

User Guide

Purpose

This sourcebook has been designed to improve access to information about Vietnam's protected areas. The sourcebook contains site cards for 189 existing and proposed protected areas in Vietnam. Each site card summarises the existing information available about the site, and directs the reader to more detailed sources of information.

We anticipate that the sourcebook will provide:

- reliable information on the location, status and values of Vietnam's protected areas, as a resource for planners and decision-makers at international, national and provincial levels;
- baseline data for monitoring the impacts of national and provincial policies and plans on the national system of Special-use Forests and other protected areas;
- a resource for training, awareness and educational activities, of particular potential value at the provincial, district and site levels; and
- a first step towards a more comprehensive review of information available on Vietnam's system of Special-use Forests and other protected areas.

Structure

The sourcebook has been published in two regional volumes. Volume I covers northern Vietnam, and includes all provinces north of and including Thue Thien Hue. Volume II covers southern Vietnam, and includes all provinces south of but excluding Thua Thien Hue. Each volume is further sub-divided into regional sections, preceded by a regional map. At the beginning of each volume, there is a background chapter, which provides the reader with an overview of protected areas in Vietnam. Each volume also contains an A3 format colour map, showing the location of existing and proposed protected areas in relation to 1995 forest cover.

Data sources

The sourcebook is the result of an attempt to collate all published and unpublished information on protected areas in Vietnam. The collation process was centred on a literature review of over 800 documents, including scientific papers and reports, protected area feasibility studies and investment plans, and newspaper articles. Information derived from the literature review was supplemented, and, wherever possible, cross-checked, with information from a number of other sources. These included personal communications with a wide variety of individuals and organisations with first-hand knowledge of the protected areas concerned. In addition, the Forest Protection Department (FPD) of the Ministry of Agriculture and Rural Development (MARD) assisted the data collation process by preparing and disseminating a questionnaire to provincial FPDs and Special-use Forest management boards. Finally, the draft site cards were peer reviewed by national and international experts familiar with the protected areas in question.

The sourcebook represents a modest first step towards improving access to information available on Vietnam's protected areas. BirdLife and FIPI are aware, however, that the information contained within the sourcebook is far from comprehensive, because:

- information on many, if not most, protected areas, whether existing or proposed, is incomplete; in many cases, virtually no information is available. Comprehensive information exists for only a small number of protected areas;
- in many cases, where survey information is available, it is out of date or the source is not clear. In these cases, further survey work is required to obtain accurate and up-to-date information;
- the boundaries of many protected areas have never been precisely defined, as a result of which, accurate information on the location and extent of these protected areas is unavailable; and
- in some cases, information included within survey reports and other documents (such as investment

plans) is disputed by some authors and experts. In other cases, information from different sources is inconsistent.

The sourcebook draws attention to any information that is unclear, inconsistent or potentially inaccurate. Undoubtedly, however, there will be instances where the editors of the sourcebook have included information that is not entirely accurate, or have overlooked important existing information. We appeal to readers to highlight such gaps and inaccuracies, and to supply us with any new information on protected areas that becomes available. In this way, future editions of the sourcebook can be improved.

Taxonomy and nomenclature

Plant names and taxonomy follow Pham Hoang Ho (1991). Mammal names (common and scientific) and taxonomy follow Corbet and Hill (1992). Bird names (common and scientific) and taxonomy follow Inskipp *et al.* (1996), with the exception of globally threatened and near-threatened species, for which Collar *et al.* (1994) is followed.

Geographical information

Diacritical marks are omitted from Vietnamese names due to typographical limitations. Locality names follow Department of Cartography 1:250,000 scale maps from a variety of dates. Protected area names follow the most commonly used name for the site; alternative names are given where known.

The sourcebook contains a map of protected areas in relation to forest cover. Protected area polygons have been digitised from a number of sources (see Table 1). Where site maps were available, these were used. Where site maps were unavailable, maps or boundary descriptions from investment plans were used. Where neither source was available, maps from other reports, including survey reports and feasibility studies, were used. Where no adequate boundary information was available for a protected area, the likely location and extent were estimated from existing information, including coordinates supplied by provincial FPDs, administrative boundaries and physical features. Where no information was available about the location or extent of a protected area, it was

plotted as a point not a polygon. Protected area polygons and points were then overlaid onto a forest cover map of Vietnam, based upon a 1995 Landsat data set. Where reference is made to remote sensing data in the site cards, it is this map that is being referred to.

