

Annex 8B: Faunal Species Recorded within the Project Site and Study Area

Table 1. Maximum count of mammal species recorded from the Project Site and the 500m Study Area from August to November 2019

Species	Conservation and Protection Status ¹	Status in HK ²	Project Site	500m Study Area	
			Habitat ³	Habitat ³	
			-	PL	RB
Small Indian Civet <i>Viverricula indica</i>	RLCV(VU); CSMPS(II); CITES(III); Cap.170; Cap.586	Very Common			1
Domestic Dog <i>Canis lupus familiaris</i>	-	Common		3	
Leopard Cat <i>Prionailurus bengalensis</i>	RLCV(VU); CITES(II); Cap.170; Cap.586	Uncommon		1	
Total number of species recorded			0	2	1

*Species of conservation importance are highlighted in bold type.

Notes:

- Conservation and protection status refers to Fellowes *et al.* (2002), Red List of China's Vertebrates (Jiang *et al.* 2016), IUCN (2019), China State Major Protection Status, CITES (2019), Cap. 170 and Cap. 586.
 - Conservation status by Fellowes *et al.* (2002): LC = Local Concern; PRC = Potential Regional Concern; RC = Regional Concern; PGC = Potential Global Concern; GC = Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence.
 - Conservation status by Red List of China's Vertebrates (RLCV) (Jiang *et al.* 2016): NT = Near Threatened; VU = Vulnerable; EN = Endangered; CR = Critically Endangered.
 - Conservation status by IUCN (2019): NT = Near Threatened; VU = Vulnerable; EN = Endangered; CR = Critically Endangered.
 - Protection status by China State Major Protection Status (CSMPS): II = Class II Protected Species in China.
 - Protection status by CITES (2019): I = Listed in CITES Appendix I; II = Listed in CITES Appendix II; III = Listed in CITES Appendix III.
 - Cap. 170 = Wild Animals Protection Ordinance.
 - Cap. 586 = Protection of Endangered Species of Animals and Plants Ordinance.
- Status in Hong Kong follows Carey *et al.* (2001).
- Habitats: CW = Channelised Watercourse; YLTN = Yuen Long Town Nullah; SPR = Shan Pui River; MCW = Minor Channelised Watercourses; DA = Developed Area; AG = Agricultural Land; IF = In Flight; MG = mangrove; PL = Plantation; PO = Pond; RB = Reedbed; WC = Semi-natural Watercourse; KTR = Old Kam Tin River; SH = Shrubland; TM = Tidal Marsh

Table 2. Maximum count of avifauna species recorded from the Project Site and the 500m Study Area from August to November 2019

Species	Conservation and Protection Status ¹	Principal Status ²	Wetland-dependent	Project Site				500m Study Area															
				Habitat ³				Habitat ³															
				CW			DA	AG	CW					DA	IF	MG	PL	PO	RB	WC	SH	TM	
				YLTN S2	YLTN S3	YLTN S4			MCW	SPR	YLTN S1	YLTN S2	YLTN S4							KTR			
Eurasian Teal <i>Anas crecca</i>	RC	W	Y							3											12		
Little Grebe <i>Tachybaptus ruficollis</i>	LC	P	Y																		2		
Black-faced Spoonbill <i>Platalea minor</i>	PGC; RLCV(EN); IUCN(EN); CSMPS(II)	W	Y																				
Yellow Bittern <i>Ixobrychus sinensis</i>	(LC)	M,Su	Y							1												2	
Black-crowned Night Heron <i>Nycticorax nycticorax</i>	(LC)	P	Y																		1	1	
Striated Heron <i>Butorides striata</i>	(LC)	Su	Y														1						
Chinese Pond Heron <i>Ardeola bacchus</i>	PRC (RC)	P	Y			3	2										1				3	2	1
Grey Heron <i>Ardea cinerea</i>	PRC	W	Y			1															3	3	3

