

Appendix 8.4A Avifauna Recorded within the Assessment Area

Common Name <sup>(1)</sup>	Scientific Name	Distribution in Hong Kong <sup>(2)</sup>	Principal Status <sup>(3)</sup>	Level of Concern <sup>(4)</sup>	Protection Status in China <sup>(5)</sup>	China Red Data Book <sup>(6)</sup>	Red List of China's Vertebrates <sup>(16)</sup>	IUCN Red List (Version 2017.2) <sup>(7)</sup>	Project Area: Developed Area	Developed Area	Plantation	Orchard	Shrubland	Grassland	Reedbed	Mangrove	Pond	Modified Watercourse	In Flight
Eurasian Wigeon <sup>(8)</sup>	<i>Anas penelope</i>	Common	W	RC	-	-	-	-										++	
Northern Shoveler <sup>(8)</sup>	<i>Anas clypeata</i>	Abundant	W	RC	-	-	-	-									+	++	
Northern Pintail <sup>(8)</sup>	<i>Anas acuta</i>	Abundant	W	RC	-	-	-	-										+	
Eurasian Teal <sup>(8)</sup>	<i>Anas crecca</i>	Common	W	RC	-	-	-	-										++	
Tufted Duck <sup>(8)</sup>	<i>Aythya fuligula</i>	Uncommon	W	LC	-	-	-	-									+	+	
Smew <sup>(8)</sup>	<i>Mergellus albellus</i>	-	-	-	-	-	-	-									+		
Little Grebe <sup>(8)</sup>	<i>Tachybaptus ruficollis</i>	Common	P	LC	-	-	-	-									++		
Black-faced Spoonbill <sup>(8)</sup>	<i>Platalea minor</i>	Common	W	PGC	Class II	Endangere	Endangered	Endangered									+	+	
Yellow Bittern <sup>(8)</sup>	<i>Ixobrychus sinensis</i>	Uncommon	M,Su	(LC)	-	-	-	-							+		+		
Black-crowned Night Heron <sup>(8)</sup>	<i>Nycticorax nycticorax</i>	Common	P	(LC)	-	-	-	-									+	+	
Chinese Pond Heron <sup>(8)</sup>	<i>Ardeola bacchus</i>	Common	P	PRC (RC)	-	-	-	-	+	+				+	+	+	++	+++	
Eastern Cattle Egret <sup>(8)</sup>	<i>Bubulcus coromandus</i>	Common	P	(LC)	-	-	-	-						+			++		
Grey Heron <sup>(8)</sup>	<i>Ardea cinerea</i>	Common	W	PRC	-	-	-	-									+	++	
Great Egret <sup>(8)</sup>	<i>Ardea alba</i>	Common	P	PRC (RC)	-	-	-	-								++	++	++	
Intermediate Egret <sup>(8)</sup>	<i>Egretta intermedia</i>	Common	M,P	RC	-	-	-	-									+	+	
Little Egret <sup>(8)</sup>	<i>Egretta garzetta</i>	Common	P	PRC (RC)	-	-	-	-						+		+	++	++	
Great Cormorant <sup>(8)</sup>	<i>Phalacrocorax carbo</i>	Common	W	PRC	-	-	-	-								+	++++	++++	
Western Osprey <sup>(8)(9)</sup>	<i>Pandion haliaetus</i>	Common	W	RC	-	Rare	Near Threatened	-											+
Black Kite <sup>(8)(9)</sup>	<i>Milvus migrans</i>	Common	W,R	(RC)	Class II	-	-	-					+	+	+		+	+	+
Crested Serpent Eagle <sup>(8)</sup>	<i>Spilornis cheela</i>	Uncommon	R,M	(LC)	Class II	Vulnerable	Near Threatened	-					+						+
Eastern Marsh Harrier <sup>(8)(9)</sup>	<i>Circus spilnotus</i>	Common	W	LC	Class II	-	Near Threatened	-									+		+
Resa <sup>(8)</sup>	<i>Accipiter virgatus</i>	Scarce	R	-	Class II	-	-	-											+
Eastern Buzzard <sup>(8)(9)</sup>	<i>Buteo japonicus</i>	Common	W	-	Class II	-	-	-			+					+	+	+	+
Amur Falcon <sup>(8)</sup>	<i>Falco amurensis</i>	Rare	-	-	Class II	-	Near Threatened	-											+
White-breasted Waterhen <sup>(8)</sup>	<i>Amaurornis phoenicurus</i>	Common	R	-	-	-	-	-			+			+	+	+	+	+	+
Common Moorhen <sup>(8)</sup>	<i>Gallinula chloropus</i>	Common	R	-	-	-	-	-						+	+	+	+	+	+
Black-winged Stilt <sup>(8)</sup>	<i>Himantopus himantopus</i>	Common	W	RC	-	-	-	-								+	++	++	
Pied Avocet <sup>(8)</sup>	<i>Recurvirostra avosetta</i>	Abundant	W	RC	-	-	-	-											++++
Little Ringed Plover <sup>(8)</sup>	<i>Charadrius dubius</i>	Common	W,R	(LC)	-	-	-	-									+	+	
Common Snipe <sup>(8)</sup>	<i>Gallinago gallinago</i>	Common	W	-	-	-	-	-										+	
Eurasian Curlew <sup>(8)</sup>	<i>Numenius arquata</i>	Abundant	W,M	RC	-	-	Near Threatened	Near Threatened											+
Spotted Redshank <sup>(8)</sup>	<i>Tringa erythropus</i>	Abundant	W/M	RC	-	-	-	-											++
