



WWF

REPORT

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郊野公園
「不包括土地」
調查報告

COUNTRY PARK ENCLAVES
INVESTIGATION REPORT

堵塞漏洞
Fixing the Holes

修補香港郊野公園生態保育缺口

The Need to Repair Hong Kong's Country Park System

WWF-Hong Kong

WWF-Hong Kong has been working since 1981 to deliver solutions for a living planet through Conservation, Footprint and Education programmes.

In support of our global mission, WWF-Hong Kong's vision is to transform Hong Kong into Asia's most sustainable city where nature is conserved, carbon pollution is reduced, and consumption is environmentally responsible.

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Executive Summary

Hong Kong has a globally-significant biological diversity. Our incredible Country Park system, covering 40 per cent of Hong Kong's land area, contributes greatly to maintaining this biodiversity. Our Country Parks also provide 20 to 30 per cent of our drinking water and serve as an invaluable recreational and educational resource for everyone. However, when the Country Park system was developed it was not completed, with a number of areas containing villages or agricultural land left out of the parks. These "holes" became the Country Park enclaves.

Altogether, there are 77 enclaves, many of which contain villages and sizeable areas of private land. For many years, these enclaves have remained untouched due to their remoteness. Due to rises in population, urbanization and land prices, the situation has recently changed. To date, 12 of these enclaves have been deliberately damaged or destroyed in order to prevent conservation and to "prepare the land" for development.

The Tai Long Sai Wan incident – in which a developer bought and partially destroyed a large piece of land in an area of high scenic value – was a turning point. Public outcry over the desecration of this beautiful site caused the government to give consideration to better protecting the enclaves. The result was the revision of the criteria for Country Parks designation in 2011 allowing the incorporation of enclaves containing villages and private land into Country Parks.

Since then, the government has back-tracked. Enclaves that are of high conservation value and under the greatest threat from private developers, i.e. those containing private land, have now been deemed "too difficult to manage" as part of Country Parks. Instead, planning controls are being used and the vast majority of the draft Outline Zoning Plans (OZPs) produced for Country Park enclaves have a large "Village Type Development" or "V" zone, which effectively gives a green light to large scale housing development within the enclaves.

The most recent case of enclave destruction was in Lo Shue Tin, an enclave already covered by an OZP. Between 2010 and 2013, Kantex Development Limited bought 29 of 43 lots for a total of \$104 million. Following this purchase, land clearance was carried out in 2013. Mature secondary forest that was contiguous with forested areas in the surrounding Ma On Shan Country Park was bulldozed, freshwater marshes were flattened or drained, and a section of a stream was transformed into a channel. Many threatened species including the Globally Endangered Chinese pangolin and the Short-legged toad, as well as the locally rare Grey scrub hopper butterfly have been affected.

Property developers continue to buy up private land in Country Park enclaves, seeking permission to develop, which will bring them huge profits. The main hurdle they face is the high conservation value of the Country Park enclaves, which creates a perverse incentive to destroy nature and make the land "worthless for conservation".

There have already been 10 cases of willful destruction that can be linked to private developers or companies. Meanwhile, the government appears to be rewarding this kind of eco-vandalism by zoning private land bought by developers as “Village Type Development”. Often, this land has a recent history of destruction.

To demonstrate that the government cares about the integrity of our world-class Country Park system, values our precious natural heritage and is truly the defender of the public interest; it needs to follow through on its commitment to look carefully at each and every enclave and protect areas of high conservation value by incorporating them into Country Parks as soon as possible.

Hong Kong Precious Natural Assets

Hong Kong is home to an exceptionally rich diversity of animal and plant life. Over 2,100 species of vascular plants¹, over 50 species of mammals², some 500 species of birds³ and over 100 species of amphibians and reptiles⁴ call Hong Kong home. Not only do we sit within the “Indo-Burma Hotspot”, one of 25 global biodiversity hotspots⁵; Hong Kong is also a Key Biodiversity Area⁶ within the hotspot, meaning it is of extra-high conservation priority. This is all the more remarkable given our small size, our large and growing human population of seven million plus, and the long history of human activities in the territory which have caused the disappearance of virtually all original forests⁷.

This great biodiversity is partly due to Hong Kong’s protected area system with its 24 Country Parks, which cover around 40 per cent of the SAR’s land area. These extensive protected areas cover much of our secondary forests, shrubland, grasslands, hillsides and associated hill streams. Forest succession, often with enhancement from active planting, occurs inside the Country Parks and has resulted in an increase in forest cover, the maturation of secondary forests and the re-colonisation of some forest specialist species.



Hong Kong’s countryside not only supports an amazingly rich diversity of wildlife, it is also a valuable and irreplaceable natural asset for its people

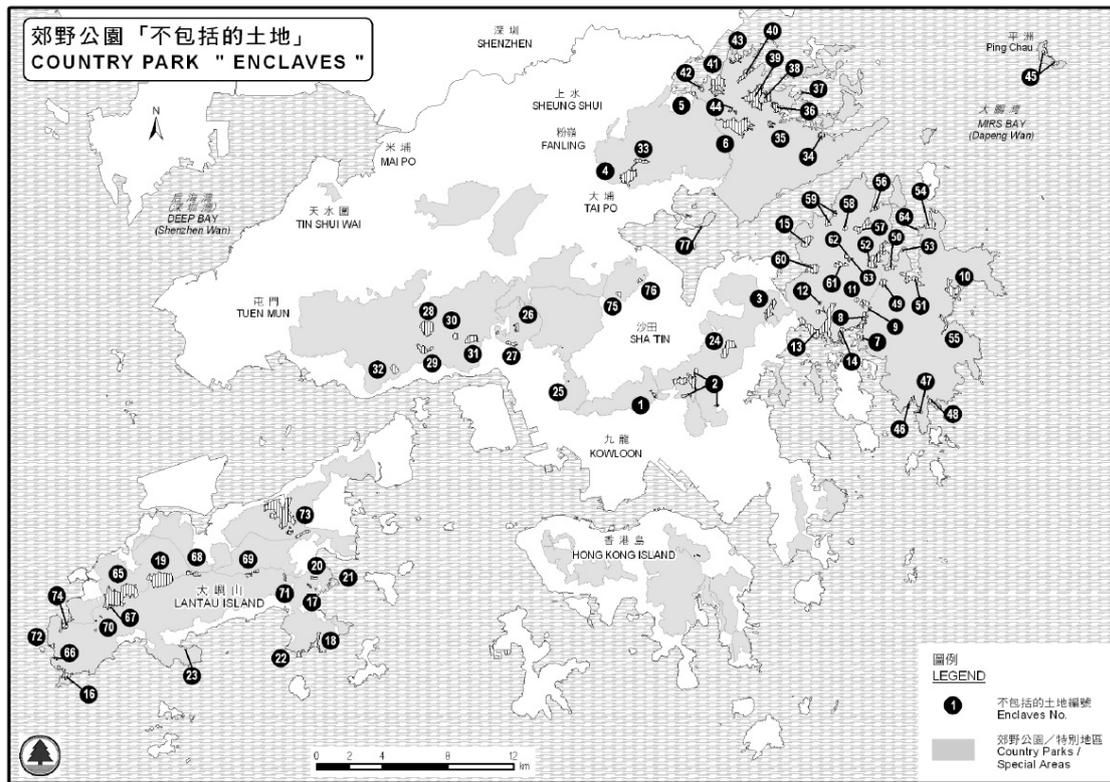
Hong Kong’s Country Parks were first established in the 1970s. They provide numerous functions, from protecting water gathering grounds to providing countryside recreational opportunities, and also for nature conservation⁸. Over the past four decades, they have become invaluable assets for Hong Kong, providing a significant proportion (20-30 per cent)⁹ of our potable water and an easily-accessible natural green space for city dwellers to enjoy, an important contributing factor to Hong Kong being ranked as the top “livable city”¹⁰.

