Appendix G

Ecological Baseline Data

Table 1Bird Recorded in the Vicinity of the Study Area (from Literature Review)

Common Name	Species Name	Commonness	Main Status in HK		l Sources of	Remark	
				Status/CITES	Information		
	T 1 1 (C 11)	T	D DM	Status/IUCN Status	1 0 5 7 9 11	Bred at Shuen Wan	
Little Grebe	Tachybaptus ruficollis	U U	R, PM WV	LC LC	1, 2,5, 7, 8, 11	Over 1000 roosting at Plover Cove Reservoir	
Great Cormorant	Phalacrocorax carbo	U	VV V	LC	6, 8,10, 11	Up to 392 at Shuen Wan (94)	
Great Bitten	Botaurus stellaris	R	WV. PM	LC		Op to 592 at Shuen Wall (94)	
Yellow Bittern		к U	SV	LC	4, 5, 7,	Up to 5 of Chuon Won	
	Ixobrychus sinensis	U VR	SV SV	LC	1, 5, 6,7,	Up to 5 at Shuen Wan	
Schrenck's Bittern	Ixobrychus eurythmus				7,		
Chestnut Bittern	Ixobrychus cinnamomeus	R	SV	LC	8		
		CW	R, PM	LC	1 2 5 6 5 11	Up to 413 at Shuen Wan (94)	
Little Egret	Egretta garzetta	D	D) (10	1, 3, 5, 6,7, 11	20 pairs bred at Shuen Wan	
Intermediate Egret	Egretta intermedia	R	PM	LC	5,6,8, 11	Up to 7 at Shuen Wan (96)	
		CW	R, PM	LC	1, 3, 4, 5, 6, 7, 10,	Up to 102 at Shuen Wan	
Great Egret	Ardea alba	0111		1.0	11	20 pairs bred at Shuen Wan (94)	
Cattle Egret	Bubulcus ibis	CW	R, PM	LC	1, 3,6, 11	Up to 300 pairs bred at Shuen Wan (91)	
Reef Egret	Egretta sacra	U	R	Class II, LC	3	1 at Shuen Wan	
Grey Heron	Ardea cinerea	U	WV	LC	1, 4, 5, 6,7,8, 11	Up to 44 at Shuen Wan (96)	
		CW	R	LC		Up to 25 pairs bred at Shuen Wan (92)	
Chinese Pond Heron	Ardeola bacchus				1, 4, 6,7,8, 11	Up to 42 at Shuen Wan (96)	
Black-crowned Night		U	R, WV	LC		Up to 25 pairs bred at Shuen Wan (92)	
Heron	Nycticorax nycticorax	T T	5	1.0	1, 4,5,6,7		
Straited Heron	Butorides striatus	U	R	LC	1, 6, 7, 11	Up to two at Shurn Wan (94)	
Purple Heron	Ardea purpurea	R	PM	LC	3, 5		
Common Shelduck	Tadorna tadorna	R	WV	LC	5		
Falcated Teal	Anas falcata	R	WV	NT	4	1 at Shuen Wan (92)	
Common Teal	Anas crecca	U	WV	LC	4, 5, 6, 7, 11	Up to 80 at Shuen Wan (92)	
Spot-billed Duck	Anas poecilofhyncha	U	WV	LC	5		
Garganey	Anas querquedula	U	WV, PM	LC	5,		
Northern Pintail	Anas acuta	U	WV	LC	8	1 at Shuen Wan	
Northern Shoveler	Anas clypeata	U	WV	LC	11	2 at Shuen Wan (99)	
Greater Scaup	Aythya marila	VR	WV	LC	4	1 at Shuen Wan (92)	
Red-breasted Merganser	Mergus serrator	R	WV, PM	LC	6	2 at Shuen Wan (94)	
Black Baza	Aviceda leuphotes	R	SV, PM	Class II, LC	1,4	1 at Tai Mei Tuk (92)	
White-bellied Sea Eagle	Haliaeetus leucogaster	U	R	Class II, LC	1,11		

Common Name	Species Name	Commonness	Main Status in HK	National Protected Status/CITES Status/IUCN Status	d Sources of Information	Remark
Crested Serpent Eagle	Spilornis cheela	R	R, PM	Class II, LC	8	7 at Pat Sing Leng
Bonelli's Eagle	Hieraaetus fasciatus	R	R	Class II, LC	1, 4	Bred at Shuen Wan (92)
Osprey	Pandion haliaetus	U	WV	Class II, LC	7, 10, 11	
Crested Goshawk	Accipiter trivirgatus	R	R	Class II, LC	4	1 at Tai Mei Tuk (92)
Chinese Goshawk	Accipiter soloensis	R	PM	Class II, LC	3,8	1 at Shuen Wan
Bersa	Accipiter virgatus	R	R	Class II, LC	7, 10, 11	M & F at Shuen Wan
Grey-faced Buzzard	Butastur indicus	R	PM	Class II, LC	8	1 at Shuen Wan
Eurasian Hobby	Falco subbuteo	R	SV, PM	Class II, LC	8	1 at Shuen Wan
Peregrine Falcon	Falco peregrinus	R	WV	Class II, CITES I, LC	7, 10, 11	
Black Kite	Milvus migrans	CW	R, WV	Class II, LC	1, 5	Up to 37 at Shuen Wan
Common Buzzard	Buteo buteo	U	WV	Class II, LC	5,6, 11	
Japanese Quail	Coturnix japonica	R	WV, PM	LC	5	
Slaty-breasted Rail	Gallirallus striatus	R	R	LC	5	
Slaty-legged Crake	Rallina eurizonoides	VR	SV,WV,PM	LC	6, 8,10, 11	1 at Shuen Wan
Common Moorhen	Gallinula chloropus	U	R	LC	5, 10	Bred at Shuen Wan
Eurasian Coot	Fulica atra	U	WV	LC	2,5,10	Up to 12 at Shuen wan
Black-winged Stilt	Himantopus himantopus	R	WV, PN, R	LC	6, 7	Up to 2 at Shuen Wan
Northern Lapwing	Vanellus vanellus	R	WV	LC	11	2 at Shuen Wan (2000)
Pacific Golden Plover	Pluvialis fulva	R	PM	LC	5,8,10, 11	Up to 3 at Sheun Wan
Eurasian Woodcock	Scolopax rusticola	R	WV	LC	7	
Swinhoe's Snipe	Gallinago megala	R	PM	LC	5	
Red-necked Stint	Calidris ruficollis	U	PM	LC	6, 8,10	Up to 9 at Shuen Wan (98)
Temminck's Stint	Calidris temminckii	U	WV, PM	LC	6	7 at Shuen Wan (94)
Long-toed Stint	Calidris subminuta	R	WV, PM	LC	6	1 at Shuen Wan (94)
Sharp-tailed Sandpiper	Calidris acuminate	R	PM	LC	6	1 at Shuen Wan (94)
Curlew Sandpiper	Calidris ferruginea	U	PM	LC	8	Up to 6 at Shuen Wan (96)
Little-ringed Plover	Charadrius dubius	U	WV, PM, R	LC	5, 6, 7, 11	Up to 33 at Shuen Wan
Kentish Plover	Charadrius alexandrinus	U	WV, PM	LC	8, 11	Up to 22 at Shuen Wan (2000)
Lesser Sand Plover	Charadrius mongolus	R	PM	LC	5	4 at Shuen Wan
Whimbrel	Numenius phaeopus	U	PM	LC	11	1 at Shuen Wan
Common Redshank	Tringa totanus	U	WV, PM	LC	7, 10, 11	
Common Greenshank	Tringa nebularia	U	WV, PM	LC	7, 8,10	Up to 3 at Shuen Wan (96)
Marsh Sandpiper	Tringa stagnatilis	U	PM	LC	7	
Wood Sandpiper	Tringa glareola	U	WV, PM	LC	5, 6, 7	
Common Sandpiper	Actitis hypoleucos	CW	WV, PM	LC	6, 7,8, 11	Up to 10 at Shuen Wan (2000)
Grey-tailed Tattler	Heteroscelus brevipes	R	PM	LC	4, 6, 8, 11	Up to 19 at Shuen Wan (94)