Species	Conservation and Protection Status ¹	Principal Status ²	Wetland-dependent	Project Site			500m Study Area																	
				Habitat ³			Habitat ³																	
				CW			DA	AG	CW					DA	IF	MG	PL	PO	RB	WC	SH	TM		
				YLTN S2	YLTN S3	YLTN S4			MCW	SPR	YLTN S1	YLTN S2	YLTN S4							KTR				
White-throated Kingfisher <i>Halcyon smyrnensis</i>	(LC)	AM,P	Y							1														
Common Kingfisher <i>Alcedo atthis</i>	-	AM,P	Y							1						1								
Pied Kingfisher <i>Ceryle rudis</i>	(LC)	R	Y							2														
Eurasian Wryneck <i>Jynx torquilla</i>	-	W,M	N																	1				
Long-tailed Shrike <i>Lanius schach</i>	-	R	N				1										1			1				
Black-naped Oriole <i>Oriolus chinensis</i>	LC	AM	N																			1		
Black Drongo <i>Dicrurus macrocercus</i>	-	M,Su	N																		1			
Hair-crested Drongo <i>Dicrurus hottentottus</i>	-	M,Su,W	N																		1			
Red-billed Blue Magpie <i>Urocissa erythroryncha</i>	-	R	N											1										
Oriental Magpie <i>Pica serica</i>	-	R	N											2										
Collared Crow <i>Corvus torquatus</i>	LC; RLCV(NT); IUCN(VU)	R	Y																			2		1
Large-billed Crow <i>Corvus macrorhynchos</i>	-	R	N																	1			1	
Cinereous Tit <i>Parus cinereus</i>	-	R	N											6		1	8			1				
Red-whiskered Bulbul <i>Pycnonotus jocosus</i>	-	R	N					2						2	34		2	11		7			6	2
Chinese Bulbul <i>Pycnonotus sinensis</i>	-	R	N											4			6			2				1
Sooty-headed Bulbul <i>Pycnonotus aurigaster</i>	-	R	N																	2			3	
Barn Swallow <i>Hirundo rustica</i>	-	SpM,Su	N											3							2			5
Yellow-browed Warbler <i>Phylloscopus inornatus</i>	-	W	N											2							2			
Pallas's Leaf Warbler <i>Phylloscopus proregulus</i>	-	W	N																		3		1	
Dusky Warbler <i>Phylloscopus fuscatus</i>	-	W	N							1				1		3	1			7	5			2
Sakhalin Leaf Warbler <i>Phylloscopus borealoides</i>	-	AM	N																		1			
Pale-legged Leaf Warbler <i>Phylloscopus tenellipes</i>	-	AM	N																		3			
Arctic Warbler <i>Phylloscopus borealis</i>	-	AM	N																		1			
Oriental Reed Warbler <i>Acrocephalus orientalis</i>	-	M	Y														1				13	4		