It is difficult to quantify the value of these natural resources in monetary terms; however an attempt was made in 2002, with the Country Parks estimated to have a minimum annual recreational value of \$314 million and a watershed protection value of \$881 million¹¹. Many other functions like absorbing air pollution, carbon sequestration, flood prevention and pollination were not included in the above calculation.

Growing Holes in the Country Park System

Even though Hong Kong's extensive Country Park system is the largest – percentage-wise – in the Asia-Pacific region, there are a number of conspicuous gaps. When the Country Parks were first established, villages and surrounding farmlands, feng shui woods and hillsides were excluded from the parks due to objections from the villagers. These excluded sites were invariably located on flat land next to small rivers and became known as Country Park enclaves (see Map 1).

Map 1. Distribution of Country Park enclaves in Hong Kong



(Source: <http://www.legco.gov.hk/yr09-10/chinese/panels/ea/papers/devea0728cb1-2721-1-c.pdf>)

With the growth in urbanization and cheaper produce imported from mainland China, Hong Kong's agricultural output took a big dip, and large areas of farmland were abandoned¹². This resulted in paddy fields in remote areas like the Country Park enclaves reverting into freshwater marshes, which then became important wildlife habitats. These freshwater marshes and low gradient rivers are under-represented habitats in our Country Parks¹³.



Tai Long Wan, a classic example of an enclave, blends in with Sai Kung East Country Park and complements its conservation and landscape value

In accessing the effectiveness of Hong Kong's protected area system, researchers at the University of Hong Kong found that an additional two per cent of our land area is needed to ensure that all species of conservation concern are adequately covered¹⁴. Many of the sites necessary to complete this protection net lie in the Country Park enclaves – highlighting their importance in complementing the surrounding Country Parks.

There are a total of 77 enclaves, of which only 23 are covered by Outline Zoning Plans (OZPs). Three enclaves were incorporated into Country Parks in 2013 (Table 1).

Table 1. The protection status of Country Park Enclaves (Last update: April 2014)

Protection Status	Numbers of Enclave
Before 2010	
Outline Zoning Plan	23
Unprotected	54
After 2010	
Incorporated into a Country Park	3
Proposed for incorporation into a Country Park	3
Pre-2010 Outline Zoning Plan	23
Draft Outline Zoning Plan	6
Development Permission Area	18
Draft Development Permission Area	5
Unprotected	19
Total:	77

The Destruction of Enclaves: an Increasing - and Increasingly Worrying - Trend



BEFORE

Sham Chung used to have an extensive freshwater marsh supporting a high diversity of fish and aquatic insects and was rated as one of most important wetlands in Hong Kong



AFTER

Sham Chung in 2011, marsh replaced by carefully manicured turf

Due to their relative inaccessibility, each of the Country Park enclaves remained largely intact until recently. In some of the more remote areas, villages were abandoned altogether and nature returned: forests grew back, while freshwater marshes developed in old rice paddies.

With the recent steep increase in property prices and a growing demand for low-density housing, developers are now buying private land in the New Territories and seeking to build highly profitable low-rise luxury homes. The first instance of “enclave destruction” came in 1997 when the freshwater marsh at Sham Chung, a picturesque cove along the shore of Tolo Harbour, was drained, bulldozed and turned into turf and deep ponds, apparently for a future golf course. Although the site was one of the most important freshwater wetlands in Hong Kong, supporting the rare Hong Kong paradise fish and Bog orchid¹⁵, its destruction

could not be prevented as it was not in a Country Park and on private land. The outcry from conservationists and researchers did not stop the destruction of this top freshwater marsh, but it did stall further development.



The Bog orchid, a specialized orchid which grows in marshy environments. In Hong Kong, it is only known to occur at a few sites and is regarded as locally endangered



The Hong Kong paradise fish can only found in Hong Kong and a small number of sites in South China. Enclaves provide strongholds for this wetland species

The Hong Kong government produced an OZP covering Sham Chung and laid down land use controls for the site, stipulating that any future housing development would require the approval of the Town Planning Board (TPB). Today, the site remains a sanitized turfed area with several deep ponds. Gone are the frog choruses, bog orchids and probably the largest population of Hong Kong paradise fish in the world¹⁶.

In the late 2000s, a series of enclaves followed the tragic fate of Sham Chung. To date, important habitats in a total of 12 enclaves have been deliberately destroyed (see Table 2). Most of these enclaves had been bought by developers, rather than being owned by villagers, when the destruction occurred; as such, it is logical to assume that these acts of large-scale eco-vandalism were driven by economic incentive. Compounding the problem, once habitats are destroyed and any important wildlife species are removed or forced offsite, the land becomes less valuable ecologically, making it easier to obtain approval for future development.