Common Name	Species Name	Commonness	Main Status in HK		l Sources of	Remark	
				Status/CITES Status/IUCN Status	Information		
Black-headed Gull	Larus ridibundus	CW	WV	LC	4, 5, 10, 11	Up to 1200 Shuen Wan (93)	
Gull-billed Tern	Gelochelidon nilotica	R	PM	LC	5, 8	1 at Shuen Wan (93) and Tolo Channel (96)	
Aleutian Tern	Sterna aleutica	VR	PM	LC	5		
Little Tern	Sterna albifrons	R	PM	LC	5, 11	2 at Shuen Wan (99)	
Whiskered Tern	Chlidonias hybrida	R	WV, PM	LC	5, 11	Up to 33 at Shuen Wan (99)	
Whiskered Tern	ennuonius nyoriuu	R	PM	LC	3, 6	Up to 145 at Tolo Channel (91)	
White-winged Black Tern	Chlidonias leucopterus	It.	1 101	LC	5,0	1 at Shuen Wan (94)	
Winte-winged Diack Term	Streptopelia	R	WV, PM	LC	11		
Red Turtle Dove	tranquebarica	It.	VV V, I IVI	LC			
Emerald Dove	Chalcophaps indica	R	R	LC	1, 5		
Lesser Coucal	Centropus bengalensis	U	R	Class II, LC	1, 8	Up to 2 at Shuen Wan (96)	
Chestnut-winged Cuckoo	Clamator coromandus	R	SV,PM	LC	1, 3,4,10	Heard at Tai Mei Tuk (92)	
enestingen energen		CW	SV,PM	LC	1,5,8	1 at Tai Mei Tuk (93)	
Large Hawk Cuckoo	Hierococcyx sparverioides	0.11	5,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-,-,-	Up to 3 at Shuen Wan (96)	
Indian Cuckoo	Cuculus micropterus	U	SV	LC	1, 10, 11		
Oriental Cuckoo	Cuculus saturatus	R	PM	LC	8		
Plaintive Cuckoo	Cacomantis merulinus	U		LC	7, 8,10	1 at Shuen Wan	
Common Koel	Eudynamys scolopacea	ĊW	R	LC	1,8,10		
Collared Scops Owl	Otus bakkamoena	U	R	Class II, LC	8,10		
Asian Barred Owlet	Glaucidium cuculoides	R	R	Class II, LC	7, 8,10		
Savanna Nightjar	Caprimulgus affinis	R	R	LC	4, 5,8		
Su vanna i rigirijan	Hirundapus	VR	PM	LC	4	20 at Shuen Wan (92)	
Silver-backed Needletail	cochinchinensis						
House Swift	Apus affinis	CW	R, PM	LC	7, 11	Up to 100 at Shuen Wan (99)	
Pacific Swift	Apus pacificus	CW	PM	LC	6	1 at Shuen Wan	
White-throated Kingfisher	Halcyon smyrnensis	CW	R	LC	6, 7, 8	Bred at Shuen Wan (95)	
Black-capped Kingfisher	Halcyon pileata	U	PM, WV	LC	6, 8, 11	Up to 3 at Shuen Wan (2000)	
Common Kingfisher	Alcedo atthis	R	WV, PM, R	LC	8,10, 11	Up to 3 at Shuen Wan (96)	
Pied Kingfisher	Ceryle rudis	U	R	LC	5, 6, 7, 8,10, 11	•	
Crested Kingfisher	Ceryle lugubris	VR	R	LC	4, 8, 11	1 at Plover Cove Reservoir (92, 96, 99)	
Dollarbird	Eurystomus orientalis	R	PM	LC	6, 8, 11	1 at Shuen Wan	
Eurasian Hoopoe	Upupa epops	VR	WV	LC	6	1 at Shuen Wan	
Red-rumped Swallow	Hirundo daurica	R	PM	LC	4		
Asian House Martin	Delichon dasypus	R	WV, PM	LC	8	1 at Shuen Wan	
Olive-backed Pipit	Anthus hodgsoni	CW	WV, PM	LC	7	Up to 20 ay Shuen Wan	
Richard's Pipit	Anthus novaeseelandiae	CW	WV, PM, R	LC	5,6	x 5	
Pechora Pipit	Anthus gustavi	VR	PM	LC	5		

Common Name	Species Name	Commonness	Main Status in HK	National Protected Status/CITES Status/IUCN Status	d Sources of Information	Remark
Yellow Wagtail	Motacilla flava	U	WV, PM	LC	5,6,7,8, 11	Up to 250 at Shuen Wan (96)
White Wagtail	Motacilla alba	CW	WV, PM	LC	5,6,7,8, 11	Up to 12 at Shuen Wan
Grey Wagtail	Motacilla cinerea	CW	WV, PM	LC	7	-
Plumbeous Water Redstart	Rhyacornis fuliginosus	VR	WV	LC	4	A pair at Plover Cove (92)
Brown Shrike	Lanius cristatus	U	PM	LC	2, 6	1 at Tai Mei Tuk (90) and Shuen Wan (94)
Bluethroat	Luscinia svecica	R	WV, PM	LC	6, 10	
Common Black Bird	Turdus merula	U	WV, PM	LC	4, 8,10	Up to 34 at Shuen Wan (98)
Eyebrowed Thrush	Turdus obscurus	R	WV, PM	LC	8	1 at Shuen Wan
Rufous-capped Babbler	Stachyris ruficeps	VR	F	LC	10	
Greater Necklaced	<i>y y i</i>	R	F	LC	11	17 at Tak Mei Tuk (2000)
Laughing Thrush Brownish-flanked Bush Warbler	Garrulax pectoralis Cettia fortipes	R	WV	LC	11	I at Shuen Wan
Russet Bush Warbler	Bradypterus seebohmi	R	WV,PM	LC	7, 11	Up to 2 at Shuen Wan (2000)
Pallas's Grasshopper	Braaypierus seebonmi	R	PM	LC	11	
Warbler	Locustella certhiola	K	1 101	LC	11	
Black-browed Reed	Locusiena cermiota	R	WV, PM	LC	11	
Warbler	Acrocephalus bistrigiceps	IC .	vv v , 1 ivi			
Oriental Reed Warbler	Acrocephalus orientalis	U	WV,PM	LC	6	15 at Shuen Wan
Zitting Cisticola	Cisticola juncidis	U	WV,PM	LC	11	
Dusky Warbler	Phylloscopus fuscatus	U	WV, PM	LC	10, 11	
Eastern Crowned Warbler	Phylloscopus coronatus	R	PM	LC	5	
Verditer Flycatcher	Eumyias thalassina	R	WV	LC	8	1 at Shuen Wan (96)
Buff-bellied Flowerpecker	Dicaeum ignipectus	R	WV, R	LC	8	2 juveniles at Sheun Wan (96)
Little Bunting	Emberiza pusilla	U	WV,PM	LC	8	
Yellow-breasted Bunting	Emberiza aureola	R	WV,PM	NT	8	
White-rumped Munia	Lonchura striata	CW	R	LC	8	Up to 23 at Shuen Wan
Scaly-breasted Munia	Lonchura punctulata	U	R	LC	7, 8	1 1
Red-billed Starling	Sturnus sericeus	U	WV	LC	3,5,7, 8,10	Up to 250 at Shuen Wan (91)
White-shouldered Starling	Sturnus sinensis	U	WV, PM, R	LC	6	1 at Shuen Wan
Common Myna	Acridotheres tristis	R	F	LC	8	1 at Shuen Wan
Large-billed Crow	Corvus macrorhynchos	CW	R	LC	1, 4, 6	Up to 112 at Shuen Wan (94)
0	· · · · · · · · · · · · · · · · · · ·	U	R	LC	1, 4, 5, 6, 7, 8,10,	Up to 62 at Shuen Wan
Collared Crow	Corvus torquatus				11	1

Commonness & Distribution: CW = common and widespread, U = uncommon and localised, R = rare and localized, VR = very rare

Status in Hong Kong: R = Resident, WV = Winter Visitor, SV = Summer Visitor, PM = Passage Migrant, E = Records treaded as escaped birds, F = Feral

IUCN Status:

LC = Least Concern, NT = Near Threatened

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Table 2Plant Species Recorded Within the Study Area

							Relative Abundance	2		
Species	Growth Form	Origin	Status –	Secondary Woodland	Shrubland	Mangrove	Stream/ Channel	Village/ Modified Area	Sandy Shore with Backshore Vegetation	Project Site
Acacia auriculiformis	Т	Е	С	S				0		
Acacia confusa	Т	Е	VC	Ο				F		0
Acacia mangium	Т	Е	VC					F		
Acronychia pedunculata	Т	Ν	VC	F						
Aegiceras corniculatum	S	Ν	С			А			S	S
Ageratum conyzoides	Н	Ν	VC		F					F
Alangium chinensis	S	Ν	VC	S	S		S			
Albizia lebbeck	Т	Ν	С					F		D
Alchornea trewioides	S	Ν	VC	F						
Aleurites moluccana	Т	Ν	VC					0		0
Alocasia macrorrhiza	Н	Ν	VC	S			F	F		
Aporusa dioica	S	Ν	VC	F						
Araucaria heterophylla	Т	Е	С					F		
Aquilaria sinensis	Т	Ν	С	Ο						
Avicennia marina	S	Ν	С			0			S	S
Baeckea frutescens	S	Ν	VC		F					
Bauhinia blackeana	Т	Ν	VC					F		
Bauhinia galphinii	С	Ν	С		0					
Bidens bipinnata	Н	Ν	VC		F					
Blechnum orientale	F	Ν	VC	F						
Breynia fruticosa	S	Ν	VC	F	F					
Bridelia tomentosa	S	Ν	VC	0	F			А		
Bruguiera gymnorrhiza	S	Ν	С			А				
Caesalpinia bonduc	S	Е	VC			0				