Species	Conservation and Protection Status ¹	Principal Status ²	Wetland-dependent	Project Site			500m Study Area															
				Habitat ³			Habitat ³															
				CW			DA	AG	CW					DA	IF	MG	PL	PO	RB	WC	SH	TM
				YLTN S2	YLTN S3	YLTN S4			MCW	SPR	YLTN S1	YLTN S2	YLTN S4							KTR		
Black-browed Reed Warbler <i>Acrocephalus bistrigiceps</i>	-	M	Y																28	28		
Thick-billed Warbler <i>Arundinax aedon</i>	LC	AM	N																1			
Pallas's Grasshopper Warbler <i>Helopsaltes certhiola</i>	LC	AM	Y																3	1		
Lanceolated Warbler <i>Locustella lanceolata</i>	RLCV(NT)	AM	N																1			
Yellow-bellied Prinia <i>Prinia flaviventris</i>	-	R	N							1									6	6	1	1
Plain Prinia <i>Prinia inornata</i>	-	R	N							3									7	5		2
Common Tailorbird <i>Orthotomus sutorius</i>	-	R	N											2			2				3	
Masked Laughingthrush <i>Pterorhinus perspicillatus</i>	-	R	N					3						4			7		16	2	3	
Swinhoe's White-eye <i>Zosterops simplex</i>	-	R,?W	N									4				10						
Crested Myna <i>Acridotheres cristatellus</i>	-	R	N				3						3	20			5	3	2			
Common Myna <i>Acridotheres tristis</i>	-	R	N	4										3			4					
Black-collared Starling <i>Gracupica nigricollis</i>	-	R	N	12			3					6	4	17			3		1		2	
Grey-backed Thrush <i>Turdus hortulorum</i>	-	W	N														1					
Oriental Magpie Robin <i>Copsychus saularis</i>	-	R	N										1	8		2	3		1	2		
Asian Brown Flycatcher <i>Muscicapa dauurica</i>	-	M,W	N														4		1	1		
Siberian Rubythroat <i>Calliope calliope</i>	-	W	N																1	1		
Red-throated Flycatcher <i>Ficedula albicilla</i>	-	AM,W	N													2	2					
Daurian Redstart <i>Phoenicurus aureus</i>	-	W	N											12			2	1				
Stejneger's Stonechat <i>Saxicola stejnegeri</i>	-	W,M	N																4	4		
Eurasian Tree Sparrow <i>Passer montanus</i>	-	R	N					3				17		35			4				4	
Scaly-breasted Munia <i>Lonchura punctulata</i>	-	R	N																18	12		
Eastern Yellow Wagtail <i>Motacilla tschutschensis</i>	-	M,W	N							1												
Grey Wagtail <i>Motacilla cinerea</i>	-	W	N						2		3		2									
White Wagtail <i>Motacilla alba</i>	-	W,R	N		2		3		2	5		3	4	4						5		

Species	Conservation and Protection Status ¹	Principal Status ²	Wetland-dependent	Project Site			500m Study Area																
				Habitat ³			Habitat ³																
				CW			DA	AG	CW					DA	IF	MG	PL	PO	RB	WC	SH	TM	
				YLTN S2	YLTN S3	YLTN S4			MCW	SPR	YLTN S1	YLTN S2	YLTN S4							KTR			
Olive-backed Pipit <i>Anthus hodgsoni</i>	-	W	N					1							2			5					
Chestnut-eared Bunting <i>Emberiza fucata</i>	LC	M	N																	1			
Little Bunting <i>Emberiza pusilla</i>	-	W	N																	3		4	
Total number of specie recorded				3	6	2	6	4	2	24	1	6	18	20	3	12	27	8	38	22	13	7	

*Species of conservation importance are highlighted in bold type.

Notes:

- Conservation and protection status refers to Fellowes *et al.* (2002), Red List of China's Vertebrates (Jiang *et al.* 2016), IUCN (2019), China State Major Protection Status, CITES (2019), Cap. 170 and Cap. 586.
 - Conservation status by Fellowes *et al.* (2002): LC = Local Concern; PRC = Potential Regional Concern; RC = Regional Concern; PGC = Potential Global Concern; GC = Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence.
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 - Protection status by China State Major Protection Status (CSMPS): II = Class II Protected Species in China.
 - Protection status by CITES (2019): I = Listed in CITES Appendix I; II = Listed in CITES Appendix II; III = Listed in CITES Appendix III.
 - All wild birds in Hong Kong are protected under Cap. 170 Wild Animals Protection Ordinance.
 - Cap. 586 = Protection of Endangered Species of Animals and Plants Ordinance.
- Status in Hong Kong follows Carey *et al.* (2001).
- Habitats: CW = Channelised Watercourse; YLTN = Yuen Long Town Nullah; SPR = Shan Pui River; MCW = Minor Channelised Watercourses; DA = Developed Area; AG = Agricultural Land; IF = In Flight; MG = mangrove; PL = Plantation; PO = Pond; RB = Reedbed; WC = Semi-natural Watercourse; KTR = Old Kam Tin River; SH = Shrubland; TM = Tidal Marsh

Table 3. Maximum count of amphibian species recorded from the Project Site and the 500m Study Area from August to November 2019