Table 2. History of enclave destruction

Enclave [Enclave no.]*	Time of destruction	Type of destruction	Ecological Importance		Covered by statutory plan at the time of destruction	Private companies bought / rent many private lots
			Habitat	Species of Conservation Concern (Sources)		
Sham Chung, Sai Kung West Country Park [15]	1997-1999 ¹⁷	<ul style="list-style-type: none"> Marsh drained and filled Excavation and vegetation clearance Stream modified 	<ul style="list-style-type: none"> Mangrove Freshwater marsh Ecologically Important Stream (EIS) 	<u>Fauna</u> <ul style="list-style-type: none"> <i>Macropodus hongkongensis</i> Hong Kong paradise fish (a) <i>Mangarinus waterousi</i> Chiseltooth goby (a) <i>Moduza procris procris</i> Commander (b) <u>Flora</u> <ul style="list-style-type: none"> <i>Ligustrum punctifolium</i> (a privet shrub) (a) <i>Liparis ferruginea</i> Bog orchid (c) 	No	Yes
Sources:						
(a) Explanatory Statement of the Approved Sham Chung OZP No.S/NE-SC/3						
(b) Green Power (2011) ¹⁸						
(c) Anon (1999) ¹⁹						
She Tau & Tam Wat, Sai Kung West Country Park [13]	2006 ²⁰	<ul style="list-style-type: none"> Forest clearance Construction and Demolition waste dumped 	<ul style="list-style-type: none"> Abandoned agriculture fields Secondary forest Stream 	<u>Flora</u> <ul style="list-style-type: none"> <i>Geissapis cristata</i> (a herb) (a) 	Yes	Yes
Source:						
(a) AFCD (2008) ²¹						
So Lo Pun, Plover Cove Country Park [40]	2008 ²²	<ul style="list-style-type: none"> Damming off of tidal mangroves and sea grass Excavation Vegetation clearance Forest clearance Land filling 	<ul style="list-style-type: none"> Mature secondary forest Mangrove Sea grass bed Freshwater marsh EIS 	<u>Fauna</u> <ul style="list-style-type: none"> <i>Mustela kathiah</i> Yellow-bellied weasel (a) <i>Herpestes urva</i> Crab-eating mongoose (a) <i>Oryzias curvnotus</i> Rice fish (b) <i>Orthetrum poecilops poecilops</i> Mangrove skimmer (b) <i>Tylonycteris robustula</i> Greater bamboo bat (b) <u>Flora</u> <ul style="list-style-type: none"> <i>Zostera japonica</i> Dwarf eelgrass (b) <i>Cibotium barometz</i> Lamb of tartary (a) <i>Aquilaria sinensis</i> Incense tree (a) 	No	No
Sources:						
(a) KFBG (2004) ²³						
(b) Planning Department (2013) ²⁴						
Kai Kuk Shue Ha, Plover Cove Country Park [5]	2009 ²⁵	<ul style="list-style-type: none"> Pond filling 	<ul style="list-style-type: none"> Abandoned fishpond Freshwater marsh EIS 	<u>Fauna</u> <ul style="list-style-type: none"> <i>Nannophya pygmaea</i> Scarlet dwarf (a) 	Yes	No
Source:						
(a) AFCD (2013) ²⁶						

Enclave numbers are the same as on Map 1

Table 2. History of enclave destruction (continued)

Enclave [Enclave no.]*	Time of destruction	Type of destruction	Ecological Importance		Covered by statutory plan at the time of destruction	Private companies bought / rent many private lots
			Habitat	Species of Conservation Concern (Sources)		
Pak Lap, Sai Kung East Country Park [48]	2009 ²²	<ul style="list-style-type: none"> Excavation Site formation Stream modification Illegal access built 	<ul style="list-style-type: none"> Freshwater marsh Secondary forest 	<u>Fauna</u> <ul style="list-style-type: none"> <i>Branchiostoma lanceolatum</i> Amphioxus (a) <u>Flora</u> <ul style="list-style-type: none"> <i>Ceratopteris thalictroides</i> Water fern (a) <i>Pavetta hongkongensis</i> Hong Kong pavetta (a) 	No	Yes
Source: (a) Planning Department (2013) ²⁷						
To Kwa Peng, Sai Kung East Country Park [50]	2009 ²²	<ul style="list-style-type: none"> Excavation Vegetation clearance Forest clearance 	<ul style="list-style-type: none"> Secondary forest Shrubland Mangrove Seagrass bed Streams 	<u>Fauna</u> <ul style="list-style-type: none"> <i>Naja atra</i> Chinese cobra (a) <i>Python bivittatus</i> Burmese python (a) <i>Pseudosesarma patshuni</i> Sesarmine crab (a) <u>Flora</u> <ul style="list-style-type: none"> <i>Gnetum luofuense</i> (a woody climber) (a) Incense tree (a) Hong Kong pavetta (a) <i>Halophila minor</i> (a Spoon seagrass) (b) 	No	Yes
Sources: (a) KFBG (2013) ²⁸ (b) Kwok <i>et al.</i> (2005) ²⁹						
Shui Mong Tin, Ma Shi Chau Special Area [77]	2009 ²²	<ul style="list-style-type: none"> Vegetation clearance Forest clearance Site formation 	<ul style="list-style-type: none"> Secondary forest 	<u>Fauna</u> <ul style="list-style-type: none"> <i>Haliaeetus leucoqaster</i> White-bellied sea eagle (a) 	No	Yes
Source: (a) So <i>et al.</i> (2010) ³⁰						
Tai Long Sai Wan, Sai Kung East Country Park [55]	2010 ²²	<ul style="list-style-type: none"> Excavation Forest clearance Site formation 	<ul style="list-style-type: none"> Secondary forest Streams Abandoned agriculture fields 	<u>Fauna</u> <ul style="list-style-type: none"> <i>Chalcophaps indica</i> Emerald dove (a) <i>Accipiter trivirgatus</i> Crested goshawk (a) <i>Euripus nyctelius</i> Courtesan (a) <i>Parazacco spilurus</i> Predaceous chub (a) <u>Flora</u> <ul style="list-style-type: none"> Hong Kong pavetta (a) <i>Enkianthus quinqueflorus</i> Chinese New Year flower (a) <i>Euonymus kwangtungensis</i> Long-leaved euonymus (a) Lamb of tartary (a) 	No	Yes
Source: (a) Country and Marine Park Authority (2011) ³¹						