							Relative Abundance	•		
Species	Growth Form	Origin	Status	Secondary Woodland	Shrubland	Mangrove	Stream/ Channel	Village/ Modified Area	Sandy Shore with Backshore Vegetation	Project Site
Caesalphinia vernalis	С	Ν	VC	F						
Calliandra haematocephala	S	Е	VC					А		
Canthium dicoccum	S	N	C C	S						
Carex chinensis	G	N	C C		F					
		N	VC	F						
Cassytha filiformis	С							F		0
Casuarina equisetifolia	Т	E	VC	А	0			F		F
Celtis sinensis	Т	N	C		-			0		0
Cerbera manghas	T	E	C					0		0
Chrysanthemum indicum	S	N	C	0				0		0
Cinnamomum camphora	Т	Ν	С	F				0		0
Cocculus orbiculatus Cratoxylum	С	Ν	VC	1						
cochinchinensis	S	Ν	VC	F						
Daphniphyllum calycinum	Т	Ν	С	F						
Delonix regia	Т	Е	VC	S				F		
Dicranopteris linearis	F	Ν	VC	0	0					
Digitaria sanquinalis	G	Ν	С				Ο			
Dimocarpus longan	Т	Ν	С					0		
Diospyros morrisiana	Т	Ν	С	S						
Duranta repens	S	Е	С					F		
Embelia laeta	C	N	VC	0						
Eurya japonica	S	N	VC	F						
Excoecaria agallocha	S	N	C			А			S	
Ficus microcapus	Б Т	N	VC	F			F			0
Ficus superba	T	N	VC	F						
Ficus hispida	T	N	VC	F			F	F		

							Relative Abundance	2		
Species	Growth Form	Origin	Status –	Secondary Woodland	Shrubland	Mangrove	Stream/ Channel	Village/ Modified Area	Sandy Shore with Backshore Vegetation	Project Site
Ficus pumila	С	Ν	VC	F						
Ficus variegata	Т	Ν	VC					F		
Ficus variolosa	S	Ν	VC	А						
Gahnia tristis	Se	Ν	VC	S						
Garcinia multiflora	Т	N	С	Ο						
Gardenia jasminoides	S	N	VC	S	0					
Glochidion eriocarpum	S	N	C	F						
Glochidion lanceolarium	S	N	VC	0						
Gnetum montanum	C C	N	C	0						
Gossampinus malabarica	T	E	VC					F		
Hibiscus rosa-sinensis	Н	E	VC					F		
Hibiscus tiliaceus	Т	N	VC					F	D	А
Homalium cochinchinensis	S	N	C	0						
Ilex asprella	S	N	VC	F						
Ilex pubescens	S	N	C	F						
Indocalamus sinicus	Š	N	VC					0		
Ipomoea cairica	С	Ν	VC					F		0
I Ipomoea hederacea	С	Ν	VC					Ο		
I Ipomoea pescaprae	С	Ν	VC			F				
Ischaemum aristatum	G	N	VC		Ο					
Juniperus chinensis	S	Е	VC					F		
Kandelia obovata	S	Ν	VC			А			S	S
Lagerstroemia speciosa	Т	Е	VC					Ο		
Lantana camara	S	Е	VC	Ο	F					0
Launaea sarmentosa	Н	Ν	С						S	

							Relative Abundance			
Species	Growth Form	Origin	Status	Secondary Woodland	Shrubland	Mangrove	Stream/ Channel	Village/ Modified Area	Sandy Shore with Backshore Vegetation	Project Site
Leucaena leucocephala	S	Ν	VC					А		А
Ligustrum sinensis	S	Ν	VC	Ο	Ο					
Limonium sinense	Н	Ν	С			F			F	
Liquidamber confertus	Т	Ν	VC	S	Ο					
Liriope spicata	Н	Ν	С	F			А			
Litsea cubeba	Т	Ν	С	0						
Litsea glutinosa	Т	Ν	VC	0						
Litsea rotundifolia	S	Ν	VC	F	0					
Livistona chinensis	Р	Ν	VC					Ο		
Lophostemon conferta	Т	Е	VC					0		0
Lygodium dichotomum	С	Ν	VC	F						
Macaranga tanarius	Т	Ν	VC	0	F			F		А
Maesa perlarius	S	Ν	VC	F						
Mallotus paniculatus	Т	Ν	С	F						
Melaleuca leucadendron	Т	Е	VC					F		F
Melastoma candidum	S	Ν	VC	F						F
Melia azedarach	Т	Е	С					Ο		
Melodinus monogynus	С	Ν	С	F						
Michelia alba	Т	Е	С					F		
Microcos paniculata	S	Ν	С	F	F					
Mikania micrantha	С	Е	VC		0			F		F
Millettia reticulata	С	Ν	VC	F						
Mimosa pudica	S	Ν	VC		F					
Miscanthus sinensis	G	Ν	VC		F		0	F		F
Miscanthus floridulus	G	Ν	VC		F			F		
Mussaenda pubescens	S	Ν	VC	F						

							Relative Abundance	2		
Species	Growth Form	Origin	Status –	Secondary Woodland	Shrubland	Mangrove	Stream/ Channel	Village/ Modified Area	Sandy Shore with Backshore Vegetation	Project Site
Neyraudia arundinacea	G	Ν	VC					F		F
Paederia scandens	С	Ν	С		F		0	F		F
Panicum maximum	G	Ν	С				0	F		F
Paspalum conjugatum	G	Ν	С							F
Phyllanthus emblica Phyllanthus	Т	N	С	0 0						
cochinchinensis	S	N	VC	S						
Pinus massoniana Psychotria rubra	T S	N N	C VC	0						
Psychotria serpens	С	Ν	VC	F						
Pueraria lobata	С	N	VC		F			А		0
Rapanea neriifolia	S	Ν	С	S						
Rhododendron simsii	S	Ν	Р	S						
Rhodomyrtus tomentosa	S	Ν	VC	F						
Rhus succedanea	S	Ν	VC	F						
Sapium discolor	S	Ν	С	F	0					
Scaevola sericea	Н	Ν	VC			F				
Schefflera heptaphylla	S	Ν	VC	F						
Schima superba	Т	Ν	С	S						
Scleria harlandi	Se	Ν	VC				0			
Sesbania cochinchinensis	S	Е	VC		0	0		Ο		F
Sesuvium portulacastrum	Н	Е	VC			F			F	
Smilax china	С	Ν	VC	Ο						
Sterculia lanceolata	Т	Ν	С				F			
Strophanthus divaricatus	С	Ν	VC	0						
Syzygium jambos	Т	Ν	VC	S				F		

							Relative Abundance	•		
Species	Growth Form	Origin	Status	Secondary Woodland	Shrubland	Mangrove	Stream/ Channel	Village/ Modified Area	Sandy Shore with Backshore Vegetation	Project Site
Tetracera asiatica	С	Ν	VC	F					-	
Thespesia populnea	Т	Ν	С					F	D	
Uvaria microcarpa	S	Ν	VC	S						
Vitex rotundifolia	S	Ν	VC			F				
Wedelia chinensis	С	Ν	VC					F		0
Zoysia sinica	G	Ν	VC			О			0	
Total no. of Species				71	26	13	11	46	10	30