Glossary of terms

2010 list refers to a proposed system of Special-use Forests prepared by the FPD of MARD, following a national conference held at Cuc Phuong National Park in 1997. It was proposed that the establishment of this system be completed by 2010 (FPD 1998).

327 Programme refers to the national forestry programme established in accordance with Decision No. 327/CT of the Chairman of the Council of Ministers on use of open land, bare hills, forest, coastal alluviums and water bodies.

661 Programme refers to the national forestry programme established in accordance with Decision No. 661/TTg of the Prime Minister, dated 29 July 1998 on objectives, tasks, policies and organisation for the establishment of 5 million hectares of new forest. The 661 Programme is commonly known as the 5 Million Hectare Reafforestation Programme.

Administration and services area refers to a designated area within a Special-use Forest, where construction of protected area infrastructure and tourism development are permitted.

Buffer zone refers to a designated area contiguous with but outside of a protected area, the management objective of which is to reduce human pressure on the natural resources of the protected area.

Convention on Biological Diversity, refers to an international convention, signed in 1992 and ratified by the government of Vietnam in 1994, with the objectives of conserving biological diversity, using its components sustainably, and sharing the benefits arising out of the utilisation of genetic resources fairly and equitably.

Decreed protected area refers to a protected area whose establishment has been decreed by the government of Vietnam. The term excludes protected areas with investment plans approved at the provincial

and/or ministerial level but not included on a government decision regarding the protected areas system, and protected areas included on official or unofficial proposals but not on a government decision. Protected areas whose establishment has not been decreed by the government are termed *proposed protected areas*.

Endemic Bird Area (EBA) refers to an area supporting at least two restricted-range bird species. A restricted-range bird species is one with a global breeding range of less than 50,000 km².

Globally threatened species refers to a species assigned a category of threat in the IUCN Red Lists of Threatened Animals or Plants (IUCN 1996, 1997); the term excludes species listed as *near threatened* or *data deficient*.

Feasibility study refers to an official document that assesses the costs and benefits of establishing a protected area at a site, thereby allowing decision-makers to decide whether a site should become a candidate for protected area establishment.

Forest rehabilitation area refers to a designated area within a Special-use Forest, which is protected and managed for forest rehabilitation.

Indochina refers to the biogeographic region of Cambodia, Laos and Vietnam.

Investment plan refers to an official document that outlines the justification for establishing a protected area and requests funding for its establishment and/or management.

Man and the Biosphere Reserve refers to a site designated by UNESCO, the purpose of which is the conservation of ecosystems and the species they contain, and which is integrated into its social, economic and cultural environment.

Management board refers to the staff of a protected area. In the case of Special-use Forests, the staff comprise forest guards, administrative staff and support staff.

Management plan refers to an official document prepared after the establishment of a protected area, which details the management objectives of the site, and the management actions that must be taken in order to attain them.

Marine protected area (MPA) refers to a site containing a marine component that has been proposed for recognition at the national level with a protected area status other than that of Special-use Forest. To date, the institutional and legislative arrangements for marine protected areas have not been finalised, and there are no decreed MPAs.

Nationally threatened species refers to a species assigned a category of threat in the Red Data Book of Vietnam, Volume I: Animals or Volume II: Plants (Anon. 1992, 1996).

Production forest is a management category of forest land, with the principal objective of supplying forestry products to meet domestic demand in combination with environmental protection. Production forests are usually managed by forest enterprises, individual households or other organisations.

Protection forest is a management category of forest land, with the principal objectives of watershed protection, soil erosion control, natural disaster amelioration, climate regulation and foreshore protection. Protection forests include watershed protection forests and coastal protection forests. Protection forests are usually managed by individual households or management boards, under the management of the relevant provincial FPD.

Ramsar Site refers to a site designated as a wetland of international importance under the Convention on Wetlands (Ramsar Convention).

Special-use Forest is a management category of forest land with the principal objectives of biodiversity conservation, scientific research, protection of sites of historical and cultural importance, and tourism development. Special-use Forests comprise *national parks*, *nature reserves* and *cultural and historical sites*. Special-use Forests are usually managed by management boards, under the management of the relevant provincial FPD or the FPD of MARD.

Strict protection area refers to a designated area within a Special-use Forest, where all activities that alter the natural landscape are prohibited.

World Heritage Site refers to a site inscribed as having outstanding cultural or natural value by the UNESCO World Heritage Committee.