Common Redshank <sup>(8)</sup>	<i>Tringa totanus</i>	Common	W	RC	-	-	-	-											++++
Marsh Sandpiper <sup>(8)</sup>	<i>Tringa stagnatilis</i>	Common	M,W	RC	-	-	-	-									+	++	++
Common Greenshank <sup>(8)</sup>	<i>Tringa nebularia</i>	Abundant	M,W	RC	-	-	-	-									+	++	++
Green Sandpiper <sup>(8)</sup>	<i>Tringa ochropus</i>	Uncommon	W	-	-	-	-	-										+	
Wood Sandpiper <sup>(8)</sup>	<i>Tringa glareola</i>	Common	M,W	LC	-	-	-	-									++	+	
Common Sandpiper <sup>(8)</sup>	<i>Actitis hypoleucos</i>	Common	M,W	-	-	-	-	-									+	+	
Temminck's Stin <sup>(8)</sup>	<i>Calidris temminckii</i>	Uncommon	M,W	LC	-	-	-	-											+
Black-headed Gull <sup>(8)</sup>	<i>Chroicocephalus ridibundus</i>	Common	W	PRC	-	-	-	-											+++
Heuglin's Gull <sup>(8)</sup>	<i>Larus fuscus</i>	Common	W,M	LC	-	-	-	-											+
Whiskered Tern <sup>(8)</sup>	<i>Chlidonias hybrida</i>	Uncommon	M	-	-	-	-	-									+		
Domestic Pigeon	<i>Columba livia</i>	Common	R	-	-	-	-	-											+
Oriental Turtle Dove	<i>Streptopelia orientalis</i>	Common	W	-	-	-	-	-											+
Eurasian Collared Dove	<i>Streptopelia decaocto</i>	Found in Mai Po, Tsim Bei Tsui, Fung Lok Wai	-	-	-	-	-	-								+	+		
Red Turtle Dove	<i>Streptopelia tranquebarica</i>	Uncommon	AM	-	-	-	-	-										+	
Spotted Dove	<i>Spilopelia chinensis</i>	Abundant	R	-	-	-	-	-	+	+	+	+	+	+	+	+	++	+	
Common Emerald Dove	<i>Chalcophaps indica</i>	Scarce	R	-	-	Vulnerable	-	-											+
Greater Coucal	<i>Centropus sinensis</i>	Common	R	-	Class II	Vulnerable	-	-				+	+	+	+	+	+	+	
Chestnut-winged Cuckoo	<i>Clamator coromandus</i>	Uncommon	Su	-	-	-	-	-											
Asian Koel	<i>Eudynamis scolopacea</i>	Common	Su,R	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	
Plaintive Cuckoo	<i>Cacomantis merulinus</i>	Uncommon	Su	-	-	-	-	-											
Large Hawk Cuckoo	<i>Hierococcyx sparveroides</i>	Common	Su	-	-	-	-	-											+
Indian Cuckoo	<i>Cuculus micropterus</i>	Uncommon	Su	-	-	-	-	-								+			
Collared Scops Owl <sup>(8)</sup>	<i>Otus lettia</i>	Common	R	-	Class II	-	-	-				+	+						
Savanna Nightjar	<i>Caprimulgus affinis</i>	Uncommon	Su, ?W	-	-	-	Data Deficient	-		+					+		+		
House Swift	<i>Apus nipalensis</i>	Common	R, SpM	-	-	-	-	-	+										++
White-throated Kingfisher <sup>(8)</sup>	<i>Halcyon smyrnensis</i>	Common	AM,P	(LC)	-	-	-	-				+	+	+		+	+	+	
Common Kingfisher <sup>(8)</sup>	<i>Alcedo atthis</i>	Common	AM,P	-	-	-	-	-							+		+	+	
Pied Kingfisher <sup>(8)</sup>	<i>Ceryle rudis</i>	Uncommon	R	(LC)	-	-	-	-									+	+	
Eurasian Wrenneck	<i>Jynx torquilla</i>	Uncommon	W,M	-	-	-	-	-							+				
Scarlet Minnet	<i>Pericrocotus speciosus</i>	Common	R	-	-	-	-	-					+						
Brown Shrike	<i>Lanius cristatus</i>	Common	SpM	-	-	-	-	-											+
Long-tailed Shrike	<i>Lanius schach</i>	Common	R	-	-	-	-	-				+	+	+	+	+	+	+	
Black Drongo	<i>Dicrurus macrocercus</i>	Common	M,Su	-	-	-	-	-				+	+	+	+	+	+	+	
Hair-crested Drongo	<i>Dicrurus hottentottus</i>	Common	M,Su,W	-	-	-	-	-				+	+	+	+	+	+	+	
Azure-winged Magpie	<i>Cyanopica cyanus</i>	Introduced	-	-	-	-	-	-											+
Eurasian Magpie	<i>Pica pica</i>	Common	R	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	
Collared Crow <sup>(8)</sup>	<i>Corvus torquatus</i>	Uncommon	R	LC	-	-	Near Threatened	Near Threatened		+							+	+	
Large-billed Crow	<i>Corvus macrorhynchos</i>	Common	R	-	-	-	-	-											+
Cinereous Tit	<i>Parus cinereus</i>	Common	R	-	-	-	-	-	+				+	+	+	+	+	+	
Chinese Penduline-Tit	<i>Remiz consobrinus</i>	Common	M,W	RC	-	-	-	-											+
Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	Abundant	R	-	-	-	-	-	++	+	++	++	++	+	+	+	+	+	
Chinese Bulbul	<i>Pycnonotus sinensis</i>	Abundant	R	-	-	-	-	-	+	++	+	+	+	+	+	+	+	+	