Abundance: A=Abundant; D=Dominant=; F=Frequent; O=Occasional; S=Scarce

Status: C=Common; VC=Very Common; P=Protected

Plant Form: G=Grass; C= Climber; H=Herb; Se=Sedge, P=Palm; S=Shrub; T=Tree,

Origin: N=Native; E=Exotic



Common Name	Species Name	Commonness	Status in Hong Kong	Habitats Recorded in Dry Season	Habitats Recorded in Wet Season
Asian Brown Flycather	Muscicapa dauurica	U	WV, PM	Sh	W
Barn Swallow	Hirudo rustica	CW	SV, PM		Sh
Black Kite	Milvus migrans	CW	R, WV	D, Sh	D, PS, S
Black-collared Starling	Sturnus nigricollis	CW	R	Pd, PS, S, Sh	D, Pd, PS, S, Sh
Chestnut Bulbul	Hypsipetes castanonotus	CW	R	W	
Chinese Pond Heron	Ardeola bacchus	CW	R	S	S
Collared Crow	Corvus torquatus	U	R	S	S
Common Black Bird	Turdus merula	CW	WV	Pd, Sh, W	
Common Kingfisher	Alcedo atthis	CW	WV, PM	PS	Sh
Common Magpie	Pica pica	CW	R	D, S	D, S
Common Sandpiper	Actitis hypoleucos	CW	WV, PM	S	PS
Common Tailorbird	Orthotomus sutorius	CW	R	PS, S, Sh, W	S, Sh, W
Crested Goshawk	Accipiter trivirgatus	R	R		W
Crested Myna	Acridotheres cristatellus	CW	R	D, PS, S, Sh	D, Sh
Dusky Warbler	Phylloscopus fuscatus	CW	WV, PM	Sh	
Eurasian Tree Sparrow	Passer montanus	CW	R	D, Sh	D, Pd, S, Sh
Fork-tailed Sunbird	Aethopyga christinae	CW	R	Sh	Pd, W
Great Tit	Parus major	CW	R	D, Pd, S, Sh, W	D, Sh, W
Greater Necklanced LT	Garrulax pectoralis	CW	R	W	
Grey Wagtail	Motacilla cinerea	CW	WV, PM	Sh	
Grey-backed Thrush	Turdus hortulorum	CW	WV	W	
Grey-tailed Tattler	Heteroscelus brevipes	R	PM		S
House Swift	Apus affinis	CW	R, PM	W	
Japanese White-eye	Zosterops japonicus	CW	R	Pd, Sh, W	D, Pd, S, Sh, W
Large-billed Crow	Corvus macrorhynchos	CW	R	Sh	Pd, S
	-				
Light-vented Bulbul	Pycnonotus sinensis	CW	R	D, Pd, S, Sh, W	D, Pd, PS, S, Sh,
Little Egret	Egretta garzetta	CW	R	PS, S	D, PS, S, Sh
Long-tailed Shrike	Lanius schach	CW	R		W
Masked Laughing Thrush	Garrulax perspicillatus	CW	R	D, S, Sh, W	S, Sh
Olive-backed Pipit	Anthus hodgsoni	CW	WV, PM	Sh	
Oriental Magpie Robin	Copsychus saularis	CW	R	PS, S, Sh, W	Pd, S, Sh, W
Osprey	Pandion haliaetus	R	WV	S	
Pacific Swift	Apus pacificus	CW	SV, PM		W
Red-billed Starling	Sturnus sericeus	R	WV	D, PS, S, Sh	
Red-whiskered Bulbul	Pycnonotus jocosus	CW	R	Sh, W	D, Pd, Sh, W
Richard's Pipit	Anthus richardi	CW	WV, PM	S	
Scarlet-backed Flowerpecker	Dicaeum cruentatum	R	R	S, Sh, W	Sh, W

Table 3Bird Species Recorded within the Study Area



Common Name	Species Name	Commonness	Status in Hong Kong	Habitats Recorded in Dry Season	Habitats Recorded in Wet Season
Spotted Dove	Streptopelia chinensis	CW	R	D, Pd, PS, Sh, W	D, Pd, PS, S, Sh, W
Violet Whistling Thrush	Myiophoneus caeruleus	CW	R	W	
White Wagtail	Motacilla alba	CW	WV, PM	Pd, S, Sh	D, Pd, PS, S, Sh
White-bellied Sea Eagle	Haliaeetus leucogaster	U	R		S, Sh
White-throated Kingfisher	Halcyon smyrnensis	CW	R	S	Pd
Yellow-bellied Prinia	Prinia flaviventris	CW	R	Sh	
Yellow-browed Warbler	Phylloscopus inornatus	CW	WV, PM	Pd, Sh, W	Pd
			Total Species	38	31

Habitats: W = Secondary Woodland, Sh = Shrubland, S = Sandy Shore with Backshore Vegetation, Pd =Pond, PS =Project Site, D = Village/Modified Area

Commonness & Distribution: CW = common and widespread, U = uncommon and localised, R = rare and localized, VR = very rare

Main Status: R = Resident, WV = Winter Visitor, SV = Summer Visitor; PM = Passage/Seasonal Migrant

Table 4Bird Species Recorded within Study Area in Dry Season

				Study A	rea		
Common Name	Species Name	Secondary Woodland	Shrubland	Sandy Shore with Backshore Vegetation	Pond	Village/ Modified Area	Project Site
Asian Brown Flycather	Muscicapa dauurica	0	1	0	0	0	0
Black Kite	Milvus migrans	0	1	0	0	1	0
Black-collared Starling	Sturnus nigricollis	0	3	11	2	0	2
Chestnut Bulbul	Hypsipetes castanonotus	4	0	0	0	0	0
Chinese Pond Heron	Ardeola bacchus	0	0	1	0	0	0
Collared Crow	Corvus torquatus	0	0	2	0	0	0
Common Black Bird	Turdus merula	33	3	0	1	0	0
Common Kingfisher	Alcedo atthis	0	0	0	0	1	1
Common Magpie	Pica pica	0	0	3	0	1	0
Common Sandpiper	Actitis hypoleucos	0	0	3	0	0	0
Common Tailorbird	Orthotomus sutorius	8	5	2	0	0	2
Crested Myna	Acridotheres cristatellus	0	2	0	0	3	1
Dusky Warbler	Phylloscopus fuscatus	0	2	0	0	0	0
Eurasian Tree Sparrow	Passer montanus	0	14	0	0	8	0
Fork-tailed Sunbird	Aethopyga christinae	0	1	0	0	0	0
Great Tit	Parus major	3	2	1	2	1	0
Greater Necklanced LT	Garrulax pectoralis	6	0	0	0	0	0
Grey Wagtail	Motacilla cinerea	0	6	0	0	0	0
Grey-backed Thrush	Turdus hortulorum	2	0	0	0	0	0
House Swift	Apus affinis	5	0	0	0	0	0
Japanese White-eye	Zosterops japonicus	27	5	0	21	0	0

				Study A	rea		
Common Name	Species Name	Secondary Woodland	Shrubland	Sandy Shore with Backshore Vegetation	Pond	Village/ Modified Area	Project Site
Large-billed Crow	Corvus macrorhynchos	0	1	0	0	0	0
Light-vented Bulbul	Pycnonotus sinensis	4	8	7	2	6	0
Little Egret	Egretta garzetta	0	0	2	0	0	2
Masked Laughing Thrush	Garrulax perspicillatus	2	5	5	0	0	0
Olive-backed Pipit	Anthus hodgsoni	0	5	0	0	0	0
Oriental Magpie Robin	Copsychus saularis	1	3	2	0	0	1
Osprey	Pandion haliaetus	0	0	1	0	0	0
Red-billed Starling	Sturnus sericeus	0	14	18	0	8	68
Red-whiskered Bulbul	Pycnonotus jocosus	6	4	0	0	0	0
Richard's Pipit	Anthus richardi	0	0	1	0	0	0
Scarlet-backed Flowerpecker	Dicaeum cruentatum	1	1	1	0	0	0
Spotted Dove	Streptopelia chinensis	1	4	0	4	3	2
Violet Whistling Thrush	Myiophoneus caeruleus	1	0	0	0	0	0
White Wagtail	Motacilla alba	0	5	1	2	0	0
White-throated Kingfisher	Halcyon smyrnensis	0	0	1	0	0	0
Yellow-bellied Prinia	Prinia flaviventris	0	1	0	0	0	0
Yellow-browed Warbler	Phylloscopus inornatus	4	1	0	1	0	0
	Total Species	16	24	17	8	9	8

Table 5Bird Species Recorded Quantitatively within Study Area in Wet Season

				Study A	rea		
Common Name	S pecies Name	Secondary Woodland	Shrubland	Sandy Shore with Backshore Vegetation	Pond	Village/ Modified Area	Project Site
Asian Brown Flycather	Muscicapa dauurica	1	0	0	0	0	0
Barn Swallow	Hirudo rustica	0	1	0	0	0	0
Black Kite	Milvus migrans	0	0	2	0	2	1
Black-collared Starling	Sturnus nigricollis	0	2	6	5	2	5
Chinese Pond Heron	Ardeola bacchus	0	0	2	0	0	0
Collared Crow	Corvus torquatus	0	0	2	0	0	0
Common Kingfisher	Alcedo atthis	0	1	0	0	0	0
Common Magpie	Pica pica	0	0	2	0	2	0
Common Sandpiper	Actitis hypoleucos	0	0	4	0	0	1
Common Tailorbird	Orthotomus sutorius	8	2	1	0	0	0
Crested Goshawk	Accipiter trivirgatus	2	0	0	0	0	0
Crested Myna	Acridotheres cristatellus	0	1	0	0	9	0
Eurasian Tree Sparrow	Passer montanus	0	16	2	6	20	0
Fork-tailed Sunbird	Aethopyga christinae	2	0	0	2	0	0
Great Tit	Parus major	2	2	0	0	2	0
Grey-tailed Tattler	Heteroscelus brevipes	0	0	1	0	0	0
Japanese White-eye	Zosterops japonicus	16	6	6	11	5	0
Large-billed Crow	Corvus macrorhynchos	0	0	5	2	0	0
Light-vented Bulbul	Pycnonotus sinensis	15	7	5	3	12	4
Little Egret	Egretta garzetta	0	1	4	0	2	1
Long-tailed Shrike	Lanius schach	1	0	0	0	0	0