Abbreviations and acronyms used

In general, abbreviations and acronyms are given in full at first usage. In the site cards, however, the following common acronyms are never given in full: DARD, FIPI, FPD, IUCN, MARD, MOSTE, NGO, UNDP, UNESCO and WWF.

5MHRP	5 Million Hectares Reafforestation Programme
ADB	Asian Development Bank
AREA	Association for Research and Environmental Aid
CPCP	Cuc Phuong Conservation Project
CRES	Centre for Natural Resources and Environmental Studies
Danida	Danish International Development Assistance
DARD	Department of Agriculture and Rural Development
EBA	Endemic Bird Area
EPRC	Endangered Primate Rescue Centre
FFI	Fauna and Flora International
FINNIDA	Finnish International Development Assistance
FiPD	Fisheries Protection Department
FIPI	Forest Inventory and Planning Institute
FPD	Forest Protection Department
FPRDP	Forest Protection and Rural Development Project
FREC	Forest Resources and Environment Centre
GEF	Global Environment Facility
HNU	Hanoi National University
IEBR	Institute of Ecology and Biological Resources
IUCN	World Conservation Union
JICA	Japan International Cooperation Agency
KNCCN	Korean National Council for Conservation of Nature
MAB	Man and the Biosphere
MARD	Ministry of Agriculture and Rural Development
MERD	Mangrove Ecosystem Research Division
MOF	Ministry of Forestry (now incorporated within MARD)
MOFI	Ministry of Fisheries
MOSTE	Ministry of Science, Technology and the Environment
MPA	Marine protected area
NEA	National Environment Agency
NGO	Non-governmental organisation
NTFP	Non-timber forest product
PARC	Creating Protected Areas for Resource Conservation Using Landscape Ecology
SFNC	Social Forestry and Nature Conservation in Nghe An Province
SNV	Netherlands Development Organisation
TCP	Tonkin Snub-nosed Monkey Conservation Project
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VAMCP	Viet-AusAid Malaria Control Project
WWF	World Wide Fund for Nature
ZSCSP	Zoological Society for the Conservation of Species and Populations

References

All references for literature cited in the text of each site card are given in full in the literature sources section of the site card. However, the following common references are never given in full: Cao Van Sung (1995), FPD (1998), FPD and FIPI (in prep.), Government of SRV/GEF (1994), MARD (1997), MOF (1991), Stattersfield *et al.* (1998) and Wege *et al.* (1999).

Disclaimer

The representation of geographical entities in this sourcebook does not imply any expression on the part of the editors, BirdLife International, FIPI or the European Union concerning the legal status of any country, territory or area, or concerning the delineation of its frontiers and boundaries.

The opinions expressed within this sourcebook are those of the editors, and do not necessarily reflect the opinions of BirdLife International, FIPI or the European Union. The editors take full responsibility for the accuracy of the information presented within the sourcebook.

Table 1: Sources of digitised protected area boundaries used in the sourcebook

Site Name	Data Source	Notes
A Vuong	6	
A Yun Pa	3	Tran Quang Ngoc <i>et al.</i> (in prep.)
Ai Chi Lang	5	Boundary of Chi Lang commune
An Toan	4	Plotted on 1:250,000 map
Ba Be	3	Kemp <i>et al.</i> (1994)
Ba Mun	5	Coastline of Ba Mun island
Ba Na-Nui Chua	2	Anon. (1994); excluding area in Quang Nam province
Ba To	4	Plotted on 1:250,000 map
Ba Vi	1	1:50,000 site map
Bac Hai Van	3	Eve (1996)
Bac Lieu bird sanctuary	6	
Bac Me	1	1:50,000 site map
Bac Plei Ku	4	Plotted on 1:250,000 map
Bac Son	6	
Bach Ma	1	1:50,000 site map
Bai Boi	3	Buckton <i>et al.</i> (1999)
Bai Chay	6	
Ban Dao Son Tra	2	Anon. (1989)
Bat Dai Son	4	Plotted on 1:250,000 map
Ben En	3	Tordoff <i>et al.</i> (1997)
Bi Dup-Nui Ba	2	Anon. (1995)
Bien Lac-Nui Ong	2	Anon. (1992)
Binh Chau-Phuoc Buu	2	Anon. (1993)
Boi Loi	6	
Bu Gia Map	2	Anon. (1994)
Cac Dao Vinh Ha Long	3	ADB (1999)
Cam Son	5	Shoreline of Cam Son lake
Can Gio	3	Anon. (1998)
Cat Ba	1	1:25,000 site map
Cat Tien	1	1:50,000 site map
Cha La bird sanctuary	6	
Cham Chu	6	
Chu Hoa	1	1:100,000 site map
Chu Prong	3	Tran Hieu Minh <i>et al.</i> (in prep.)
Chu Yang Sin	2	Anon. (1997)
Con Dao	5	Coastline of Con Dao archipelago
Con Dao (marine)	3	ADB (1999)
Con Son	6	
Cu Lao Cham	5	Coastline of Cu Lao Cham archipelago
Cu Lao Cham (marine)	3	ADB (1999)
Cu Mong	3	ADB (1999)
Cuc Phuong	1	1:50,000 site map
Dak Mang	1	1:100,000 site map
Dakrong	2	Anon. (2000)
Dam Doi bird sanctuary	6	
Dao Bach Long Vi	3	ADB (1999)
Dao Cat Ba	3	ADB (1999)