Species	Conservation and Protection Status ¹	Status in HK ²	Project Site	500m Study Area						
			Habitat ³	Habitat ³						
			-	AG	DA	PL	PO	RB	SH	
Asian Common Toad <i>Duttaphrynus melanostictus</i>	-	Widely distributed in Hong Kong.			3	4	3			3
Asiatic Painted Frog <i>Kaloula pulchra</i>	-	Widely distributed in Hong Kong.		1	3	2				1
Ornate Pigmy Frog <i>Microhyla fissipes</i>	-	Widely distributed in Hong Kong.							1	
Paddy Frog <i>Fejervarya multistriata</i>	-	Widely distributed in Hong Kong.			1		3	1		2
Günther's Frog <i>Sylvirana guentheri</i>	-	Widely distributed throughout Hong Kong.					6	6		
Brown Tree Frog <i>Polypedates megacephalus</i>	-	Widely distributed throughout Hong Kong.		2	1	3				1
Greenhouse Frog <i>Eleutherodactylus planirostris</i>	-	(Introduced species)			7	6				
Total number of species recorded			0	2	5	4	3	3	3	4

Notes:

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 - Conservation status by Fellowes *et al.* (2002): LC = Local Concern; PRC = Potential Regional Concern; RC = Regional Concern; PGC = Potential Global Concern; GC = Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence.

- b. Conservation status by Red List of China's Vertebrates (RLCV) (Jiang *et al.* 2016): NT = Near Threatened; VU = Vulnerable; EN = Endangered; CR = Critically Endangered.
- c. Conservation status by IUCN (2019): NT = Near Threatened; VU = Vulnerable; EN = Endangered; CR = Critically Endangered.
- d. Protection status by China State Major Protection Status (CSMPS): II = Class II Protected Species in China.
- e. Protection status by CITES (2019): I = Listed in CITES Appendix I; II = Listed in CITES Appendix II; III = Listed in CITES Appendix III.
- f. Cap. 170 = Wild Animals Protection Ordinance.
- g. Cap. 586 = Protection of Endangered Species of Animals and Plants Ordinance.
2. Status in Hong Kong follows AFCD (2019).
3. Habitats: CW = Channelised Watercourse; YLTN = Yuen Long Town Nullah; SPR = Shan Pui River; MCW = Minor Channelised Watercourses; DA = Developed Area; AG = Agricultural Land; IF = In Flight; MG = mangrove; PL = Plantation; PO = Pond; RB = Reedbed; WC = Semi-natural Watercourse; KTR = Old Kam Tin River; SH = Shrubland; TM = Tidal Marsh

Table 4. Maximum count of reptile species recorded from the Project Site and the 500m Study Area from August to November 2019

Species	Conservation and Protection Status ¹	Status in HK ²	Project Site	500m Study Area						
			Habitat ³	Habitat ³						
			-	CW	DA	PL	RB	SH	TM	
Red-eared Slider <i>Trachemys scripta</i>	-	Widely distributed and commonly found in reservoirs or ponds in urban parks.		1				2		
Chinese Soft-shelled Turtle <i>Pelodiscus sinensis</i>	GC; RLCV(EN); IUCN(VU); Cap.170	Locally found in reservoirs and fishponds in Deep Bay area.						1		
Changeable Lizard <i>Calotes versicolor</i>	-	Widely distributed throughout Hong Kong.			2				1	
Long-tailed Skink <i>Eutropis longicaudata</i>	-	Widely distributed throughout Hong Kong.			1				1	
Bowring's Gecko <i>Hemidactylus bowringii</i>	-	Distributed throughout Hong Kong.			12		6			
Checked Keelback <i>Fowlea flavipunctatus</i>	-	Widely distributed in streams in the New Territories and Lantau Island.								1
Total number of species recorded			0	1	3	1	2	2	2	1

*Species of conservation importance are highlighted in bold type.