				Study A	rea		
Common Name	S pecies Name	Secondary Woodland	Shrubland	Sandy Shore with Backshore Vegetation	Pond	Village/ Modified Area	Project Site
Masked Laughing Thrush	Garrulax perspicillatus	0	6	5	0	0	0
Oriental Magpie Robin	Copsychus saularis	3	2	2	1	0	0
Pacific Swift	Apus pacificus	1	0	0	0	0	0
Red-whiskered Bulbul	Pycnonotus jocosus	6	20	0	9	4	0
Scarlet-backed Flowerpecker	Dicaeum cruentatum	3	1	0	0	0	0
Spotted Dove	Streptopelia chinensis	2	2	6	2	2	2
White Wagtail	Motacilla alba	0	4	2	1	2	1
White-bellied Sea Eagle	Haliaeetus leucogaster	0	1	1	0	0	0
White-throated Kingfisher	Halcyon smyrnensis	0	0	0	1	0	0
Yellow-browed Warbler	Phylloscopus inornatus	0	0	0	2	0	0
	Total Species	13	17	18	12	12	7

ommon Name	Species Name	Status	Habitat Recorded in Dry Season	Habitat Recorded in Wet Season
Angled Castor	Ariadne ariadne	С	Sh	Sh
Blue-spotted Crow	Euploea midamus	VC	S, Sh	Sh, W
Brown Pansy	Junonia iphita	UC		W
Ceylon Blue Tiger	Ideopsis similis	VC	W	Sh
Chinese Peacock	Papilio bianor	VC		W
Colour Sergeant	Athyma nefte	С	Sh	W
Common Bluebottle	Graphium sarpedon	VC	Sh	D, Pd, S, W
Common Five-ring	Ypthima baldus	VC	Sh, W	Sh, W
Common Grass Yellow	Eurema hecabe	VC	Sh, W	D, Sh, W
Common Hedge Blue	Acytolepis puspa	С	Sh	Sh
Common Indian Crow	Euploea core	VC		D, Sh, W
Common Jay	Graphium doson	С		Sh
Common Jester	Symbrenthia lilaea	С	Sh	
Common Mine	Chilasa clytia	С		W
Common Mormon	Papilio polytes	VC	D, Sh	D, Pd, S, Sh, W
Common Nawab	Polyura athamas	UC		Pd, W
Common Palmfly	Elymnias hypermnestra	С	Sh	
Common Sailer	Neptis hylas	VC	Sh, W	Sh, W
Common Tiger	Danaus genutia	VC	W	Pd, Sh
Danaid Egg-fly	Hypolimnas misippus	UC	Sh	
Dark Cerulean	Jamides bochus	С	Sh	
Dark Evening Brown	Melanitis phedima	UC		Sh
Dark-band Bush Brown	Mycalesis mineus	VC	Sh, W	Sh, W
Five-bar Swordtail	Pathysa antiphates	С		W
Forest Hopper	Astictopterus jama	С		W
Glassy Tiger	Parantica aglea	VC	Sh	
Great Egg-fly	Hypolimnas bolina	С	W	Sh, W
Great Mormon	Papilio memnon	VC	Sh	W
Great Orange Tip	Hebomoia glaucippe	С		W
Great Swift	Pelopidas assamensis	UC		Sh
Indian Cabbage White	Pieris canidia	VC	Sh	
Indian Palm Bob	Suastus gremius	UC		W
Indian Red Admiral	Vanessa indica	С	W	Sh
Large Faun	Faunis eumeus	С	W	W
Lemon Emigrant	Catopsilia prmona	С	Sh	Pd, W
Lime Blue	Chilades lajus	VC	Sh	W
Long-tailed Blue	Lampides boeticus	С	Sh	
Painted Jezebel	Delias hyparete	UC	Sh	W
Pale Grass Blue	Zizeeria maha	VC	Sh	
Paris Peacock	Papilio paris	VC		D
Plain Tiger	Danaus chrysippus	UC	Sh	

Table 6Butterfly Species Recorded within the Study Area



Common Name	Species Name	Status	Habitat Recorded in Dry Season	Habitat Recorded in Wet Season
Plum Judy	Abisara echerius	VC	Sh, W	W
Punchinello	Zemeros flegyas	С	Sh	
Purple Sapphire	Heliophorus epicles	С		S, Sh
Red Helen	Papilio helenus	VC	D, Sh	W
Red-based Jezebel	Delias pasithoe	VC	S, Sh, W	
Rustic	Cupha erymanthis	VC	Sh	Sh, W
Slate Flash	Rapala manea	С	Sh	W
Sliver Streak Blue	Iraota timoleon	UC		W
South China Bush Browr	Mycalesis zonata	UC	Sh, W	
South Sullied Sailer	Neptis clinia	С	S, Sh	
Spangle	Papilio protenor	VC	Sh	Sh
Tailed Jay	Graphium agamemnon	VC	Sh	Sh
Tailed Sulphur	Dercas verhuelli	UC		W
White-edged Blue Baron	Euthalia phemius	UC	Sh	
Yellow Orange Tip	Ixias pyrene	UC	Sh	
		Total Species	40	41

VC = Very Common, C = Common, UC = Uncommon, R = Rare W = Secondary Woodland, S = Sandy Shore with Backshore Vegetation, Sh = Shrubland, Pd = Pond, D = Village/Modified Area

Table 7Butterfly Species Recorded within the Study Area in Dry Season

				Study A	rea		
Common Name	Species Name	Secondary Woodland	Shrubland	Sandy Shore with Backshore Vegetation	Pond	Village/ Modified Area	Project Site
Angled Castor	Ariadne ariadne	0	2	0	0	0	0
Blue-spotted Crow	Euploea midamus	0	1	1	0	0	0
Ceylon Blue Tiger	Ideopsis similis	1	0	0	0	0	0
Colour Sergeant	Athyma nefte	0	1	0	0	0	0
Common Bluebottle	Graphium sarpedon	0	1	0	0	0	0
Common Five-ring	Ypthima baldus	3	2	0	0	0	0
Common Grass Yellow	Eurema becabe	5	5	0	0	0	0
Common Hedge Blue	Acytolepis puspa	0	3	0	0	0	0
Common Jester	Symbrenthia lilaea	0	1	0	0	0	0
Common Mormon	Papilio polytes	0	3	0	0	1	0
Common Palmfly	Elymnias hypermnestra	0	1	0	0	0	0
Common Sailer	Neptis hylas	2	3	0	0	0	0
Common Tiger	Danaus genutia	3	0	0	0	0	0
Danaid Egg-fly	Hypolimnas misippus	0	1	0	0	0	0
Dark Cerulean	Jamides bochus	0	1	0	0	0	0
Dark-band Bush Brown	Mycalesis mineus	2	2	0	0	0	0
Glassy Tiger	Parantica aglea	0	1	0	0	0	0
Great Egg-fly	Hypolimnas bolina	3	0	0	0	0	0
Great Mormon	Papilio memnon	0	2	0	0	0	0
Indian Cabbage White	Pieris canidia	0	2	0	0	0	0
Indian Red Admiral	Vanessa indica	1	0	0	0	0	0

				Study A	rea		
Common Name	Species Name	Secondary Woodland	Shrubland	Sandy Shore with Backshore Vegetation	Pond	Village/ Modified Area	Project Site
Large Faun	Faunis eumeus	2	0	0	0	0	0
Lemon Emigrant	Catopsilia prmona	0	3	0	0	1	0
Lime Blue	Chilades lajus	0	1	0	0	0	0
Long-tailed Blue	Lampides boeticus	0	18	0	0	0	0
Painted Jezebel	Delias hyparete	0	1	0	0	0	0
Pale Grass Blue	Zizeeria maha	0	7	0	0	0	0
Plain Tiger	Danaus chrysippus	0	2	0	0	0	0
Plum Judy	Abisara echerius	6	1	0	0	0	0
Punchinello	Zemeros flegyas	0	3	0	0	0	0
Red Helen	Papilio helenus	0	1	0	0	1	0
Red-based Jezebel	Delias pasithoe	3	2	2	0	0	0
Rustic	Cupha erymanthis	0	1	0	0	0	0
Slate Flash	Rapala manea	0	1	0	0	0	0
South China Bush Brown	Mycalesis zonata	1	1	0	0	0	0
South Sullied Sailer	Mandin aliain	0	2	1	0	0	0
Spangle	Neptis clinia Papilio protenor	0 0	2 2	1 0	0	0	0
Tailed Jay	Graphium agamemnon	0	1	0	0	0	0
White-edged Blue Baron	Euthalia phemius	0	2	0	0	0	0
Yellow Orange Tip	Ixias pyrene	0	1	0	0	0	0
	Total No. of Individuals	32	82	4	0	3	0
	Total Species	12	35	3	0	3	0