Site Name	Data Source	Notes
Dao Co To	3	ADB (1999)
Dao Con Co	3	ADB (1999)
Dao Ho Song Da	5	Shoreline of the Black River reservoir
Dao Ly Son	3	ADB (1999)
Dao Phu Quy	3	ADB (1999)
Dao Tran	3	ADB (1999)
Dat Mui	3	Buckton <i>et al.</i> (1999)
Den Ba Trieu	6	
Den Hung	6	
Deo Ca Hon Nua	6	
Deo Ngoan Muc	6	
Dinh Hoa	6	
Do Son	5	Boundary of Do Son district
Du Gia	2	Dinh Van Manh (1994)
Duong Minh Chau	6	
Ea So	2	Anon. (1998)
Earal	6	
Ha Tien	3	Buckton <i>et al.</i> (1999)
Hai Van-Hon Son Tra	3	ADB (1999)
Ham Rong	6	
Ho Lak	5	Parts of Lien Son, Lak Giang Tao, Dak Lien and Bong Krang communes
Hoa Lu	2	Nguyen Nhat Han (1995)
Hoang Lien Son-Lai Chau	6	
Hoang Lien Son-Sa Pa	3	Tordoff <i>et al.</i> (1999)
Hoang Lien Son-Van Ban	6	
Hon Cau-Vinh Hao	3	ADB (1999)
Hon Chong	5	Limestone outcrop near Hon Chong town
Hon Khoai	6	
Hon Me	5	Coastline of Hon Me island
Hon Me (marine)	3	ADB (1999)
Hon Mun	3	ADB (1999)
Huong Son	2	Anon. (1992)
Huu Lien	2	Anon. (1990)
Kalon Song Mao	3	Le Trong Trai and Tran Hieu Minh (2000)
Ke Go	2	Le Trong Trai <i>et al.</i> (1999)
Khe Net	6	
Khe Ro	6	
Khe Ve-Minh Hoa	6	
Kien Luong	3	Buckton <i>et al.</i> (1999)
Kim Binh	5	Boundary of Kim Binh commune
Kim Hy	3	Tordoff <i>et al.</i> (2000)
Kon Cha Rang	2	Anon. (1999)
Kon Ka Kinh	2	Le Trong Trai <i>et al.</i> (2000)
Krong Trai	2	Anon. (1990)
Ky Thuong	3	Tordoff <i>et al.</i> (2000)
Lam Son	6	
Lang Sen	3	Buckton <i>et al.</i> (1999)
Lo Go Sa Mat	3	Le Trong Trai and Tran Hieu Minh (2000)
Lung Ngoc Hoang	3	Buckton <i>et al.</i> (1999)
Mom Ray	1	1:50,000 site map
Muong Nhe	2	Anon. (1993)