Enclave numbers are the same as on Map 1

Table 2. History of enclave destruction (continued)

Enclave [Enclave no.]*	Time of destruction	Type of destruction	Ecological Importance		Covered by statutory plan at the time of destruction	Private companies bought / rent many private lots
			Habitat	Species of Conservation Concern (Sources)		
Wong Chuk Yeung, Ma On Shan Country Park [3]	2012 ³²	<ul style="list-style-type: none"> • Vegetation clearance • Forest clearance 	<ul style="list-style-type: none"> • Secondary forest • Abandoned agriculture fields • Freshwater marsh • Stream 	<u>Fauna</u> <ul style="list-style-type: none"> • <i>Picumnus innominatus</i> • Speckled piculet (a) • <i>Troides aeacus aeacus</i> • Golden birdwing (a) • <i>Troides helena spilotia</i> • Common birdwing (a) <u>Flora</u> <ul style="list-style-type: none"> • Incense tree (a) 	Yes	Yes
Source: (a) Green Power ³³						
Pak Sha O, Sai Kung West Country Park [57]	2012 ³⁴	<ul style="list-style-type: none"> • Excavation • Vegetation clearance • Marsh drained 	<ul style="list-style-type: none"> • Freshwater marsh • EIS • Secondary forest 	<u>Fauna</u> <ul style="list-style-type: none"> • <i>Gekko gekko</i> • Tokay gecko (a) • <i>Paguma larvata</i> • Masked palm civet (a) • <i>Hystrix brachyura</i> • East Asian porcupine (a) • <i>Pseudobagrus trilineatus</i> • Three-lines bagrid fish (a) • <i>Anguilla marmorata</i> • Giant mottled eel (a) <u>Flora</u> <ul style="list-style-type: none"> • <i>Gnetum luofuense</i> (a) • <i>Ludisia discolor</i> • Discolor ludisia (a) • Bog orchid (a) • Incense tree (a) • Hong Kong pavetta (a) 	No	Yes
Source: (a) KFBC (2013) ³⁵						
Yi O, Lantau North & South Country Park [74]	2012- 2013 ³⁶	<ul style="list-style-type: none"> • Excavation • Vegetation clearance • Forest clearance • Marsh flattened or drained 	<ul style="list-style-type: none"> • Secondary forest • Mangrove • Streams • Freshwater marsh • Abandoned agriculture fields 	<u>Fauna</u> <ul style="list-style-type: none"> • <i>Liuixalus romeri</i> • Romer's tree frog (a) • <i>Carcinoscorpius rotundicauda</i> • Horseshoe crab (b) <u>Flora</u> <ul style="list-style-type: none"> • Incense tree (a) 	Yes (DPA plan gazetted one month after land clearance started, and failed to stop further destruction)	Yes (The land is leased to a private company)
Sources: (a) Planning Department (2012) ³⁷ (b) Qin <i>et al.</i> (1998) ³⁸						

*Enclave numbers are the same as on Map 1

Table 2. History of enclave destruction (continued)

Enclave [Enclave no.]*	Time of destruction	Type of destruction	Ecological Importance		Covered by statutory plan at the time of destruction	Private companies bought / rent many private lots
			Habitat	Species of Conservation Concern (Sources)		
Lo Shue Tin, Ma On Shan Country Park [2]	2013	<ul style="list-style-type: none"> • Forest clearance • Site formation • Slope cutting • Marsh flattened or drained • Stream modification 	<ul style="list-style-type: none"> • Mature secondary forest • Abandoned agriculture fields • Freshwater marsh • Streams 	<u>Fauna</u> <ul style="list-style-type: none"> • Chinese pangolin (a) • East Asian porcupine (a) • <i>Paramesotriton hongkongensis</i> • Hong Kong newt (a) • <i>Amolops hongkongensis</i> • Hong Kong cascade frog (a) • <i>Xenophrys brachykolos</i> • Short-legged toad (a) • <i>Parantica sita sita</i> • Chestnut tiger (a) • <i>Aeromachus jhora</i> • Grey scrub hopper (a) • <i>Choaspes</i> sp. • (Skipper butterfly) (a) <u>Flora</u> <ul style="list-style-type: none"> • Chinese New Year flower (a) • <i>Rhododendron simsii</i> • Red azalea (a) • Lamb of tartary (a) 	Yes	Yes

Source:

(a) Survey records during site visits on 27 Mar 2014 and 7 Apr 2014

Enclave numbers are the same as on Map 1

Tai Long Sai Wan – a Turning Point for the Better or for the Worse?

Many Country Park enclaves lie in remote areas far from the eyes of society. As such, their destruction causes only short-lived disapproval in the media and small reactionary measures by the government when infringements are made on government land. This was not the case with Tai Long Sai Wan, located in the scenic Sai Kung East Country Park along a popular hiking trail and ranked number one of Hong Kong's "Top Ten Most Scenic Sites"³⁹.



A small river flows past a beach creating a wave effect, one of many pleasant scenes in Tai Long Sai Wan

A large piece of private land was bought and partially destroyed by a businessman intending to build a private mansion. The ensuing public outcry prompted the government to look into new measures to prevent further degradation at Tai Long Sai Wan and develop a new policy to protect the enclaves. In October 2010, the Chief Executive stated in his Policy Address that the Planning Department and the Agriculture, Fisheries and Conservation Department (AFCD) would protect enclaves not yet covered by statutory plans against human damage, either by incorporating them into Country Parks or through statutory planning control⁴⁰.



Eyesore created on private land behind the beach in Tai Long Sai Wan

In May 2011, AFCD and the Country and Marine Parks Board (CMPB) agreed to revise the criteria for designating Country Parks⁴¹. Under the new criteria, the administration no longer automatically excludes private lands from the boundaries of Country Parks. Instead, it will determine whether the sites concerned should be incorporated into Country Parks after considering such factors as conservation value, geographical location, size of existing human settlements and development pressure faced by the site. Of the 54 enclaves not covered by OZPs to control land use, about half will be incorporated into the Country Parks while the rest will be protected by land use planning.

These developments resulted in high hopes that enclaves with high conservation value, even those containing villages and private land, could be protected through incorporation into Country Parks. Indeed, Tai Long Sai Wan, together with two other small enclaves (without villages) were incorporated into Country Parks in December 2013.