Table 8Butterfly Species Recorded within the Study Area in Wet Season

				Study A	rea		
Common Name	Species Name	Secondary Woodland	Shrubland	Sandy Shore with Backshore Vegetation	Pond	Village/ Modified Area	Project Sit
Angled Castor	Ariadne ariadne	0	1	0	0	0	0
Blue-spotted Crow	Euploea midamus	5	0	1	0	0	0
Brown Pansy	Junonia iphita	1	0	0	0	0	0
Ceylon Blue Tiger	Ideopsis similis	0	2	0	0	0	0
Chinese Peacock	Papilio bianor	6	0	0	0	0	0
Colour Sergeant	Athyma nefte	2	0	0	0	0	0
Common Bluebottle	Graphium sarpedon	1	0	2	2	1	0
Common Five-ring	Ypthima baldus	2	1	0	0	0	0
Common Grass Yellow	Eurema hecabe	8	1	0	0	1	0
Common Hedge Blue	Acytolepis puspa	0	1	0	0	0	0
Common Indian Crow	Euploea core	2	1	0	0	2	0
Common Jay	Graphium doson	0	1	0	0	0	0
Common Mine	Chilasa clytia	3	0	0	0	0	0
Common Mormon	Papilio polytes	3	1	1	1	2	0
Common Nawab	Polyura athamas	1	0	0	1	0	0
Common Sailer	Neptis hylas	2	1	0	0	0	0
Common Tiger	Danaus genutia	0	2	0	2	0	0
Dark Evening Brown	Melanitis phedima	0	1	0	0	0	0
Dark-band Bush Brown	Mycalesis mineus	9	1	0	0	0	0
Five-bar Swordtail	Pathysa antiphates	2	0	0	0	0	0
Forest Hopper	Astictopterus jama	1	0	0	0	0	0
Great Egg-fly	Hypolimnas bolina	5	1	0	0	0	0
Great Mormon	Papilio memnon	2	0	0	0	0	0
Great Orange Tip	Hebomoia glaucippe	1	0	0	0	0	0

				Study A	rea		
Common Name	Species Name	Secondary Woodland	Shrubland	Sandy Shore with Backshore Vegetation	Pond	Village/ Modified Area	Project Sit
Great Swift	Pelopidas assamensis	0	1	0	0	0	0
Indian Palm Bob	Suastus gremius	1	0	0	0	0	0
Indian Red Admiral	Vanessa indica	0	1	0	0	0	0
Large Faun	Faunis eumeus	3	0	0	0	0	0
Lemon Emigrant	Catopsilia prmona	1	0	0	1	0	0
Lime Blue	Chilades lajus	2	0	0	0	0	0
Painted Jezebel	Delias hyparete	2	0	0	0	0	0
Paris Peacock	Papilio paris	0	0	0	0	1	0
Plum Judy	Abisara echerius	6	0	0	0	0	0
Purple Sapphire	Heliophorus epicles	0	1	1	0	0	0
Red Helen	Papilio helenus	4	0	0	0	0	0
Rustic	Cupha erymanthis	4	1	0	0	0	0
Slate Flash	Rapala manea	1	0	0	0	0	0
Silver Streak Blue	Iraota timoleon	1	0	0	0	0	0
Spangle	Papilio protenor	0	2	0	0	0	0
Tailed Jay	Graphium agamemnon	0	1	0	0	0	0
Tailed Sulphur	Dercas verhuelli	1	0	0	0	0	0
ŗ	Fotal No. of Individuals	82	22	5	7	7	0
r	Fotal Species	29	19	4	5	5	0

Common Name	S pecies Name	Status	Habitat Recorded in	Habitat Recorded in
	-		Dry Season	Wet Season
Amber-winged Glider	Hydrobasileus croceus	С		W
Black-banded Gossamerwing	Euphaea decorata	А		W
Black Threadtail	Prodasineura autumnalis	А	Sh	
Common Blue Skimmmer	Orthetrum glaccum	А	S, Sh	Sh, W
Common Red Skimmer	Orthetrum pruninosum	А	Sh	S, Sh, W
Crimson Dropwing	Trithemis aurora	А	Sh	Sh
Indigo Dropwing	Trithemis festiva	А	Sh	Sh
Red-faced Skimmer	Orthetrum chrysis	С	S, Sh	Sh
Saddlebag Glider	Tremea virginia	С		Sh, W
Variegated Flutterer	Ryhothemis variegata arria	С		Sh
Wandering Glider	Pantala flavescens	А	S	D, Pd, PS, S, Sh, W
Yellow Featherlegs	Copera marginipes	А	D	Sh
	-	Total Species	8	11

Table 9 Dragonfly Species Recorded within Study Area

VC = Very Common, C = Common, UC = Uncommon, R = Rare

W = Secondary Woodland, Sh = Shrubland, S = Sandy Shore with Backshore Vegetation, Pd = Pond, D = VU = VU

Village/Modified Area, PS = Project Site

Table 10Dragonfly Species Recorded within Study Area in Dry Season

Common Name	S pecies Name	Status			Study	v Area		
		_	W	Sh	S	Pd	D	PS
Black Threadtail	Prodasineura autumnalis	А		1				
Common Blue Skimmer	Orthetrum glaccum	А		2	1			
Common Red Skimmer	Orthetrum pruninosum	А		1				
Crimson Dropwing	Trithemis aurora	А		1				
Indigo Dropwing	Trithemis festiva	А		3				
Red-faced Skimmer	Orthetrum chrysis	С		2	1			
Wandering Glider	Pantala flavescens	А			11			
Yellow Featherlegs	Copera marginipes	А		1				
	Total Species		0	7	3	0	0	0
	Total Individuals		0	11	13	0	0	0

A = Abundant, C = Common, UC = Uncommon.

W = Secondary Woodland, Sh = Shrubland, S = Sandy Shore with Backshore Vegetation, Pd = Pond, D = Village/Modified Area, PS = Project Site



Common Name	S pecies Name	Status	s Study Area							
		-	W	Sh	S	Pd	D	PS		
Amber-winged Glider	Hydrobasileus croceus	С	2							
Black-banded Gossamerwing	Euphaea decorata	А	1							
Common Blue Skimmer	Orthetrum glaccum	А	2	5						
Common Red Skimmer	Orthetrum pruninosum	А	1	2	1					
Crimson Dropwing	Trithemis aurora	А		2						
Indigo Dropwing	Trithemis festiva	А		2						
Red-faced Skimmer	Orthetrum chrysis	С		1						
Saddlebag Glider	Tremea virginia	С	2	1						
Variegated Flutterer	Ryhothemis variegata arria	С		1						
Wandering Glider	Pantala flavescens	А	95	35	10	50	16	20		
Yellow Featherlegs	Copera marginipes	А		3						
	Total Species		6	9	2	1	1	1		
	Total Individuals		103	52	11	50	16	20		

Table 11 Dragonfly Species Recorded within Study Area in Wet Season

A = Abundant, C = Common, UC = Uncommon

 $W = Secondary \ Woodland, \ Sh = Shrubland, \ S = Sandy \ Shore \ with \ Backshore \ Vegetation, \ Pd = Pond, \ D = Pond, \ Pond, \ D = Pond, \ D =$

Village/Modified Area, PS = Project Site

Table 12	Amphibian and Reptile Species Recorded within Study Area	

Common Name	Species Name	Status	Habitat Recorded in Dry Season	Habitat Recorded in Wet Season
Amphibians				
Asian Common Toad	Bufo melanosticus	А	W	
Gunther's Frog	Rana guentheri	А	Sh	S
Destiles	Kana gueninen	A	511	5
Reptiles				
Changeable Lizard	Calotes versicolor	Α	Sh	
Common Rat Snake	Ptyas mucosus	Р	PS	S
Long-tailed Skink	Mabuya longicaudata	А	Sh	
Reeves' Smooth Skink	Scincella reevesii	А	Sh	
	Total Species		6	2

W = Secondary Woodland, S = Shrubland, S = Sandy Shore with Backshore Vegetation, Pd = Pond, D = Village/Modified Area, PS = Project Site

