





Appendix 9.4: Avifauna Species Recorded from 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>(7)</sup>	IUCN Red List <sup>(8)</sup>	Developed Area / Wasteland	Village / Orchard	Agricultural Area		Stormwater Drain / Recreational Pond	Natural Watercourse	Modified Watercourse	Plantation	Grassland	Shrubland	Woodland	Fishponds and Mitigation Ponds	Marsh	Mangrove	Mudflat / Coastal Water Body
											Dry	Wet											
Grey Wagtail	<i>Motacilla cinerea</i>	Common	W	-	-	-	Least Concern	Least Concern	+	+	+				++	+			+	+			
White Wagtail	<i>Motacilla alba</i>	Common	W,R	-	-	-	Least Concern	Least Concern	++	++	++++	+	+	+	++++	+	+	+	+	+	+	+	+
Richard's Pipit	<i>Anthus richardi</i>	Common	W,R	-	-	-	Least Concern	Least Concern			+												
Olive-backed Pipit	<i>Anthus hodgsoni</i>	Common	W	-	-	-	Least Concern	Least Concern	++	++	++	++				+	+	+	++				
Alexandrine parakeet	<i>Psittacula eupatria</i>	-	-	-	-	-	Data Deficient	Least Concern								+			+				
Azure-winged Magpie	<i>Cyanopica cyanus</i>	-	-	-	-	-	Least Concern	Least Concern	+														

Notes:

(1) All wild birds are Protected under Wild Animal Protection Ordinance (Cap. 170)

(2) AFCD (2015). Hong Kong Biodiversity Database.

(3) Carey *et al.* (2001). R=resident; W=winter visitor; Su=summer visitor; M=migrant; Sp=spring; P=present all year, exact composition unknown

(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).

(7) IUCN (2016). IUCN Red List of Threatened Species. Version 2016-1.

(9) Wetland-dependent species.

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

(11) Nesting/roosting sites of the species were no recorded during the survey.

Species of conservation importance are in bold type face

Code for Abundance: +++++=dominant; ++++=abundant; +++=frequent; ++=occasional; +=scarce

**Appendix 9.5: Height of Ardeids Flying from Egretry**

**Height of Ardeids Flying from San Sang San Tsuen Egretry**

<b>Species</b>	<b>0 – 10 m</b>	<b>11 – 20 m</b>	<b>21 – 30 m</b>	<b>Total</b>
<u>Jul-12</u>				
Little Egret ( <i>Egretta garzetta</i> )	1	32	13	46
Chinese Pond Heron ( <i>Ardeola bacchus</i> )	0	19	3	22
<b>Total</b>	<b>1</b>	<b>51</b>	<b>16</b>	<b>68</b>
<u>May-16</u>				
Little Egret ( <i>Egretta garzetta</i> )	7	1	0	8
<b>Total</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>8</b>
<u>Jun-16</u>				
Little Egret ( <i>Egretta garzetta</i> )	6	0	0	6
<b>Total</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>

Note:

This table does not indicate the actual numbers of ardeids in the egretry as they were recorded flying away from the egretry, including those that flew back and out again.

Appendix 9.6: Mammal Species Recorded from 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>	Red List of China's Vertebrates <sup>(5)</sup>	IUCN Red List <sup>(6)</sup>	Developed Area / Wasteland	Village / Orchard	Agricultural Area		Storm Water Drain / Recreational Pond	Natural Watercourse	Modified Watercourse	Plantation	Grassland	Shrubland	Woodland	Fishponds and Mitigation Ponds	Marsh	Mangrove	Mudflat / Coastal Water Body
										Dry	Wet											
Short-nosed Fruit Bat <sup>(7)</sup>	<i>Cynopterus sphinx</i>	Common	LC	-	Indeterminate	Near Threatened	Least Concern		+													
Japanese Pipistrelle <sup>(7)</sup>	<i>Pipistrellus abramus</i>	Abundant	LC	-	-	Least Concern	Least Concern	+++	++	+			+	+	+	+	+		++			
Chinese Noctule <sup>(7)</sup>	<i>Nyctalus plancyi</i>	Common	PRC	-	-	Least Concern	Least Concern		+					+					+	+		
Myotis spp. <sup>(7)</sup>	<i>Myotis spp.</i>	-	-	-	-	Least Concern	-	+														
Small Indian Civet <sup>(7)</sup>	<i>Viverricula indica</i>	Abundant	-	Class II	-	Vulnerable	Least Concern								+							
Domestic Ox	<i>Bos taurus</i>	Abundant	-	-	-	-	-	+		+								+				
Domestic Goat	<i>Capra hircus</i>	-	-	-	-	-	-			++												

Notes:

(1) AFCD (2015). Hong Kong Biodiversity Database.

(2) Fellowes *et al.* (2002): LC=Local Concern; PRC=Potential 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) Jiang *et al.* (2016).

(6) IUCN (2016). IUCN Red List of Threatened Species. Version 2016-1.