Notes:

- Conservation and protection status refers to Fellowes *et al.* (2002), Red List of China's Vertebrates (Jiang *et al.* 2016), IUCN (2019), China State Major Protection Status, CITES (2019), Cap. 170 and Cap. 586.
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 - Conservation status by IUCN (2019): NT = Near Threatened; VU = Vulnerable; EN = Endangered; CR = Critically Endangered.
 - Protection status by China State Major Protection Status (CSMPS): II = Class II Protected Species in China.
 - Protection status by CITES (2019): I = Listed in CITES Appendix I; II = Listed in CITES Appendix II; III = Listed in CITES Appendix III.
 - Cap. 170 = Wild Animals Protection Ordinance.
 - Cap. 586 = Protection of Endangered Species of Animals and Plants Ordinance.
- Status in Hong Kong follows AFCD (2019).
- Habitats: CW = Channelised Watercourse; YLTN = Yuen Long Town Nullah; SPR = Shan Pui River; MCW = Minor Channelised Watercourses; DA = Developed Area; AG = Agricultural Land; IF = In Flight; MG = mangrove; PL = Plantation; PO = Pond; RB = Reedbed; WC = Semi-natural Watercourse; KTR = Old Kam Tin River; SH = Shrubland; TM = Tidal Marsh

Table 5. Maximum count of butterfly species recorded from the Project Site and the 500m Study Area from August to November 2019

Species	Conservation and Protection Status ¹	Status in HK ²	Project Site	500m Study Area				
			Habitat ³	Habitat ³				
			DA	DA	MG	PL	SH	TM
Common Awl <i>Hasora badra</i>	LC	Very Rare			1			
Formosan Swift <i>Borbo cinnara</i>	-	Common		1		2	1	1

Species	Conservation and Protection Status ¹	Status in HK ²	Project Site	500m Study Area				
			Habitat ³	Habitat ³				
			DA	DA	MG	PL	SH	TM
Common Straight Swift <i>Parnara guttata</i>	-	Common						1
Lesser Band Dart <i>Potanthus trachala</i>	-	Rare					1	
Indian Palm Bob <i>Suastus gremius</i>	-	Uncommon					6	
Greenish Palm Dart <i>Telicota ancilla</i>	-	Uncommon					1	
Pale Palm Dart <i>Telicota colon</i>	LC	Rare					1	
Purple Sapphire <i>Heliophorus epicles</i>	-	Common						
Forget-me-not <i>Catochrysops strabo</i>	-	Very Rare; Species of Conservation Concern					12	
Lime Blue <i>Chilades lajus</i>	-	Common					2	
Dark Cerulean <i>Jamides bochus</i>	-	Common		1			5	
Malayan <i>Megisba malaya</i>	LC	Very Rare; Species of Conservation Concern					5	
Quaker <i>Neopithecops zalmora</i>	-	Uncommon		1			1	
Tailless Line Blue <i>Prosotas dubiosa</i>	-	Vagrant					8	
Pale Grass Blue <i>Pseudozizeeria maha</i>	-	Very Common		4			2	
Lesser Grass Blue <i>Zizina otis</i>	-	Common					4	
Tiny Grass Blue <i>Zizula hylax</i>	-	Very Rare; Species of Conservation Concern					8	
Silver Streak Blue <i>Iraota timoleon</i>	-	Uncommon					1	
Chocolate Royal <i>Remelana jangala</i>	-	Common			2			
Club Silverline <i>Spindasis syama</i>	-	Uncommon					3	
Plum Judy <i>Abisara echerius</i>	-	Very Common					3	
Tawny Rajah <i>Charaxes bernardus</i>	-	Common					1	
Common Tiger <i>Danaus genutia</i>	-	Common		3		1	2	
Common Indian Crow <i>Euploea core</i>	-	Common		2		1	3	
Blue-spotted Crow <i>Euploea midamus</i>	-	Very Common		2			3	
Blue Tiger <i>Tirumala limniace</i>	-	Common		1				
Angled Castor <i>Ariadne ariadne</i>	-	Common		3		2		