A = Abundant, UC = Uncommon, P = Protected

Table 13Fish Species and Individuals Recorded from the Stream/ Channels at Lung
Mei Study Area

]	Relative Al	oundance		
Scientific Name	Status	Origin	S1	S 2	S 3	S4	Lo Tsz R	iver (S5)	Shan Liu	River (S6)
Scientific Maine	Status	Origin	51	54	65	54	Lower	Upper	Lower	Upper
Guppy Poecilia reticulata	Common	Exotic to China			+			++	++	++
Mosquito Fish <i>Gambusia affinis</i>	Common	Exotic to China			+	+++	++	+++	++	+++
Swordtail Xiphophorus hellerii	Common	Exotic to China							++	
Tilapia Oreochromis niloticus	Common	Exotic to China	W	fish vas		++		+	+	
Variable Platyfish Xiphophorus variatus	Common	Exotic to China	in S	orded 1 and 32.	+		++	+++		+++
Common Mudskipper Periophthalmus modestus	Common	Western Pacific region					+		+	
Common Silver- biddy Gerres oyena	Common	Indo- Pacific region					++		++	

+ = less than 20 individuals; ++ = 20-50 individuals; +++ = more than 50 individuals

For Lo Tsz River and Shan Liu River, Lower = Section of the stream located below Ting Kok Road. Upper = Section of the stream above Ting Kok Road.

Table 14Mean Number of Individuals (m-2) (± S.D.) of Intertidal Organisms Recorded
from the Artificial / Disturbed Shoreline During the Intertidal Survey

	High Intert	idal Zone	Middle Inte	rtidal Zone	Low Intertidal Zone		
Snail							
Nodilittorina radiata	0.8	± 1.8	0		0		
Planaxis sulcatus	2.4	± 5.4	0		96	± 203.7	
Monodonta labio	2.4	± 5.4	18.4	± 15.7	4.8	± 6.6	
Bivalves (% cover)							
Saccostrea cucullata	1.8%	$\pm 2.5\%$	7.0%	$\pm 4.8\%$	38.0%	$\pm 36.8\%$	
Isognomon isognomum	5.4%	$\pm 8.4\%$	5.2%	$\pm 6.1\%$	0.4%	$\pm 0.9\%$	
Barnacles (% cover)							
Balanus amphitrite	0.4%	$\pm 0.9\%$	0.6%	$\pm 0.9\%$	0.0%		

Depth	Sample	Number of individuals	Biomass (g)	Scientific	Family	Order	Class	Phylumn
	1	9	0.4218	Clithon oulaniensis	Neritidae	Archaeogastropoda	Gastropoda	Mollusca
	1	1	0.557	Cerithidea sp.	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
0 m	1	1	0.0118	Diogenes edwardsii	Diogenidae	Anomura	Crustacea	Arthropoda
CD	1	25	0.6334	Batillaria multiformis	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
	1	1	0.0073	Timoclea imbricata	Veneridae	Veneroida	Bivalvia	Mollusca
	1	1	0.0306	Nassarius papillosus	Nassariidae	Stenoglossa	Gastropoda	Mollusca
	2	5	0.1886	Clithon oulaniensis	Neritidae	Archaeogastropoda	Gastropoda	Mollusca
	2	6	1.5772	Balanus albicostatus	Balanudae	Thoracica	Crustacea	Arthropoda
	2	4	0.638	Nassarius papillosus Patillania	Nassariidae	Stenoglossa	Gastropoda	Mollusca
0 m CD	2	28	0.7338	Batillaria multiformis	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
CD	2	1	0.0005	Prionospio sp.	Spionidae	Spionida	Polychaeta	Annelida
	2	1	0.0004	Corophium sp.	Corophiidae	Amphipoda	Crustacea	Arthropoda
	2	1	0.0019	Cirratulus sp.	Cirratulidae	Spionida	Polychaeta	Annelida
	2	1	0.0183	Ruditapes philippinarum	Veneridae	Veneroida	Bivalvia	Mollusca
	3	7	0.3075	Clithon oulaniensis	Neritidae	Archaeogastropoda	Gastropoda	Mollusca
	3	30	0.6624	Batillaria multiformis	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
0 m CD	3	1	0.1849	Nassarius papillosus	Nassariidae	Stenoglossa	Gastropoda	Mollusca
	3	1	0.0105	Timoclea imbricata	Veneridae	Veneroida	Bivalvia	Mollusca
	3	1	0.0008	Prionospio sp.	Spionidae	Spionida	Polychaeta	Annelida
-1 m CD	4	6	0.4666	Cerithidea cingulata	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
CD	4	7	0.3664	Batillaria multiformis	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
	4	7	0.051	Cerithidea sp.	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
-1 m	5	2	0.3196	Nassarius dealbatus	Nassariidae	Stenoglossa	Gastropoda	Mollusca
CD	5	16	0.6292	Batillaria multiformis	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
	5	6	0.5466	Cerithidea cingulata	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
	5	2	0.0142	Iravadia quadrasi	Rissoidae	Mesogastropoda	Gastropoda	Mollusca
-1 m CD	6	2	0.3642	Nassarius dealbatus	Nassariidae	Stenoglossa	Gastropoda	Mollusca
	6	1	0.1924	Saccostrea cucullata	Ostreidae	Pterioida	Bivalvia	Mollusca
	6	16	0.5912	Batillaria multiformis	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
	6	4	0.3419	Cerithidea cingulata	Potamodidae	Mesogastropoda	Gastropoda	Mollusca

Table 15 Benthic Organisms Recorded within the Soft Bottom Habitat of the Project Site

Agreement No. CE 59/2005 (EP)
Development of a Bathing Beach at Lung Mei, Tai Po
Environmental, Drainage and Traffic Impact Assessments - Investigation



Depth	Sample	Number of individuals	Biomass (g)	Scientific	Family	Order	Class	Phylumn
	6	2	0.0151	Iravadia quadrasi	Rissoidae	Mesogastropoda	Gastropoda	Mollusca
	6	1	0.0008	Syllis sp.	Syllidae	Phyllodocida	Polychaeta	Annelida
	6	2	0.0013	Prionospio ehlersi	Spionidae	Spionida	Polychaeta	Annelida
	6	1	0.0035	Ruditapes philippinarum	Veneridae	Veneroida	Bivalvia	Mollusca
	6	1	0.0007	Aonides oxycephala	Spionidae	Spionida	Polychaeta	Annelida
	6	1	0.0069	Modiolus sp.	Mytilidae	Mytiloida	Bivalvia	Mollusca
	6	3	0.1478	Timoclea imbricata	Veneridae	Veneroida	Bivalvia	Mollusca
	6	4	0.0441	Cerithidea sp.	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
-2 m	7	1	0.1674	Nassarius dealbatus	Nassariidae	Stenoglossa	Gastropoda	Mollusca
CD	7	1	0.062	Cerithidea cingulata	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
	7	7	0.1553	Batillaria multiformis	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
	7	1	0.2308	Cerithidea sp.	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
	7	14	0.1009	Batillaria zonalis	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
	7	1	0.0057	Mitrella bella	Pyrenidae	Stenoglossa	Gastropoda	Mollusca
	7	1	0.0161	Assiminea sp.	Assimineidae	Mesogastropoda	Gastropoda	Mollusca
	8	2	0.2347	Nassarius dealbatus	Nassariidae	Stenoglossa	Gastropoda	Mollusca
	8	1	0.651	Barbatia decussata	Arcidae	Arcoida	Bivalvia	Mollusca
	8	2	0.146	Cerithidea cingulata	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
	8	14	0.5686	Batillaria multiformis	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
-2 m CD	8	1	0.0027	Aonides oxycephala	Spionidae	Spionida	Polychaeta	Annelida
	8	2	0.0104	Ruditapes philippinarum	Veneridae	Veneroida	Bivalvia	Mollusca
	8	3	0.0091	Mitrella bella	Pyrenidae	Stenoglossa	Gastropoda	Mollusca
	8	7	0.0532	Batillaria zonalis	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
-2 m	9	1	0.0992	Saccostrea cucullata	Ostreidae	Pterioida	Bivalvia	Mollusca
CD	9	19	0.528	Batillaria multiformis	Potamodidae	Mesogastropoda	Gastropoda	Mollusca
	9	1	0.0931	Timoclea imbricata	Veneridae	Veneroida	Bivalvia	Mollusca
	9	12	0.1179	Batillaria sp.	Potamodidae	Mesogastropoda	Gastropoda	Mollusca



Table 16 General Descriptions of the Seabed and Qualitative Survey Recorded along each Zone

Zone	Description
Artificial / disturbed shoreline at Tai Mei Tuk	The seabed was mainly composed of boulders and bedrocks with sand and rubbles in between. Low cover of mud was also observed on the substratum. Low abundance (< 10 individuals) and cover of coral (< 5 %) were recorded, which were common and widespread species in Hong Kong (<i>Oulastrea crispata</i> and <i>Cyphastrea serailia</i>). Visibility was poor (~1m).
Natural rocky shore at east of Ma Shi Chau	The seabed was mainly composed of boulders and bedrocks with sand and rubbles in between. Low cover of mud was also observed on the substratum. Extremely low abundance (< 3 individuals) and cover of coral (< 5 %) were recorded, which was common and widespread species in Hong Kong (<i>Psammocora superficialis</i>). Visibility was poor (~1m).
Natural shore at east of Yeung Chau	The seabed was mainly composed of rocks, boulders and sands with rubbles in between. Low abundance (< 10 individuals) and cover of coral (< 5 %) were recorded, which was common and widespread species in Hong Kong (<i>Oulastrea crispata</i>). Visibility was poor (~1m).
Soft bottom habitat within the Project Site	The seabed was mainly composed of sandy and small bubbles. No coral was found at this zone. Visibility was around 1.5m.
Soft bottom habitat adjacent to the Project Site	The seabed was composed of sand and mud. No coral was found at this zone. Visibility was poor (\sim 1m).