Giving the Least Threatened Enclaves the Strongest Protection... Why?

These hopes were dashed in a CMPB meeting held in February, 2014, when the AFCD revealed that their assessment of nine enclaves had determined that the six enclaves with villages and private land were too difficult to manage as Country Parks and hence “not suitable for incorporating into them”⁴². Instead, three small enclaves without indigenous villages, with little private land and generally of a lower conservation value were proposed for Country Park incorporation⁴³. These developments are in clear contradiction of the criteria adopted in May 2011.

This seemingly backward-looking policy move means that enclaves without villages or private agriculture land – i.e. those likely to be small in size, on hillsides, of lower conservation value and under less threat from development – would be given the highest level of protection and incorporated into Country Parks. Apart from Tai Long Sai Wan, the other five enclaves that have been incorporated or proposed to be incorporated into Country Parks fit this worrying modus operandi (see Table 3).

Table 3. Enclaves incorporated into Country Park or proposed for incorporation

Enclave [Enclave no.]*	Area (ha.)	Ecological importance		Contains indigenous village	Contains private land	Remarks
		Habitat	Species of Conservation Concern			
<i>Enclaves incorporated into Country Parks</i>						
Tai Long Sai Wan ⁴⁴ , Sai Kung East Country Park, [55]	17	<ul style="list-style-type: none"> • Secondary forest • Streams • Abandoned agriculture fields 	<u>Fauna</u> <ul style="list-style-type: none"> • <i>Chalcophaps indica</i> Emerald dove • <i>Accipiter trivirgatus</i> Crested goshawk • <i>Euripus nyctelius</i> Courtesan • <i>Parazacco spilurus</i> Predaceous chub <u>Flora</u> <ul style="list-style-type: none"> • Hong Kong pavetta • <i>Enkianthus</i> <i>quinqueflorus</i> Chinese New Year flower • <i>Euonymus</i> <i>kwangtungensis</i> Long-leaved euonymus • Lamb of tartary 	Yes	Yes	
Kam Shan ⁴⁵ , Kam Shan Country Park [25]	1	<ul style="list-style-type: none"> • Shrubby woodland 	Not provided by AFCD	No	No	
Yuen Tun ⁴⁶ , Tai Lam Country Park [32]	19	<ul style="list-style-type: none"> • Secondary forest 	Not provided by AFCD	No	No	Includes Civil Aid Service Outdoor Training Camp

*Enclave numbers are the same as on Map 1

Table 3. Enclaves incorporated into Country Park or proposed for incorporation (continued)

Enclave [Enclave no.]*	Area (ha.)	Ecological importance		Contains indigenous village	Contains private land	Remarks
		Habitat	Species of Conservation Concern			
<i>Enclaves proposed for incorporation into Country Parks</i> ⁴⁷						
Fan Kei Tok, Plover Cove Country Park [44]	5	• Secondary forests	<u>Fauna</u> <ul style="list-style-type: none"> • <i>Fukienogomphus choifongae</i> Hong Kong tusk-tail • <i>Asiagomphus hainanensis</i> Hainan club-tail • <i>Creon cleobis cleobis</i> Broadtail royal • <i>Tajuria cippus malcolmi</i> Peacock royal • <i>Abraximorpha davidii esta</i> Magpie flat • <i>Sinthusia chandrana grotei</i> Broad spark • Crab-eating mongoose • <i>Muntiacus muntjak</i> Red muntjac <u>Flora</u> <ul style="list-style-type: none"> • Incense tree • Lamb of tartary 	No	No	
Sai Lau Kong, Plover Cove Country Park [37]	2	• Mixed woodland	None	No	No	Application for a Short Term Tenancy for operating a drug treatment and rehabilitation centre endorsed by government earlier
Site near Nam Shan, Lantau South Country Park [71]	6	• Secondary forest	<u>Fauna</u> <ul style="list-style-type: none"> • <i>Gerosis phisara</i> White-banded flat • Red muntjac <u>Flora</u> <ul style="list-style-type: none"> • <i>Artocarpus hypagureus</i> Silverback artocarpus • Incense tree • Hong Kong pavetta • <i>Rhodoleia championii</i> Rhodoleia 	No	No	

*Enclave numbers are the same as on Map 1

Outline Zoning Plans: the Wrong Tool to Protect Important Enclaves Under Threat

“Its [an OZP] effectiveness in achieving the nature conservation objective is not as strong as that under CPO (Country Park Ordinance), for example, it cannot curb eco-vandalism and may not be favoured by those who advocate absolute integrity of Country Parks.”⁴⁸

- Country and Marine Park Authority of AFCD, May, 2011

Statutory land use plans include Development Permission Area Plans (“DPA” plans) and Outline Zoning Plans (“OZPs”). Under a DPA plan, developments other than those permitted by the Town Planning Board, or those generally permitted under the DPA plan, or those which are “existing use” are deemed to be unauthorized uses and subject to enforcement action by the Planning Department.

DPA plans provide planning guidance and serve as a stopgap measure to control development. A DPA plan usually takes a shorter time to prepare and the land use information shown is not as detailed as an OZP. A DPA plan is effective for a period of three years and may be extended for up to one year. Before its expiry, a DPA plan must be replaced by an OZP which is more detailed. Both plans display “uses always permitted” and “other uses that require permission from the TPB” within the planning area.

Both these land use plans provide only “passive” protection for the enclaves, by controlling unauthorized uses and development. Agricultural use on private land is always permitted even in the “Unspecified Use” zone in DPAs, and, “Green Belt” and “Conservation Area” zones in OZPs, providing a loophole for land clearance and forest destruction as seen in Yi O and Wong Chuk Yeung, if the land lease does not have a tree preservation clause, which is often the case. In addition, “existing uses” – i.e. uses present before the gazetting of a statutory plan – are permitted. This provides a perverse incentive to rush to destroy the ecology of the enclaves by means not always permitted – such as excavation and filling – in advance of a statutory plan being ready.

Another drawback of statutory plans is that even if an enclave is of high conservation value, there will be no management by the government. As a result, these areas are often under-patrolled, causing the destruction to be noticed quite late, when very little can be done to mitigate any damage. This fact is illustrated by the recent example of Lo Shue Tin, which will be explained below.