Species	Conservation and Protection Status ¹	Status in HK ²	Project Site	500m Study Area				
			Habitat ³	Habitat ³				
			DA	DA	MG	PL	SH	TM
Staff Sergeant <i>Athyma selenophora</i>	-	Common					1	
White-edged Blue Baron <i>Euthalia phemius</i>	-	Common		1			1	
Red-ring Skirt <i>Hestina assimilis</i>	-	Common					2	
Great Egg-fly <i>Hypolimnas bolina</i>	-	Common				1	5	
Danaid Egg-fly <i>Hypolimnas misippus</i>	LC	Uncommon					3	
Short-banded Sailer <i>Phaedyma columella</i>	-	Common					2	
Common Palmfly <i>Elymnias hypermnestra</i>	-	Common		2			3	
Dark Evening Brown <i>Melanitis phedima</i>	-	Uncommon		2				
Dark-brand Bush Brown <i>Mycalesis mineus</i>	-	Very Common					3	
South China Bush Brown <i>Mycalesis zonata</i>	-	Common					2	
Common Five-ring <i>Ypthima baldus</i>	-	Very Common		1			2	
Common Mime <i>Chilasa clytia</i>	-	Common					4	
Tailed Jay <i>Graphium agamemnon</i>	-	Common					5	
Common Bluebottle <i>Graphium sarpedon</i>	-	Very Common					6	
Chinese Peacock <i>Papilio bianor</i>	-	Common					1	
Red Helen <i>Papilio helenus</i>	-	Very Common					2	
Great Mormon <i>Papilio memnon</i>	-	Very Common		3			2	
Paris Peacock <i>Papilio paris</i>	-	Very Common					3	
Common Mormon <i>Papilio polytes</i>	-	Very Common	1	1		5	8	
Spangle <i>Papilio protenor</i>	-	Very Common		2			3	
Swallowtail <i>Papilio xuthus</i>	-	Rare					1	
Lemon Emigrant <i>Catopsilia pomona</i>	-	Common		2		3		
Mottled Emigrant <i>Catopsilia pyranthe</i>	-	Very Common	1					
Three-spot Grass Yellow <i>Eurema blanda</i>	-	Common					2	
Common Grass Yellow <i>Eurema hecabe</i>	-	Very Common		3		2	5	

Species	Conservation and Protection Status ¹	Status in HK ²	Project Site	500m Study Area				
			Habitat ³	Habitat ³				
			DA	DA	MG	PL	SH	TM
Red-base Jezebel <i>Delias pasithoe</i>	-	Very Common		2	1		1	
Great Orange Tip <i>Hebomoia glaucippe</i>	-	Common		1				
Indian Cabbage White <i>Pieris canidia</i>	-	Very Common		5		1		
Total number of species recorded			2	21	3	9	44	2

*Species of conservation importance are highlighted in bold type.

Notes:

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 - Conservation status by Fellowes *et al.* (2002): LC = Local Concern; PRC = Potential Regional Concern; RC = Regional Concern; PGC = Potential Global Concern; GC = Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence.
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 - Cap. 170 = Wild Animals Protection Ordinance.
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- Status in Hong Kong follows AFCD (2019).
- Habitats: CW = Channelised Watercourse; YLTN = Yuen Long Town Nullah; SPR = Shan Pui River; MCW = Minor Channelised Watercourses; DA = Developed Area; AG = Agricultural Land; IF = In Flight; MG = mangrove; PL = Plantation; PO = Pond; RB = Reedbed; WC = Semi-natural Watercourse; KTR = Old Kam Tin River; SH = Shrubland; TM = Tidal Marsh

Table 6. Maximum count of odonate species recorded from the Project Site and the 500m Study Area from August to November 2019

Species	Conservation and Protection Status ¹	Status in HK ²	Project Site	500m Study Area						
			Habitat ³	Habitat ³						
			CW	CW	MG	PL	PO	RB	SH	TM
Lesser Emperor <i>Anax parthenope</i>	-	Common					1			
Regal Pond Cruiser <i>Epopthemia elegans</i>	-	Common					1		1	
Asian Pintail <i>Acisoma panorpoides</i>	-	Common						1		
Blue Dasher <i>Brachydiplax chalybea</i>	-	Common			1		3	2		
Asian Amberwing <i>Brachythemis contaminata</i>	-	Abundant	1	1	1		5			2
Pied Percher <i>Neurothemis tullia</i>	-	Common					1			
Marsh Skimmer <i>Orthetrum luzonicum</i>	-	Abundant						1		
Green Skimmer <i>Orthetrum sabina</i>	-	Abundant		2			2	1		
Wandering Glider <i>Pantala flavescens</i>	-	Abundant				2				2
Pied Skimmer <i>Pseudothemis zonata</i>	-	Common					1			