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Sooty-headed Bulbul	<i>Pycnonotus aurigaster</i>	Uncommon	R	-	-	-	-	-					+	+					
Barn Swallow	<i>Hirundo rustica</i>	Abundant	SpM,Su	-	-	-	-	-	+	+		+	+	+			++	+	+
Dusky Warbler	<i>Phylloscopus fuscatus</i>	Common	W	-	-	-	-	-		+	+		+	+	+	+	+	+	
Yellow-browed Warbler	<i>Phylloscopus inornatus</i>	Common	W	-	-	-	-	-	+	+	+		+	+	+	+	+	+	
Oriental Reed Warbler	<i>Acrocephalus orientalis</i>	Common	M	-	-	-	-	-							+				
Black-browed Reed Warbler	<i>Acrocephalus bistrigiceps</i>	Common	M	-	-	-	-	-							+				
<b>Zitting Cisticola</b>	<i>Cisticola juncidis</i>	Common	W	LC	-	-	-	-									+		
Yellow-bellied Prinia	<i>Prinia flaviventris</i>	Common	R	-	-	-	-	-		+	+	+	+	+	+	+	+	+	
Plain Prinia	<i>Prinia inornata</i>	Common	R	-	-	-	-	-						+	+	+	+	+	
Common Tailorbird	<i>Orthotomus sutorius</i>	Common	R	-	-	-	-	-	+		+	+	+	+	+	+	+	+	
Masked Laughingthrush	<i>Garrulax perspicillatus</i>	Abundant	R	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	
Japanese White-eye	<i>Zosterops japonicus</i>	Abundant	R,?W	-	-	-	-	-	+	+	+	+	++	+	+	+	+	+	
Crested Myna	<i>Acridotheres cristatellus</i>	Common	R	-	-	-	-	-	++	++	++	+	+	+	+	+	++++	+	
Common Myna	<i>Acridotheres tristis</i>	Uncommon	R	-	-	-	-	-		+	+								
<b>Red-billed Starling<sup>(9)</sup></b>	<i>Spodiopar sericeus</i>	Common	W	GC	-	-	-	-			++						++	++	
<b>White-cheeked Starling</b>	<i>Spodiopar cineraceus</i>	Common	W	PRC	-	-	-	-									+		
Black-collared Starling	<i>Gracupica nigricollis</i>	Common	R	-	-	-	-	-	+	+	+	+	+	+	+	+	++	++	
White-shouldered Starling	<i>Sturnia sinensis</i>	Common	M,W,Su	(LC)	-	-	-	-									+		
Grey-backed Thrush	<i>Turdus hortolorum</i>	Common	W	-	-	-	-	-					+						
Japanese Thrush	<i>Turdus cardis</i>	Uncommon	M,W	-	-	-	-	-					+						
Common Blackbird	<i>Turdus merula</i>	Common	W,M	-	-	-	-	-					+						
Oriental Magpie Robin	<i>Copsychus saularis</i>	Abundant	R	-	-	-	-	-	+	+	+		+	+	+	+	+	+	
Daurian Redstart	<i>Phoenicurus aureus</i>	Common	W	-	-	-	-	-		+				+	+	+	+	+	
Stejneger's Stonechat	<i>Saxicola stejnegeri</i>	Common	W,M	-	-	-	-	-			+			+	+		+	+	
Red-throated Flycatcher	<i>Ficedula albicilla</i>	Uncommon	AM,W	-	-	-	-	-		+	+								+
Scarlet-backed Flowerpecker	<i>Dicaeum cruentatum</i>	Common	R	-	-	-	-	-					+						
Fork-tailed Sunbird	<i>Aethopyga christinae</i>	Common	R	-	-	-	-	-				+	+						
Eurasian Tree Sparrow	<i>Passer montanus</i>	Abundant	R	-	-	-	-	-	+	+++	++			++		+	+++		
White-rumped Munia	<i>Lonchura striata</i>	Common	R	-	-	-	-	-						+					
Scaly-breasted Munia	<i>Lonchura punctulata</i>	Common	R	-	-	-	-	-		+			+	+			++		
Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>	Common	M,W	-	-	-	-	-		+							+	+	
White Wagtail	<i>Motacilla alba</i>	Common	W,R	-	-	-	-	-	+	+	+		+	+	+	+	+	+	
Richard's Pipit	<i>Anthus richardi</i>	Common	W,R	-	-	-	-	-									+		
Olive-backed Pipit	<i>Anthus hodgsoni</i>	Common	W	-	-	-	-	-	+	+	+	+	+	++	+		+	+	
Little Bunting	<i>Emberiza pusilla</i>	Common	W	-	-	-	-	-									+		
Black-faced Bunting	<i>Emberiza spodocephala</i>	Common	M,W	-	-	-	-	-					+	+			+		