Location	Transect	Depth	Description
Artificial / disturbed shoreline at Tai Mei Tuk	1	-3 to -5 mPD	The seabed was mainly composed of boulders/bedrocks with rubbles in between. Visibility was fair (~1.0m) along the transect. One colony of hard coral <i>Oulastrea crispata</i> was recorded. One seahorse <i>Hippocampus</i> sp. was recorded. The transect started from east to west direction.
	2	-3 to - 4 mPD	The seabed was mainly composed of boulders/bedrocks with sand and rubbles in between. Visibility was fair (~1.0m) along the transect. No coral was recorded. The transect started from east to west direction.
	3	-3 to -5 mPD	The seabed was composed of boulders/bedrocks and in some parts with sand. Visibility was fair (~1.0m) along the transect. No coral was recorded The transect started from south to north direction.
	`4	-3 to -5 mPD	The seabed was mainly composed of bedrocks/ boulders with sand and rubbles in between. Visibility was fair ($\sim 1m - 1.5m$) along the transect. No coral was recorded. The transect started from south-west to north-east direction.
	5	-2.5 to -6 mPD	The seabed was composed of boulder and bedrocks with sand in between. Visibility was fair (~1m). Two seahorses <i>Hippocampus</i> sp. was recorded. No coral was recorded. The transect started from south-west to north-east direction.
	6	-3 to -6 mPD	The seabed was composed of sand and muddy with some rocks in between. Visibility was fair (~1m). Two hard coral colonies were recorded along the transect which are <i>Oulastrea crispata</i> and <i>Cyphastrea serailia</i> . The transect started from south-east to north-west direction.
	7	-3 to -5 mPD	The seabed was mainly composed with rocks and sandy. Visibility was fair (~1m). One seahorse <i>Hippocampus</i> sp. was recorded. No coral was recorded. The transect started from south to north direction.
	8	-2.5 to -4 mPD	The seabed was mainly composed with bedrocks/boulder with some sand in between. Visibility was fair (~1m). No coral was recorded. The transect started from south to north direction.
	9	-3 to -6 mPD	The seabed was mainly with mud with rocks in between. Visibility was fair (~1m). Four hard colonies were recorded along the transect which are all <i>Oulastrea crispata</i> . The transect started from south to north direction.
	10	-2.5 to -5 mPD	The seabed was mainly composed with bedrocks/boulders with mud and sand in between. Visibility was fair (~1m). No coral was recorded. The transect started from south to north direction.
Natural rocky shore at east of Ma Shi Chau	11	-3 to -5 mPD	The seabed was mainly composed of boulders/bedrocks with sandy in between. Visibility was fair (~1.0m) along the transect. No coral was found at this area. The transect started from south-west to north-east direction.
Shi Chau	12	-3 to – 5 mPD	The seabed was mainly composed of boulders/bedrocks with sand and rubbles in between. Visibility was fair (~1.0m) along the transect. No coral was recorded. The transect started from south-west to north-east direction.
	13	-2.5 to -5 mPD	The seabed was composed of boulders/bedrocks with sand and rubbles in between. Visibility was fair (~1.0m) along the transect. No coral was recorded. The transect started from west to east direction.
	14	-2.5 to -4 mPD	The seabed was mainly composed of bedrocks/ boulders with sand and rubbles in between. Visibility was fair ($\sim 1m - 1.5m$) along the transect. Two hard corals were recorded along the transect which are all <i>Psammocora superficialis</i> . The transect started from north-west to southeast direction.

Table 17Detail Descriptions of the Seabed and Qualitative Survey Recorded along each
Rapid Ecological Assessment (REA) Transect

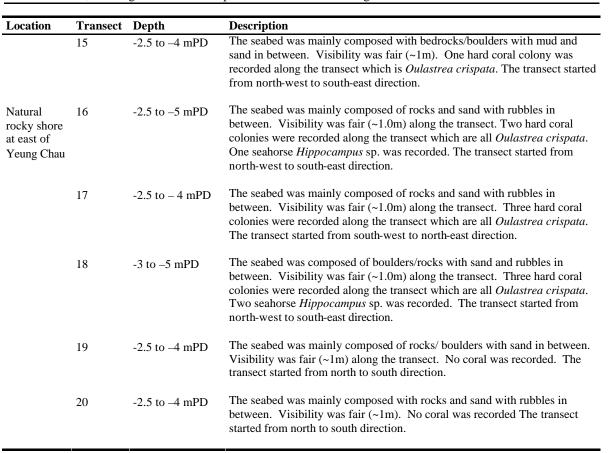


Table 18 Seabed Attributes Along the Rapid Ecological Assessment (REA) Transects

Location		A	rtificia	l / distu	rbed sl	norelin	e at Ta	i Mei T	uk		Natı		cky sho 1 Shi Cl		st of	Natı	iral roc Ye	ky sho ung Ch		ist of
Transect	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Seabed attributes ^a																				
Hard substrate																				
Continuous pavement																				
Bedrock	3	3	3	3	3			3		3	3	3	2	3	3					
Rubble	1	1		1		2	2		1		1	1	1			1	1	1	1	1
Sand	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	2	2	1	1	2
Silt						3			3	1					1					
Boulders – large	2	2	2	2	2		3	2			2	2	2	2	2	2	2	3	2	2
Boulders - small					1			1	1	2			1	1	1	3	2	1	2	2
Ecological attributes ^a																				
Hard coral	1					1			1					1	1	1	1	1		
Dead standing coral																				
Soft coral																				
Antipatharia																				
Macroalgae																				

a Note: 1 = 1-10% Cover, 2 = 11-30% Cover, 3 = 31-50% Cover, 4 = 51-75% Cover, 5 = 76-100% Cover.



Transect	Position (m)	Species	Approx. Size (cm)
1	3.5	Oulastrea crispata	3
	6.7	Oulastrea crispata	5
б	4.8	Oulastrea crispata	5
	9.5	Cyphastrea serialia	20
9	5.6	Oulastrea crispata	6
	5.6	Oulastrea crispata	5
	8.5	Oulastrea crispata	9
	8.6	Oulastrea crispata	7
.4	5.6	Psammocora superficialis	12
	7.8	Psammocora superficialis	14
5	5.6	Oulastrea crispata	5
16	5.3	Oulastrea crispata	4
	7.9	Oulastrea crispata	6
17	2.5	Oulastrea crispata	5
	4.7	Oulastrea crispata	7
	8.8	Oulastrea crispata	3
8	2.0	Oulastrea crispata	8
	4.4	Oulastrea crispata	4
	4.7	Oulastrea crispata	5

Table 19Coral Species and Their Relative Sizes Recorded Along the Rapid Ecological
Assessment (REA) Transects

Note: The three coral species *Oulastrea crispate, Cyphastrea serailia* and *Psammocora superficialis* are regarded as common, dominant and abundant species in Hong Kong

Table 20 Hard Coral Species Recorded During the Rapid Ecological Assessment (REA)

Location Transect	Abundance																			
	Artificial shoreline at Tai Mei Tuk						Natural rocky shore at east of Ma Shi Chau							Natural rocky shore at east of Yeung Chau						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Hard Coral Species																				
Cyphastrea serailia	-	-	-	-	-	1	-	-	-	-										
Oulastrea crispata	2	-	-	-	-	1	-	-	4	-	-	-	-	-	1	2	3	3	-	-
Psammocora superficialis											-	-	-	2	-					
Total Number of Species	1	0	0	0	0	2	0	0	1	0	0	0	0	1	1	1	1	1	0	0