Species	Conservation and Protection Status ¹	Status in HK ²	Project Site	500m Study Area							
			Habitat ³	Habitat ³							
			CW	CW	MG	PL	PO	RB	SH	TM	
Variegated Flutterer <i>Rhyothemis variegata</i>	-	Common		2	2			2	3		15
Evening Skimmer <i>Tholymis tillarga</i>	-	Common						1			
Saddlebag Glider <i>Tramea virginia</i>	-	Abundant							1		
Total number of species recorded			1	3	3	1	9	6	1	3	

Notes:

- Conservation and protection status refers to Fellowes *et al.* (2002), Red List of China's Vertebrates (Jiang *et al.* 2016), IUCN (2019), China State Major Protection Status, CITES (2019), Cap. 170 and Cap. 586.
 - Conservation status by Fellowes *et al.* (2002): LC = Local Concern; PRC = Potential Regional Concern; RC = Regional Concern; PGC = Potential Global Concern; GC = Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence.
 - Conservation status by Red List of China's Vertebrates (RLCV) (Jiang *et al.* 2016): NT = Near Threatened; VU = Vulnerable; EN = Endangered; CR = Critically Endangered.
 - Conservation status by IUCN (2019): NT = Near Threatened; VU = Vulnerable; EN = Endangered; CR = Critically Endangered.
 - Protection status by China State Major Protection Status (CSMPS): II = Class II Protected Species in China.
 - Protection status by CITES (2019): I = Listed in CITES Appendix I; II = Listed in CITES Appendix II; III = Listed in CITES Appendix III.
 - Cap. 170 = Wild Animals Protection Ordinance.
 - Cap. 586 = Protection of Endangered Species of Animals and Plants Ordinance.
- Status in Hong Kong follows AFCD (2019).
- Habitats: CW = Channelised Watercourse; YLTN = Yuen Long Town Nullah; SPR = Shan Pui River; MCW = Minor Channelised Watercourses; DA = Developed Area; AG = Agricultural Land; IF = In Flight; MG = mangrove; PL = Plantation; PO = Pond; RB = Reedbed; WC = Semi-natural Watercourse; KTR = Old Kam Tin River; SH = Shrubland; TM = Tidal Marsh

Table 7. Relative abundance of freshwater fish species recorded from the Project Site and the 500m Study Area from August to November 2019

Species	Conservation and Protection Status ¹	Status in HK ²	Project Site	500m Study Area			
			Habitat ³	Habitat ³			
			CW	CW		RB	WC
			YLTN S3	SPR	YLTN S4		
Indo-Pacific Tarpon <i>Megalops cyprinoides</i>	-	-		+		+	
North African Catfish <i>Clarias gariepinus</i>	-	-			+		
Grey Mullet <i>Mugil cephalus</i>	-	Common		+	+		++
Greenback Mullet <i>Planiliza subviridis</i>	-	-				++	
Mosquito Fish <i>Gambusia affinis</i>	-	Common				+++	
Unidentified Glass Perchlet <i>Ambassis sp.</i>	-	-		++++		+++	+++
Climbing Perch <i>Anabas testudineus</i>	-	-				+	
Redbelly Tilapia <i>Coptodon zillii</i>	-	Common				+++	
Mozambique Tilapia <i>Oreochromis mossambicus</i>	IUCN(NT)*	Common			++	+++	
Nile Tilapia <i>Oreochromis niloticus</i>	-	Common	++	+++	++	+++	
Bluespotted Mudskipper <i>Boleophthalmus pectinirostris</i>	-	-		++			

Species	Conservation and Protection Status ¹	Status in HK ²	Project Site	500m Study Area				
			Habitat ³	Habitat ³				
			CW	CW			RB	WC
			YLTN S3	SPR	YLTN S4	KTR		
<i>Gobiopterus macrolepis</i>	RLCV(VU)	-		+++	+++	++++		
<i>Pseudogobius taijiangensis</i>	-	-		++		++	++	
Spotted Scat <i>Scatophagus argus</i>	-	Common				1		
Spotted Snakehead <i>Channa maculata</i>	-	Uncommon		+				
Total number of species recorded			1	8	5	11	3	

*Species of conservation importance are highlighted in bold type.