Note:

- (1) All wild birds are Protected under Wild Animals Protection Ordinance (Cap. 170).
- (2) AFCD (2017). Hong Kong Biodiversity Database.
- (3) Carey *et al.* (2001): R=resident; W=winter visitor; Su=summer visitor; M=migrant; Sp=spring; A=autumn; P=present all year, exact composition unknown; ?W=extent of migration in winter is unclear
- (4) Fellowes *et al.* (2002): GC=Global Concern; LC=Local Concern; RC=Regional Concern; PRC=Potential Regional Concern; PGC: Potential Global Concern.  
Letters in parentheses indicate that the assessment is on the basis of restrictedness in nesting and/or roosting sites rather than in general occurrence.
- (5) List of Wild Animals Under State Protection (promulgated by State Forestry Administration and Ministry of Agriculture on 14 January, 1989).
- (6) Zheng, G. M. and Wang, Q. S. (1998). China Red Data Book
- (7) IUCN (2017). IUCN Red List of Threatened Species. Version 2017.2.
- (8) Protected under Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586).
- (9) Wetland-dependent species (including wetland-dependent species and waterbirds).
- (10) Jiang *et al.* (2016). Red List of China's Vertebrates

Species of conservation importance is in bold type face

Code of Abundance: +=Scarce; ++=Occasional; +++=Common; ++++=Abundant; +++++=Dominant

Appendix 8.4B Butterflies Recorded within the Assessment Area

Common Name	Scientific Name	Distribution in Hong Kong <sup>(1)</sup>	Level of Concern <sup>(2)</sup>	Protection Status in China <sup>(3)</sup>	China Red Data Book <sup>(4)</sup>	IUCN Red List (Version 2017.2) <sup>(5)</sup>	Project Area: Developed Area	Developed Area	Plantation	Orchard	Shrubland	Grassland	Reedbed	Mangrove	Pond	Modified Watercourse
Common Awl	<i>Hasora badra badra</i>	Very rare	LC	-	-	-					+					
Chestnut Angle	<i>Odontoptilum angulatum angulatum</i>	Common	-	-	-	-					+					
Banana Skipper	<i>Erionota torus</i>	Uncommon	-	-	-	-				+						
Greenish Palm Dart	<i>Telicota ancilla horisha</i>	Uncommon	-	-	-	-					+					
Formosan Swift	<i>Borbo cinnara</i>	Common	-	-	-	-				+	+					
Contiguous Swift	<i>Polytrems lubricans lubricans</i>	Common	-	-	-	-						+				
Common Bluebottle	<i>Graphium sarpedon sarpedon</i>	Very common	-	-	-	-					+	+				
Common Jay	<i>Graphium doson axion</i>	Common	-	-	-	-					+	+				
Tailed Jay	<i>Graphium agamemnon agamemnon</i>	Common	-	-	-	-					+				+	
Five-bar Swordtail	<i>Pathysa antiphates antiphates</i>	Common	-	-	-	-					+				+	
Common Mime	<i>Chilasa clytia clytia</i>	Common	-	-	-	-					+	+				
Swallowtail	<i>Papilio xuthus xuthus</i>	Rare	-	-	-	-					+	+				
Lime Butterfly	<i>Papilio demoleus demoleus</i>	Common	-	-	-	-					+					
Red Helen	<i>Papilio helenus helenus</i>	Very common	-	-	-	-				+	+	+				
Common Mormon	<i>Papilio polytes polytes</i>	Very common	-	-	-	-		+	+	+	+	+			+	
Great Mormon	<i>Papilio memnon agenor</i>	Very common	-	-	-	-		+	+		+				+	
Spangle	<i>Papilio protenor protenor</i>	Very common	-	-	-	-				+	+	+			+	
Chinese Peacock	<i>Papilio bianor bianor</i>	Common	-	-	-	-						+				
Paris Peacock	<i>Papilio paris paris</i>	Very common	-	-	-	-					+	+				
Red-base Jezebel	<i>Delias pasithoe pasithoe</i>	Very common	-	-	-	-		+	+		+	+	+	+	+	+
Indian Cabbage White	<i>Pieris canidia canidia</i>	Very common	-	-	-	-		+	+	+	+	+		+	++++	+
Small Cabbage White	<i>Pieris rapae crucivora</i>	Rare	-	-	-	-									++	
Yellow Orange Tip	<i>Ixias pyrene pyrene</i>	Uncommon	-	-	-	-				+						
Great Orange Tip	<i>Hebomoia glaucippe glaucippe</i>	Common	-	-	-	-					+					
Lemon Emigrant	<i>Catopsilia pomona pomona</i>	Common	-	-	-	-		+	+		+	+			+	
Common Grass Yellow	<i>Eurema hecabe hecabe</i>	Very common	-	-	-	-		+	+	+	+	+		+	+	+
Silver Streak Blue	<i>Iraota timoleon timoleon</i>	Uncommon	-	-	-	-					+					
Chocolate Royal	<i>Remelana jangala mudra</i>	Common	-	-	-	-								+		
Cornelian	<i>Deudorix epjarbas menescicles</i>	Rare	-	-	-	-						+				
Slate Flash	<i>Rapala manea schistacea</i>	Common	-	-	-	-						+				
Purple Sapphire	<i>Heliophorus epicles phoenicoparyphus</i>	Common	-	-	-	-					+					
Transparent 6-line Blue	<i>Nacaduba kurava euplea</i>	Common	-	-	-	-					+					
Metallic Cerulean	<i>Jamides alecto albocina</i>	Very rare	-	-	-	-					+	+				
Forget-me-not	<i>Catochrysops strabo strabo</i>	Very rare	-	-	-	-				+		+				
Pale Grass Blue	<i>Pseudozizeeria maha serica</i>	Very common	-	-	-	-		+		+	+	+			++	
Dark Grass Blue	<i>Zizeeria karsandra karsandra</i>	Uncommon	-	-	-	-									+	
Lesser Grass Blue	<i>Zizina otis otis</i>	Common	-	-	-	-						+				
Common Hedge Blue	<i>Acytolepis puspa gisca</i>	Common	-	-	-	-				+	+					
Plain Hedge Blue	<i>Celastrina lavendularis limbata</i>	Very rare	LC	-	-	-					+					
Plains Cupid	<i>Chilades pandava pandava</i>	Uncommon	-	-	-	-					+					
Punchinello	<i>Zemeros flegyas flegyas</i>	Common	-	-	-	-						+				
Plum Judy	<i>Abisara echerius echerius</i>	Very common	-	-	-	-					+	+				
Common Evening Brown	<i>Melanitis leda leda</i>	Common	-	-	-	-				+						
Dark Evening Brown	<i>Melanitis phedima muskata</i>	Uncommon	-	-	-	-				+						
Banded Tree Brown	<i>Lethe confusa confusa</i>	Common	-	-	-	-					+					
Bamboo Tree Brown	<i>Lethe europa beree</i>	Uncommon	-	-	-	-				+	+					
Common Palmfly	<i>Elymnias hypermnestra hainana</i>	Common	-	-	-	-					+					
Dark Brand Bush Brown	<i>Mycalesis mineus mineus</i>	Very common	-	-	-	-		+	+	+	+	+			+	