Site Name	Data Source	Notes
Muong Phang	5	Boundary of Muong Phang commune
Muong Sai	4	Plotted on 1:250,000 map
My Bang	5	Boundary of My Bang commune
Na Hang	3	Cox (1994)
Nai	6	
Nam Ca	2	
Nam Don	5	Boundary of Nam Don commune
Nam Du	3	ADB (1999)
Nam Hai Van	5	Boundary of Da Nang city and 100 m contour line
Nam Nung	2	Anon. (1994)
Nghia Hung	3	Pedersen and Nguyen Huy Thang (1996)
Ngoc Linh (Kon Tum)	2	Le Trong Trai <i>et al.</i> (1999)
Ngoc Linh (Quang Nam)	3	Tordoff <i>et al.</i> (2000)
Ngoc Son	6	
Ngoc Trao	6	
Ngu Hanh Son	6	
Nha Phu-Hon Heo	3	ADB (1999)
Nui Ba	6	
Nui Ba Den	6	
Nui Ba Ra	6	
Nui Cam Chau Doc	6	
Nui Chung	5	Boundary of Nui Chung commune
Nui Coc	2	Anon. (1995)
Nui Dai Binh	6	
Nui Giang Man	6	
Nui Pia Oac	3	Tordoff <i>et al.</i> (2000)
Nui Thanh	6	
O Loan	3	ADB (1999)
Pa Co-Hang Kia	2	Duong Coi (1993)
Pac Bo	6	
Phong Dien	2	Tran Quang Ngoc <i>et al.</i> (in prep.)
Phong Nha	1	1:50,000 site map
Phong Quang	2	Doi Van Tho (1997)
Phu Canh	6	
Phu Ninh	4	Plotted on 1:250,000 map
Phu Quoc	3	Map provided by Kien Giang Provincial FPD (2000)
Phu Quoc (marine)	3	ADB (1999)
Phuoc Binh	3	Eames and Nguyen Cu (1994); excluding area in Khanh Hoa province
Phuong Hoang-Tham Xa	5	Boundaries of Phu Thuong and Tham Xa communes
Pu Hoat	2	Anon. (1997)
Pu Hu	2	Anon. (1998)
Pu Huong	3	Kemp <i>et al.</i> (1997)
Pu Luong	2	Anon. (1998)
Pu Mat	2	Anon. (1993)
Quy Hoa-Ghenh Rang	4	Plotted on 1:250,000 map
Quy Nhon	3	ADB (1999)
Rung Kho Han Nui Chua	2	Anon. (1997)
Rung Thong Da Lat	5	Boundaries of Da Lat city, Dran town and Lac Xuan commune
Rung Thong Dong Son	6	
Sam Son	6	
Song Thanh	2	Anon. (1999)

Site Name	Data Source	Notes
Sop Cop	4	Plotted on 1:250,000 map
South-west Lam Dong	3	Wege <i>et al.</i> (1999)
Ta Dung	3	Dang Huy Huynh <i>et al.</i> (1998)
Ta Kou	4	Plotted on 1:250,000 map
Ta Sua	4	Plotted on 1:250,000 map
Tam Dao	1	1:25,000 site map
Tam Giang-Cau Hai	3	ADB (1999)
Tam Quy	6	
Tam Tao	5	Boundary of Dong Lac commune
Tan Phu	5	Boundary of Tan Phu commune
Tan Trao	5	Boundary of Tan Trao commune
Tay Con Linh I	2	Anon. (1994)
Tay Con Linh II	2	Anon. (1994)
Thac Ba	5	Shoreline of Thac Ba lake
Thai Thuy	2	Anon. (1997)
Thang Hen	6	
Thanh Phu	2	Pham Trong Thinh (1998)
Tho Chu	6	
Thuong Tien	5	Boundary of Thuong Tien commune
Thuy Trieu	3	ADB (1999)
Tien Hai	2	Anon. (1995)
Tien Lang	3	Pedersen and Nguyen Huy Thang (1996)
Tram Chim	3	Buckton <i>et al.</i> (1999)
Trap Kso	6	
Trung Khanh	6	
Truong Sa	6	
U Minh Thuong	3	Buckton <i>et al.</i> (1999)
Van Long	2	Nguyen Huy Thang (2000)
Vo Doi	3	Buckton <i>et al.</i> (1999)
Vu Quang	2	Anon. (1993)
Vuc Mau	6	
Vuon Cam Nguyen Hue	6	
Xuan Lien	3	Le Trong Trai <i>et al.</i> (1999)
Xuan Mai	6	
Xuan Nha	2	Anon. (1991)
Xuan Son	2	Anon. (1990)
Xuan Thuy	2	Anon. (1993)
Yen The	5	Boundary of Yen The commune
Yen Tu	6	
Yok Don	5	Boundary of Buon Don district, Cambodian border and Srepok river

For full references of cited literature, refer to the relevant site cards.

Data source: 1 = site map; 2 = investment plan; 3 = feasibility study or other document; 4 = approximation based upon coordinates supplied by provincial FPD; 5 = approximation based upon administrative boundary or physical feature; 6 = no boundary available; protected area plotted as a point.