Much has been destroyed in Lo Shue Tin, including the building of an illegal dirt track through government land, but this was only discovered when a member of the public made a report to WWF

The Destruction of Enclaves Continues

Since the Chief Executive announced his intention to protect Country Park enclaves after the Tai Long Sai Wan incident, four more enclaves have suffered massive degradation or near-total destruction. The most recent example is at Lo Shue Tin, an enclave already covered by an OZP. WWF was tipped off by a citizen that land clearance had been observed at the site in November, 2013. A report was made to the Planning Department, Lands Department and AFCD, leading to the following response:

“Our site inspection revealed vegetation clearance at the subject site. The site is zoned "AGR" on the approved Kwun Yam Shan and Fa Sam Hang Outline Zoning Plan No. S/ST-KYS/11 (the OZP). Although the site adjoins an area zoned "Conservation Area" in the east and the west, there is no restriction on vegetation clearance according to the OZP. There is insufficient evidence to form the opinion that the current site condition constitutes unauthorised development under the Town Planning Ordinance.”

-Planning Department’s response to the report on Lo Shue Tin destruction in January
2014

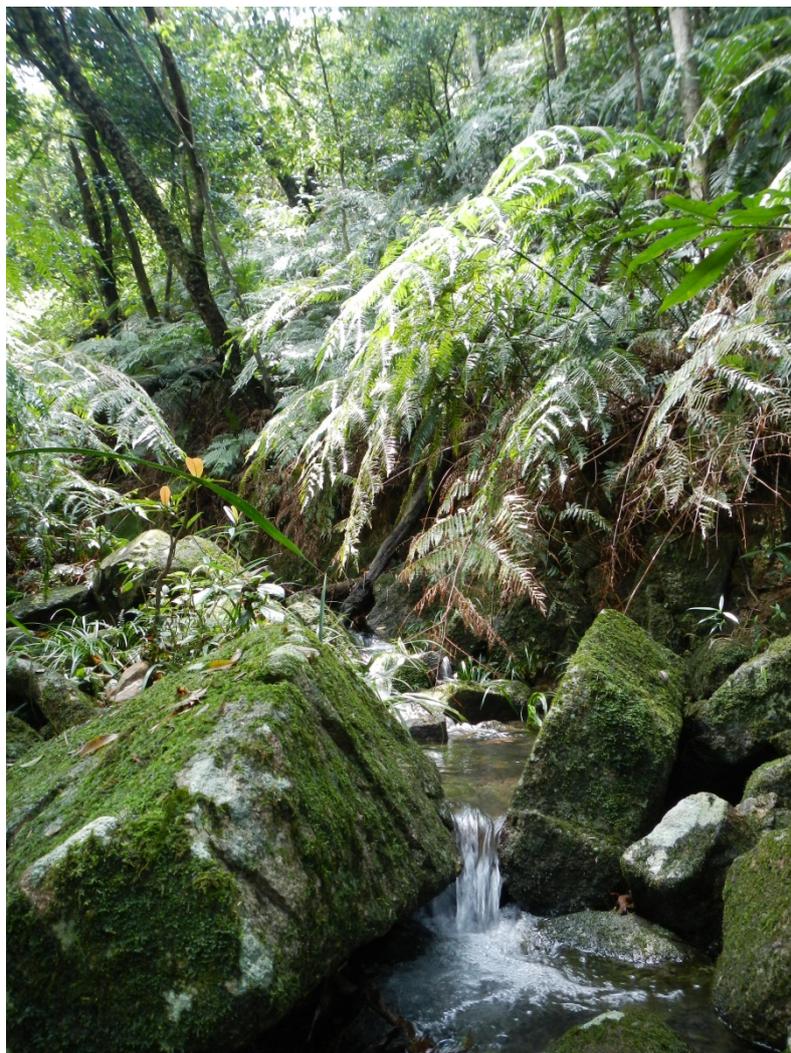
WWF conducted a site visit on 13 December 2013, finding over 2.3 hectares of land cleared. Large trees (with a diameter of over 60cm) were felled and buried in soil, slopes were cut to create a dirt track, freshwater marshes were either flattened or drained, and a stream section was turned into a channel. During this site visit, two bulldozers were found “trapped” at the site, as the track exiting the site was closed off by concrete blocks put down by the government; with a third found a short distance away. The only action taken by the government was the erection of warning signs and the installation of concrete barriers to close off the dirt track going through government land.

WWF is unaware of any ecological surveys undertaken at this site, and no information is available on any plant or animal species living there. In order to ascertain the extent of the damage, WWF scrutinized historical Google maps and aerial photos to determine which habitats had been destroyed.

It is clear that southern part of the site used to be covered by forest land connected to forests in the surrounding Ma On Shan Country Park. The northern part of the site had more open habitat, which covered abandoned agricultural fields. A stream runs through the area and from subsequent ecological survey, it is evident that a freshwater marsh existed in the flat abandoned field.



Remains of a large tree in a damaged mature secondary forest at Lo Shue Tin



Low gradient stream in Lo Shue Tin valley, an ideal habitat for the Hong Kong newt

Ecological surveys of the enclave and the adjacent area were also carried out by a team comprised of experts in plants, mammals, birds, reptiles, amphibians, freshwater fish, butterflies, and dragonflies on 27 March and 9 April, 2014. A total of over 270 plant species were recorded in the one-day botanical survey, indicating that the site is rich in plant life. The remaining forest showed characteristics of a mature secondary lowland forest, with canopy stands between 12 and 15m and emergent trees reaching 15-20m. As expected, a diversity of forest mammals and birds were observed, including a number of important species. The site has both steep streams on the hillsides and a low-gradient stream in the valley, and six species of Hong Kong stream amphibians were observed. Most of the freshwater marsh was gone, however, with only a few aquatic plants and common amphibian species recorded. The team's most significant findings are shown in Table 4.