Appendix 8.4B Butterflies Recorded within the Assessment Area

Common Name	Scientific Name	Distribution in Hong Kong <sup>(1)</sup>	Level of Concern <sup>(2)</sup>	Protection Status in China <sup>(3)</sup>	China Red Data Book <sup>(4)</sup>	IUCN Red List (Version 2017.2) <sup>(5)</sup>	Project Area: Developed Area	Developed Area	Plantation	Orchard	Shrubland	Grassland	Reedbed	Mangrove	Pond	Modified Watercourse
South China Bush Brown	<i>Mycalasis zonata</i>	Common	-	-	-	-				+	+					
Common Five-ring	<i>Ypthima baldus baldus</i>	Very common	-	-	-	-			+	+	+	+				
Large Faun	<i>Faunis eumeus eumeus</i>	Common	-	-	-	-				+						
Common Duffer	<i>Discophora sondaica tulliana</i>	Uncommon	-	-	-	-				+						
Tawny Rajah	<i>Charaxes bernardus bernardus</i>	Common	-	-	-	-				+	+					
Angled Castor	<i>Ariadne ariadne alterna</i>	Common	-	-	-	-						+			+	
Rustic	<i>Cupha erymanthis erymanthis</i>	Very common	-	-	-	-					+					
Indian Fritillary	<i>Argyreus hyperbius hyperbius</i>	Common	-	-	-	-					+					
Great Egg-fly	<i>Hypolimnas bolina kezia</i>	Common	-	-	-	-	+		+		+	+			+	
Common Sailer	<i>Neptis hylas hylas</i>	Very common	-	-	-	-				+	+	+			+	
Southern Sullied Sailer	<i>Neptis clinia susruta</i>	Common	-	-	-	-					+					
Short-banded Sailer	<i>Phaedyra columella columella</i>	Common	-	-	-	-				+	+	+				
Staff Sergeant	<i>Athyma selenophora leucophryne</i>	Common	-	-	-	-					+					
White-edged Blue Baron	<i>Euthalia phemius seitzi</i>	Common	-	-	-	-					+					
Common Mapwing	<i>Cyrestis thyodamas chinensis</i>	Common	-	-	-	-					+				+	
Black Prince	<i>Rohana parisatis stauraktius</i>	Common	-	-	-	-				+	+					
Red Ring Skirt	<i>Hestina assimilis assimilis</i>	Common	-	-	-	-			+	+	+					
Glassy Tiger	<i>Parantica aglea melanoides</i>	Common	-	-	-	-					+	+			+	
Blue Tiger	<i>Tirumala limniace limniace</i>	Common	-	-	-	-					+	+				
Common Tiger	<i>Danaus genutia genutia</i>	Common	-	-	-	-						+		+	+	
Blue-spotted Crow	<i>Euploea midamus midamus</i>	Very common	-	-	-	-				+	+	+			+	
<b>Courtesan</b>	<b><i>Euripus nyctelius</i></b>	Very rare	-	-	-	-					+					

Notes:

- (1) AFCD (2017). Hong Kong Biodiversity Database.
- (2) Fellowes *et al.* (2002): LC=Local Concern; RC=Regional Concern.
- (3) List of Wild Animals Under State Protection (promulgated by State Forestry Administration and Ministry of Agriculture on 14 January, 1989).
- (4) Zheng, G. M. and Wang, Q. S. (1998).
- (5) IUCN (2017). IUCN Red List of Threatened Species. Version 2017.2.

