capacity and improving the livelihood security of local communities, thereby reducing their dependency upon natural resources. The government of Vietnam upgraded UMT to national park status in January 2002.</p> <p>b) Current An action plan for the UMTNP was designed when it was recommended as a National Park. Some components of the action plan have been implemented since 2002, but some shortcomings remain and have resulted in many problems for the rehabilitation and sustainable use of peatlands in and around the national park.</p> <p>Existing capacity for site management is limited throughout the range of project sites. Staff of UMTNP lack the skills for modern conservation management techniques, in particular in relation to community co-management, conflict resolution and integrated wetland and watershed management.</p> <p>c) Potential Some major management activities should be considered and implemented in the the U Minh Thuong National Park:</p> <ol style="list-style-type: none"> 1) Capacity building for the park management 2) Activities of conservation and rehabilitation of peatlands ecosystems and biodiversity of peatlands 3) Water and forest fire management in peatlands
Facilities & Activities Available on Site:	<p>The management activities of U Minh Thuong National Park will help expedite the implementation of the Vietnam peatland management strategy. The main focus of activities will follow main objectives including activity plans at the provincial and local level in the U Minh Thuong area, as outlined below:</p> <ol style="list-style-type: none"> 1) Strengthen policies and institutional arrangements for peatland management and strictly enforce policies and rules for the management and conservation of peatlands. 2) Stop the further conversion and/ or drainage of deep peat and peat domes and maintain and restore the hydrology of peatland systems to prevent fires, minimize GHG emissions, and maintain ecological services. 3) Improve the current forestry, agriculture and plantation management practices to ensure that they contribute to the sustainability of peatlands. 4) Promote international studies to assess the role of peatlands in mitigating climate change and the potential future impacts of climate change and land use on the peatland carbon pool. 5) Undertake an assessment of the vulnerability of peatlands to climate change and extreme events. Effectively disseminate the knowledge generated by the scientific community for use by decision makers and to support the assessment processes and later develop adaptation strategies to guide peatland managers, in particular plantation operators. <p>Strengthen activities for monitoring changes in the status of tropical peatlands to guide wise management.</p>
Institution Responsible for the Site:	Name of Organization: U Minh Thuong National Park

	Postal Address: Cong Su crossing, North An Minh , U Minh Thuong District, Kien Giang Province Phone: +84.77.3883037 Fax: +84.77.3883023 Website: none
Nominated by:	Name: Le Phat Quoi Organization: Institute for Environment and Natural Resources, HCM City