Table 4. Species of conservation concern observed at Lo Shue Tin

Common Name	Scientific Name	Conservation Concerns*
Plants		
Chinese New Year flower	<i>Enkianthus quinqueflorus</i>	Protected under Cap. 96
Red azalea	<i>Rhododendron simsii</i>	Protected under Cap. 96
Oil-tea camellia	<i>Camellia oleifera</i>	Protected under Cap. 96
Willow-leaved camellia	<i>Camellia salicifolia</i>	Protected under Cap. 96
Walden's camellia	<i>Camellia sinensis</i> var. <i>waldenae</i>	Protected under Cap. 96
Lamb of Tartary	<i>Cibotium barometz</i>	Protected under Cap. 586
Mammals		
Chinese pangolin	<i>Manis pentadactyla</i>	Endangered ⁽¹⁾ ; Endangered ⁽²⁾ ; Rare ⁽³⁾ ; Regional Concern ⁽⁴⁾
East Asian porcupine	<i>Hystrix brachyura</i>	Vulnerable ⁽²⁾ ; Potential Global Concern ⁽⁴⁾
Red muntjac	<i>Muntiacus muntjak</i>	Vulnerable ⁽²⁾ ; Potential Regional Concern ⁽⁴⁾

*⁽¹⁾ = IUCN Red List of Threatened Species; ⁽²⁾ = China Species Red List; ⁽³⁾ = AFCD Assessment; ⁽⁴⁾ = Fellowes *et al.* (2002)⁴⁹

Cap. 96 = Forests and Countryside Ordinance; Cap. 586 = Protection of Endangered Species of Animals and Plants Ordinance

Table 4. Species of conservation concern observed at Lo Shue Tin (continued)

Common Name	Scientific Name	Conservation Concerns*
Birds		
Crested serpent eagle	<i>Spilornis cheela</i>	Local Concern ⁽⁴⁾
Bonelli's eagle	<i>Aquila fasciata</i>	Regional Concern ⁽⁴⁾
Black kite	<i>Milvus migrans</i>	Regional Concern ⁽⁴⁾
Grey-chinned minivet	<i>Pericrocotus solaris</i>	Local Concern ⁽⁴⁾
White-bellied erpornis	<i>Erpornis zantholeuca</i>	Local Concern ⁽⁴⁾
Pygmy wren-babbler	<i>Pnoepyga pusilla</i>	Local Concern ⁽⁴⁾
Rufous-capped babbler	<i>Stachyridopsis ruficeps</i>	Local Concern ⁽⁴⁾
Amphibians		
Hong Kong newt	<i>Paramesotriton hongkongensis</i>	Near Threatened ⁽¹⁾ ; Near Threatened ⁽²⁾
Leaf litter toad	<i>Leptolalax liui</i>	Local Concern ⁽⁴⁾
Short-legged toad	<i>Xenophrys brachykolos</i>	Endangered ⁽¹⁾ ; Endangered ⁽²⁾ ; Potential Global Concern ⁽⁴⁾
Hong Kong cascade frog	<i>Amolops hongkongensis</i>	Endangered ⁽¹⁾ ; Endangered ⁽²⁾ ; Potential Global Concern ⁽⁴⁾
Lesser spiny frog	<i>Quasipaa exilispinosa</i>	Vulnerable ⁽¹⁾ ; Vulnerable ⁽²⁾ ; Potential Global Concern ⁽⁴⁾
Butterflies		
Bamboo tree brown	<i>Lethe europa beroe</i>	Uncommon ⁽³⁾
Chestnut tiger	<i>Parantica sita sita</i>	Rare ⁽³⁾
	<i>Choaspes</i> sp.	Very Rare ⁽³⁾ ; Local Concern ⁽⁴⁾
Grey scrub hopper	<i>Aeromachus jhora</i>	Rare ⁽³⁾
Dragonflies		
Indochinese copperwing	<i>Mnais mneme</i>	Local Concern ⁽⁴⁾

* (1) = IUCN Red List of Threatened Species; (2) = China Species Red List; (3) = AFCD Assessment; (4) = Fellowes *et al.* (2002)⁵⁰



The Hong Kong cascade frog has adapted to life on steep hill streams. It can only be found in Hong Kong and coastal East Guangdong



The Indochinese copperwing favours small streams flowing through forests

This shocking case clearly shows that OZPs are far from adequate in terms of protecting private land in country park enclaves, with mature secondary forest being bulldozed and at least 25 species of conservation concern affected.

A land search of Lo Shue Tin shows that Kandex Development Limited bought up all the individually-held land lots (29 out of a total of 43) for a total of \$HK 104 million between 2010 and 2013. The exact time of land clearance is not clear, but judging from historical aerial photos, Google maps and the report received by WWF, the land clearance probably started in early to mid-2013 and stopped around December 2013.

From the list of enclave destruction detailed in Table 2, the majority of sites destroyed (10 out of 12 cases) were at least partially bought by or leased to private companies⁵¹. It is increasingly clear that the main drive behind the destruction of enclaves is private development, not individual small houses needed by villagers.



December 2012

(Before destruction)



December 2013

(After destruction)

It is Time to Conserve Important Enclaves Before They are Gone

In total, 12 Country Park enclaves have been dug, cut, bulldozed and even burnt – creating further holes in our unique and valuable protected area system. Alarming, four of these were damaged after the Chief Executive made a strong commitment to protecting Country Park enclaves in 2010.

The AFCD have revised the criteria for Country Parks designation, making it possible for enclaves with villages and private land to be incorporated into Country Parks. At the same time, the Planning Department has also taken swift action, producing DPA plans for 26 enclaves to stop inappropriate development.

These actions imply that Hong Kong is heading in the right direction and ensuring that the most important Country Park enclaves are properly protected. However, recent events actually signal that the government is now going backward, and is unlikely to include enclaves with villages and private land in Country Parks. Another troubling sign is that of the first enclaves to be covered by OZPs, nearly all of them have a large “Village Type Development” zone in their draft OZPs (see Table 5).

If these plans are approved by the TPB, between 50 and 134 small houses could be built in each of these enclaves. The only approval needed is from the Lands Department, who are responsible for facilitating the process. If this happens, ecologically important habitats, forests and marshes will likely be replaced by three-storey houses.

Take Hoi Ha as an example: there are 30 existing village houses at the moment, but according to the draft OZP an additional 64 houses will be catered for in the new “V” zone located in the enclave’s abandoned agriculture fields. These fields have already been recolonized by young secondary forest. When the forest and vegetation are cleared during the construction of these new houses, bare earth will be exposed and sediment will be washed into the adjacent Hoi Ha Wan Marine Park during periods of heavy rain. These additional houses will also serve as a new source of pollutants because their septic tanks will not effectively contain or remove all pollutants. The sediment and new pollution will create serious threats to nearby coral communities, lowland rivers, pristine coastal waters and even Hoi Ha Wan Marine Park itself.