Key for relative abundance: + = 1-10; ++ = 11-50; +++ = 51-100; ++++ = >100

Notes:

- Conservation and protection status refers to Fellowes *et al.* (2002), Red List of China's Vertebrates (Jiang *et al.* 2016), IUCN (2019), China State Major Protection Status, CITES (2019), Cap. 170 and Cap. 586.
 - Conservation status by Fellowes *et al.* (2002): LC = Local Concern; PRC = Potential Regional Concern; RC = Regional Concern; PGC = Potential Global Concern; GC = Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence.
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 - Cap. 170 = Wild Animals Protection Ordinance.
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- Status in Hong Kong follows AFCD (2019).
- Habitats: CW = Channelised Watercourse; YLTN = Yuen Long Town Nullah; SPR = Shan Pui River; MCW = Minor Channelised Watercourses; DA = Developed Area; AG = Agricultural Land; IF = In Flight; MG = mangrove; PL = Plantation; PO = Pond; RB = Reedbed; WC = Semi-natural Watercourse; KTR = Old Kam Tin River; SH = Shrubland; TM = Tidal Marsh

Table 8. Relative abundance of aquatic invertebrates species recorded from the Project Site and the 500m Study Area from August to November 2019

Species	Conservation and Protection Status ¹	Status in HK ²	Project Site	500m Study Area				
			Habitat ³	Habitat ³				
			-	CW			RB	WC
				SPR	YLTN S1	YLTN S4		
Freshwater Shrimp <i>Caridina cf. longirostris</i>	-	-		+			++	
Freshwater Shrimp <i>Coutierella tonkinensis</i>	-	-		+		++	++	++
Freshwater Prawn <i>Macrobrachium nipponense</i>	-	-		+				+
Chinese White Shrimp <i>Fenneropenaeus cf. chinensis</i>	-	-					+	
Greasyback Shrimp <i>Metapenaeus ensis</i>	CSRL(VU)	-		++			++	++
Mitten Crab <i>Eriocheir hepuensis</i>	-	-						+
Crab <i>Varuna litterata</i>	-	-				+		+
Mud Crab	-	-		+				

Species	Conservation and Protection Status ¹	Status in HK ²	Project Site	500m Study Area				
			Habitat ³	Habitat ³				
			-	CW			RB	WC KTR
SPR	YLTN S1	YLTN S4						
<i>Scylla serrata</i>								
Apple Snail <i>Pomacea canaliculata</i>	-	-		++	++	++		
Freshwater Snail <i>Melanooides tuberculata</i>	-	-		++		+++	++	+
Freshwater Snail <i>Sermyla riqueti</i>	-	-		++		+++	++	
Freshwater Snail <i>Tarebia granifera</i>	-	-					++	
Total number of species recorded			0	8	1	5	7	6

*Species of conservation importance are highlighted in bold type.

Key for relative abundance: + = 1-10; ++ = 11-50; +++ = 51-100; ++++ = >100

Notes:

- Conservation and protection status refers to Fellowes *et al.* (2002), Red List of China's Vertebrates (Jiang *et al.* 2016), IUCN (2019), China State Major Protection Status, CITES (2019), Cap. 170 and Cap. 586.
 - Conservation status by Fellowes *et al.* (2002): LC = Local Concern; PRC = Potential Regional Concern; RC = Regional Concern; PGC = Potential Global Concern; GC = Global Concern. Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence.
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Table 9. Abundance of Mai Po Bent-winged Firefly recorded from August to September 2019

Habitat		August	September
Project Site	-	0	0
Study Area	Channelised Watercourse	1	1
	Developed Area	2	3
	Mangrove	11	12
	Tidal Marsh	10	6
Total no. of individual recorded		24	22