Species of conservation importance is in bold type face

Code of Abundance: +=Scarce; ++=Occasional; +++=Common; ++++=Abundant

Appendix 8.4C Odonate Recorded within the Assessment Area

Common Name	Scientific Name	Distribution in Hong Kong <sup>(1)</sup>	Level of Concern <sup>(2)</sup>	Protection Status in China <sup>(3)</sup>	China Red Data Book <sup>(4)</sup>	IUCN Red List (Version 2017.2) <sup>(5)</sup>	Project Area: Developed Area	Developed Area	Plantation	Orchard	Shrubland	Grassland	Reedbed	Mangrove	Pond	Modified Watercourse
Elusive Adjutant	<i>Aethriamanta brevipennis brevipennis</i>	Uncommon	-	-	-	-				+	+				+	
Pale-spotted Emperor	<i>Anax guttatus</i>	Common	-	-	-	-									+	
Blue Dasher	<i>Brachydiplax chalybea flavovittata</i>	Common	-	-	-	-					+	+	++		+	
Asian Amberwing	<i>Brachythemis contaminata</i>	Abundant	-	-	-	-							+		++++	+
Orange-tailed Sprite	<i>Ceragrion auranticum</i>	Abundant	-	-	-	-				+		+			+	
Crimson Darter	<i>Crocothemis servilia servilia</i>	Abundant	-	-	-	-				+		+		+	+	
Amber-winged Glider	<i>Hydrobasileus croceus</i>	Common	-	-	-	-						+				
Common Flangetail	<i>Ictinogomphus pertinax</i>	Common	-	-	-	-					+				+	+
Common Bluetail	<i>Ischnura senegalensis</i>	Abundant	-	-	-	-					+	+			+	+
<b>Coastal Glider</b>	<i>Macrodiplax cora</i>	Common	LC	-	-	-						+			+	
<b>Emerald Dwarf</b>	<i>Nannophyopsis clara</i>	Common	LC	-	-	-					+					
Russet Percher	<i>Neurothemis tulvia</i>	Common	-	-	-	-						+				
Red-faced Skimmer	<i>Orthetrum chrysis</i>	Abundant	-	-	-	-									+	
Common Blue Skimmer	<i>Orthetrum glaucum</i>	Abundant	-	-	-	-					+					
Common Red Skimmer	<i>Orthetrum pruinosum neglectum</i>	Abundant	-	-	-	-		+				+				+
Green Skimmer	<i>Orthetrum serapia</i>	Abundant	-	-	-	-		+				+	+		+	
Wandering Glider	<i>Pantala flavescens</i>	Abundant	-	-	-	-		+	+	+	+++	+	+	+++	++	+
Pied Skimmer	<i>Pseudothemis zonata</i>	Common	-	-	-	-					++	+				
<b>Ruby Darter</b>	<i>Rhodothemis rufa</i>	Common	LC	-	-	-					+				+	
Variegated Flutterer	<i>Rhyothemis variegata arria</i>	Common	-	-	-	-	++++	++	+	+	++	+	+	+	++++	+
Golden Flangetail	<i>Sinictinogomphus clavatus</i>	Common	-	-	-	-									+	
Evening Skimmer	<i>Tholymis tillaga</i>	Common	-	-	-	-									+	
Saddlebag Glider	<i>Tramea virginia</i>	Abundant	-	-	-	-		+	+	+	+	+			+	
Crimson Drowwing	<i>Trithemis aurora</i>	Abundant	-	-	-	-					+	+				
<b>Scarlet Basker</b>	<i>Urothemis signata signata</i>	Common	LC	-	-	-					+	+			+	

Notes:  
(1) AFCD (2017). Hong Kong Biodiversity Database.  
(2) Fellowes *et al.* (2002): GC=Global Concern; LC=Local Concern; RC=Regional Concern; PGC: Potential Global Concern.  
(3) List of Wild Animals Under State Protection (promulgated by State Forestry Administration and Ministry of Agriculture on 14 January, 1989).  
(4) Wang S. (1998). China Red Data Book of Endangered Animals. Science Press, Beijing.  
(5) IUCN (2017). IUCN Red List of Threatened Species. Version 2017.2.  
Species of conservation importance is in bold type face  
Code of Abundance: +=Scarce; ++=Occasional; +++=Common; ++++=Abundant; +++++=Dominant