Trees in secondary forest at Hoi Ha in the proposed “V” zone face an uncertain future



Coral communities, like this one in Hoi Ha Wan, are especially susceptible to sediment runoff and water pollution

In the case of So Lo Pun, it is difficult to comprehend the rationale for the “V” zone, proposing 134 small houses in the draft OZP. So Lo Pun is an area of exceptionally high ecological value, with mature secondary forest, an ecologically important stream, freshwater marsh, mangrove and sea grass bed. The area supports a diverse mammal community including such rarities as the Yellow-bellied weasel and the Crab-eating mongoose, and is the only site known in Hong Kong where the Greater bamboo bat has been recorded. Due to its remoteness (it is over 6.5 km by path to the closet road – Bride’s Pool Road), the village itself has been abandoned for decades and currently has no inhabitants.

The inclusion of this “V” zone is both baffling and illogical – why would ordinary villagers who left so many years ago decide to return and live in the same village when the reason why the village was abandoned – i.e. lack of accessibility – has not changed? The new houses which will be built are more likely to be used as luxury holiday homes by the very rich who can travel to the location by yacht⁵².

So Lo Pun suffered from large-scale forest and vegetation clearance in 2008. Areas of wetland were also destroyed to create a pond and a bund was built to close off the tidal mangroves and a sea grass bed. Some government land was infringed upon, meaning that gaps were made in the bund by the Lands Department to allow water flow to return. The proposed “V” zone covers much of the cleared forest land. To allow such zoning is essentially rewarding the large-scale destruction that has taken place. Adding to the problems, given that So Lo Pun is in a remote area with no vehicular access, it is highly doubtful that any septic tanks for new houses would be regularly desludged to maintain their optimal function. In turn this means they will become a source of water pollution, affecting the streams and Yan Chau Tong Marine Park, located just over one kilometre away.

In addition to the damage to the enclaves, severe cumulative impacts will also occur in the surrounding Country Parks as large numbers of houses are built in the enclaves. With the natural landscape and rural outlook changed, an increase in road traffic and subsequent road kills of wildlife will undoubtedly follow. This is not what “protection against human damage” (as mentioned in the CE 2010 Policy Address) should look like.

Furthermore, any houses built in these remote enclaves are likely to cater for those with high incomes, perhaps even being holiday homes. Although these housing developments will occupy a sizeable area of land – especially high in relation to the small size of the enclaves – the number of units built will be very small relative to the housing demand in Hong Kong and will make no impact on addressing the housing issue.

Table 5. Draft OZPs, including size of “V” zone and number of additional houses

Enclave covered by draft OZP	Size of “V” zone (ha.)	Number of additional houses	Current population	Planned population
Hoi Ha ⁵³	2.60	64	110	590
Pak Lap ⁵⁴	2.37 ⁺	79	<50	230
So Lo Pun ⁵⁵	4.12	134	0	1000
To Kwa Peng & Pak Tam Au ⁵⁶	5.34	106 [*]	<50	740
Tin Fu Tsai ⁵⁷	0.41	59 [^]	20	560

⁺ Size of “V” zone refers to the latest Explanatory Statement of OZP No. S/SK-PL/1

^{*} Estimated figure based on the latest “V” zone size, i.e. 5.34 ha.

[^] 66 (private lots with house/building status covered by “V” zone) – 7 (existing village houses) = 59 (actual no. of additional houses)

It is not too late to change direction again and properly protect Hong Kong's vital Country Park enclaves. WWF echoes the Ombudsman's recommendation to incorporate enclaves with private land but of high conservation value into Country Parks.⁵⁸ This is the only way to ensure they will not be destroyed.

WWF understands that this process involves a number of steps and will take some time. Some of these important enclaves already have draft OZPs, or their DPA plans will expire soon and have to be replaced by an OZP. In these situations, all important habitats should be zoned as "Conservation Area" or "Coastal Protection Area" with "Green Belt" as buffer. Any "Village Type Development" zones should be restricted to existing villages and building lots. Land that has been destroyed or degraded by deliberate eco-vandalism activities should be zoned as "Undetermined" or "Green Belt", with approval from the TPB being required for any development. That would also allow indigenous villagers to apply for and build small houses should there be a genuine need.

There are still some enclaves that are under-studied, with not much known about their ecological value. These should be surveyed as soon as possible to produce robust data, in order that proper assessment be made using the 2011 criteria to determine whether they should be incorporated into Country Parks. Since there have been doubts about the robustness of the data gathered and assessments conducted so far, the process should be transparent and fully involve the Country and Marine Parks Board.

The Convention of Biological Diversity (CBD) was extended to Hong Kong in 2011 and our first Biodiversity Strategy and Action Plan is now being formulated. We have an international responsibility to contribute to the CBD Aichi Targets. Aichi Target No. 11 is particularly relevant to the protection of Country Park enclaves, stating that "...areas of particular importance for biodiversity and ecosystem services are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas..."⁵⁹.

The set up of the Tai Long Sai Wan Management Working Group and the development of a management plan that includes engaging local villages in developing eco-tourism shows that conservation interests and the interests of local villagers can co-exist⁶⁰. Indeed, these interests are often closely aligned. Hong Kong has already lost some important enclaves because there were no protection measures in place. This damage is unlikely to be reversed. Now that protection measures exist, it is time for the Hong Kong government to put them to good use by giving enclaves of high conservation value the strictest protection – incorporation into the Country Parks. In this way, the holes in our protected area network can be patched before it is too late.

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郊野公園「不包括土地」 Country Park Enclaves

77

本港共有77幅郊野公園「不包括土地」。
Country Park enclaves in Hong Kong.

11,400,000

於2013年到訪過香港郊野公園的人次
Number of people visited Country
Parks in 2013.



20-30%

郊野公園為本港市民供應
兩至三成食水。
Our Country Parks
provide 20-30% of our
drinking water.

12

已有12幅郊野公園
「不包括土地」遭人蓄意破壞。
Country Park enclaves have
been deliberately damaged
or destroyed.



我們在這裏 Why we are here

為了遏止自然環境惡化，建立人類與大自然和諧共存的未來。
To stop the degradation of the planet's natural environment and
to build a future in which humans live in harmony with nature.

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