Appendix 8.4D Herpetofauna Recorded within the Assessment Area

**i. Amphibians Recorded within Assessment Area**

Common Name	Scientific Name	Distribution in Hong Kong <sup>(1)</sup>	Level of Concern <sup>(2)</sup>	Protection Status in China <sup>(3)</sup>	China Red Data Book <sup>(4)</sup>	Red List of China's Vertebrates <sup>(5)</sup>	IUCN Red List (Version 2017.2) <sup>(6)</sup>	Project Area: Developed Area	Developed Area	Plantation	Grassland	Shrubland	Orchard	Mangrove	Reedbed	Pond	Modified Watercourse
Asian Common Toad	<i>Duttaphrynus melanostictus</i>	Widely distributed	-	-	-	-	-	+	+	+	++	+++	++			+	
<b>Spotted Narrow-mouthed Frog</b>	<i>Kalophrynus interlineatus</i>	Widely distributed from low to moderate altitudes in northern and central New Territories	-	-	-	Near Threatened	-			+	+						
Asiatic Painted Frog	<i>Kaloula pulchra pulchra</i>	Widely distributed	-	-	-	-	-			+	+		+			+	
Ornate Pigmy Frog	<i>Microhyla fissipes</i>	Widely distributed	-	-	-	-	-				+	+	+				
Paddy Frog	<i>Fejervarya limnocharis</i>	Widely distributed	-	-	-	-	-		+		+	+	+			+	
<b>Chinese Bullfrog</b>	<i>Hoplobatrachus rugulosus</i>	Widely distributed in Lantau Island and New Territories	PRC	Class II	-	Endangered	-									+	
Gunther's Frog	<i>Hylarana guentheri</i>	Widely distributed	-	-	-	-	-	++		+	++		+		+	++++	
Brown Tree Frog	<i>Polypedates megacephalus</i>	Widely distributed	-	-	-	-	-				++	+	+			+	
Greenhouse Frog	<i>Eleutherodactylus planirostris</i>	(Introduced species)	-	-	-	-	-		++		++	+					

Notes:

(1) AFCD (2017). Hong Kong Biodiversity Database.

(2) Fellowes *et al.* (2002): LC=Local Concern; PRC=Potential Regional Concern; PGC: Potential Global Concern.

(3) List of Wild Animals Under State Protection (promulgated by State Forestry Administration and Ministry of Agriculture on 14 January, 1989).

(4) Zheng, G. M. and Wang, Q. S. (1998). China Red Data Book

(5) Jiang *et al.* (2016). Red List of China's Vertebrates

(6) IUCN (2017). IUCN Red List of Threatened Species. Version 2017.2.

Species of conservation importance is in bold type face

Code of Abundance: +=Scarce; ++=Occasional; +++=Common; ++++=Abundant; +++++=Dominant

**ii. Reptiles Recorded within Assessment Area**

Common Name	Scientific Name	Distribution in Hong Kong <sup>(1)</sup>	Level of Concern <sup>(2)</sup>	Protection Status in China <sup>(3)</sup>	China Red Data Book <sup>(4)</sup>	Red List of China's Vertebrates <sup>(5)</sup>	IUCN Red List (Version 2017.2) <sup>(6)</sup>	Project Area: Developed Area	Developed Area	Plantation	Grassland	Shrubland	Orchard	Mangrove	Reedbed	Pond	Modified Watercourse
<b>Four-clawed Gecko</b>	<i>Gehyra mutilata</i>	Widely but thinly distributed throughout Hong Kong	-	-	-	Vulnerable	-		+								
Bowring's Gecko	<i>Hemidactylus bowringii</i>	Distributed throughout Hong Kong	-	-	-	-	-	+	+	+	+	+					
Long-tailed Skink	<i>Eutropis longicaudata</i>	Widely distributed	-	-	-	-	-					+					
Reeves' Smooth Skink	<i>Scincella reevesii</i>	Widely distributed	-	-	-	-	-						+				
<b>Indo-Chinese Rat Snake</b>	<i>Ptyas korros</i>	Widely distributed	PRC	-	Endangered	Vulnerable	-					+	+				
<b>Common Rat Snake<sup>(7)</sup></b>	<i>Ptyas mucosus</i>	Widely distributed	PRC	-	Endangered	Endangered	-				+				+		
Checkered Keelback	<i>Xenochrophis piscator</i>	Widely distributed in streams in the New Territories and Lantau Island	-	-	-	-	-		+		+						
<b>Chinese Cobra<sup>(7)</sup></b>	<i>Naja atra</i>	Widely distributed	PRC	-	Vulnerable	Vulnerable	Vulnerable						+				

Notes:

(1) AFCD (2017). Hong Kong Biodiversity Database.

(2) Fellowes *et al.* (2002): LC=Local Concern; PRC=Potential Regional Concern; PGC: Potential Global Concern.

(3) List of Wild Animals Under State Protection (promulgated by State Forestry Administration and Ministry of Agriculture on 14 January, 1989).

(4) Zheng, G. M. and Wang, Q. S. (1998). China Red Data Book

(5) Jiang *et al.* (2016). Red List of China's Vertebrates

(6) IUCN (2017). IUCN Red List of Threatened Species. Version 2017.2.

(7) Protected under Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586).

Species of conservation importance is in bold type face

Code of Abundance: +=Scarce; ++=Occasional

Appendix 8.4E Mammals and Benthos Fauna Recorded within the Assessment Area

i. Mammals Recorded within Assessment Area

Common Name	Scientific Name	Distribution in Hong Kong <sup>(3)</sup>	Level of Concern <sup>(4)</sup>	Protection Status in China <sup>(5)</sup>	China Red Data Book <sup>(6)</sup>	Red List of China's Vertebrates <sup>(7)</sup>	IUCN Red List (Version 2017.2) <sup>(8)</sup>	Project Area: Developed Area	Developed Area	Plantation	Grassland	Shrubland	Orchard	Mangrove	Reedbed	Pond	Modified Watercourse
Small Asian Mongoose <sup>(1)</sup>	<i>Herpestes javanicus rubrifrons</i>	Uncommon	-	-	-	Vulnerable	-									+	+

Common Name	Scientific Name	Distribution in Hong Kong <sup>(3)</sup>	Level of Concern <sup>(4)</sup>	Protection Status in China <sup>(5)</sup>	China Red Data Book <sup>(6)</sup>	Red List of China's Vertebrates <sup>(7)</sup>	IUCN Red List (Version 2017.2) <sup>(8)</sup>	Abundance Recorded	Description of Habitat Recorded <sup>(9)</sup>
Chinese Noctule <sup>(1)</sup>	<i>Nyctalus plancyi</i>	Common	PRC, (RC)	-	-	-	-	+	Roadside vegetation along main drainage channel
Unknown Bat Species 1 <sup>(1)</sup>	-	-	-	-	-	-	-	+	Developed area on fringes of and within Project Site
Unknown Bat Species 2 <sup>(1)</sup>	-	-	-	-	-	-	-	+	Roadside vegetation along main drainage channel
Unknown Bat Species 3 <sup>(1)</sup>	-	-	-	-	-	-	-	+	Roadside vegetation along main drainage channel and fish ponds; Developed area on fringes of and within Project Site
Unknown Bat Species 4 <sup>(1)</sup>	-	-	-	-	-	-	-	+	Roadside vegetation along main drainage channel

Notes:

(1) Protected under Wild Animals Protection Ordinance (Cap. 170).

(2) Protected under Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586).

(3) AFCD (2017). Hong Kong Biodiversity Database.

(4) Fellowes *et al.* (2002); RC=Regional Concern; LC=Local Concern; PRC=Potential Regional Concern; PGC=Potential Global Concern.

(5) List of Wild Animals Under State Protection (promulgated by State Forestry Administration and Ministry of Agriculture on 14 January, 1989).

(6) Zheng, G. M. and Wang, Q. S. (1998). China Red Data Book

(7) Jiang *et al.* (2016). Red List of China's Vertebrates

(8) IUCN (2016). IUCN Red List of Threatened Species. Version 2016.3.

(9) Actual habitats where the bat species were recorded could not be accurately ascribed given the low light levels during surveys as well as the high mobility and propensity for bats to use interface habitats.

Species of conservation importance is in bold type face

Code of Abundance: +=Scarce; ++=Occasional; +++=Common; ++++=Abundant; +++++=Dominant

ii. Benthos Survey Results during Wet Season

Group	Species	B1		B2		B3	
		Number of Individual	Wet Weight, g <sup>(1)</sup>	Number of Individual	Wet Weight, g	Number of Individual	Wet Weight, g
Amphipod	Corophiinae spp.	1	0				
Crab	<i>Gaetice depressus</i>	1	0.15				
Crab	<i>Macrophthalmus banzai</i>					8	0.48
Gastropod	<i>Batillaria zonalis</i>			1	0.13		
Polychaete	<i>Laonome triangularis</i>	13	0.17	3	0.02	3	0.02
Polychaete	<i>Nephtys oligobranchia</i>	1	0	3	0.01	5	0.01
<b>Number of Species</b>		<b>4</b>		<b>3</b>		<b>3</b>	
<b>Number of Individuals</b>		<b>16</b>		<b>7</b>		<b>16</b>	
<b>Biomass (g)</b>		<b>0.32</b>		<b>0.15</b>		<b>0.51</b>	
<b>Species Diversity (H')</b>		<b>0.69</b>		<b>1</b>		<b>1.02</b>	
<b>Species Evenness (J)</b>		<b>0.5</b>		<b>0.91</b>		<b>0.93</b>	

Note:

(1) Wet Weight = 0.00 g / 0.1 m<sup>2</sup> : The specimen with total biomass less than 0.01 g / 0.1 m<sup>2</sup>

ii. Benthos Survey Results during Dry Season

Group	Species	B1		B2		B3	
		Number of Individual	Wet Weight, g	Number of Individual	Wet Weight, g	Number of Individual	Wet Weight, g
Amphipod	Corophiinae spp.	34	0.22	9	0.06	35	0.13
Gastropod	<i>Batillaria zonalis</i>					1	0.01
Oligochaete	<i>Thalassodrilides</i> spp.					1	0.11
Polychaete	<i>Laonome triangularis</i>	58	0.4	3	0.01	4	0.04
Polychaete	<i>Nephtys oligobranchia</i>	9	0.03	8	0.01	23	0.04
<b>Number of Species</b>		<b>3</b>		<b>3</b>		<b>5</b>	
<b>Number of Individuals</b>		<b>101</b>		<b>20</b>		<b>64</b>	
<b>Biomass (g)</b>		<b>0.65</b>		<b>0.08</b>		<b>0.33</b>	
<b>Species Diversity (H')</b>		<b>0.90</b>		<b>1.01</b>		<b>1.00</b>	
<b>Species Evenness (J)</b>		<b>0.82</b>		<b>0.92</b>		<b>0.62</b>	