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

Species of conservation importance are in bold type face

Code for Abundance: ++++=dominant; +++=abundant; ++=frequent; +=occasional; +=scarce

Appendix 9.7: Herpetofauna Species Recorded from the Assessment Area

Amphibian

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 <sup>(6)</sup>	Developed Area / Wasteland	Village / Orchard	Agricultural Area		Storm Water Drain / Recreational Pond	Natural Watercourse	Modified Watercourse	Plantation	Grassland	Shrubland	Woodland	Fishponds and Mitigation Ponds	Marsh	Mangrove	Mudflat / Coastal Water Body
										Dry	Wet											
Common Toad	<i>Bufo melanostictus</i>	Abundant	-	-	-	-	Least Concern	++	+	+			+	+				+				
Common Toad (Tadpoles)	<i>Bufo melanostictus</i>	Abundant	-	-	-	-	Least Concern						++++									
Asiatic Painted Frog	<i>Kaloula pulchra</i>	Widely distributed	-	-	-	-	Least Concern	+					+	+				+				
Ornate Pigmy Frog	<i>Microhyla ornata</i>	Widely distributed	-	-	-	-	Least Concern	+		+												
Asian Grass Frog	<i>Rana limnocharis</i>	Widely distributed	-	-	-	-	Least Concern		+	++			+						+++			
Gunther's Frog	<i>Rana guentheri</i>	Widely distributed	-	-	-	-	Least Concern	+	++	+++		+	+		+	+	+	+	+++			
Gunther's Frog (tadpoles)	<i>Rana guentheri</i>	Widely distributed	-	-	-	-	Least Concern						++++		++++							
Hong Kong Whipping Frog	<i>Polypedates megacephalus</i>	Widely distributed	-	-	-	-	Least Concern	+	+	++					+		+	+	+			
Unidentified Tadpoles species	-	-	-	-	-	-	-						++++									

Reptile

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 <sup>(6)</sup>	Developed Area / Wasteland	Village / Orchard	Agricultural Area		Storm Water Drain / Recreational Pond	Natural Watercourse	Modified Watercourse	Plantation	Grassland	Shrubland	Woodland	Fishponds and Mitigation Ponds	Marsh	Mangrove	Mudflat / Coastal Water Body
										Dry	Wet											
Red-eared Slider Turtle	<i>Trachemys scripta elegans</i>	Widely distributed	-	-	-	-	Least Concern					++		+					+			
Chinese Gecko	<i>Gekko chinensis</i>	Widely distributed	-	-	-	-	Least Concern								+		+					
Bowring's Gecko	<i>Hemidactylus bowringii</i>	-	-	-	-	-	Least Concern	++	++				+	+								
Changeable Lizard	<i>Calotes versicolor</i>	Widely distributed	-	-	-	-	Least Concern	+	++						+							
Grass Lizard	<i>Takydromus sexlineatus ocellatus</i>	-	-	-	-	-	Least Concern		+	+												
Chinese Skink	<i>Eumeces chinensis chinensis</i>	Widely distributed	-	-	-	-	Least Concern	+	+													
Long-tailed Skink	<i>Mabuya longicaudata</i>	Widely distributed	-	-	-	-	Least Concern	++				+			+							
Slender Forest Skink	<i>Scincella modesta</i>	-	-	-	-	-	Least Concern		+					+				+				
Chinese Water Snake	<i>Enhydris chinensis</i>	-	-	-	-	-	Least Concern	+														
Common Wolf Snake	<i>Lycodon aulicus</i>	-	-	-	-	-	Near Threatened		+													

Notes:

(1) AFCD (2015). Hong Kong Biodiversity Database.

(2) Fellowes *et al.* (2002).

(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) Jiang *et al.* (2016).

(6) IUCN (2016). IUCN Red List of Threatened Species. Version 2016-1.

Code for Abundance: +++++=dominant; ++++=abundant; +++=frequent; ++=occasional; +=scarce

Appendix 9.8: Butterfly Species Recorded from 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>	Developed Area / Wasteland	Village / Orchard	Agricultural Area		Storm Water Drain / Recreational Pond	Natural Watercourse	Modified Watercourse	Plantation	Grassland	Shrubland	Woodland	Fishponds and Mitigation Ponds	Marsh	Mangrove	Mudflat / Coastal Water Body
								Dry	Wet											
Plum Judy	<i>Abisara echerius echerius</i>	Very common	-	-	-	+	+	+					+	+	+	+				
Common Hedge Blue	<i>Acytolepis puspa gisca</i>	Common	-	-	-	+	++	+				+	+	+	+	+				
Bush Hopper	<i>Ampittia dioscorides etura</i>	Uncommon	-	-	-									+						
Angled Castor	<i>Ariadne ariadne alterna</i>	Common	-	-	-	++	++	+				+	+	++	+	+	+			
Colour Sergeant	<i>Athyma nefte seitzi</i>	Common	-	-	-	+														
Common Sergeant	<i>Athyma perius perius</i>	Uncommon	-	-	-	+														
Formosan Swift	<i>Borbo cinnara</i>	Common	-	-	-									+						
Lemon Emigrant	<i>Catopsilia pomona pomona</i>	Common	-	-	-	+++	++	+	+	+	+	++	++	+	+	+	+			
Common Mime	<i>Chilasa clytia clytia</i>	Common	-	-	-	+						+	+			+				
Rustic	<i>Cupha erymanthis erymanthis</i>	Very common	-	-	-	+	+	+		+			+		+	+				
Common Mapwing	<i>Cyrestis thyodamas chinensis</i>	Common	-	-	-											+				
Plain Tiger	<i>Danaus chrysippus chrysippus</i>	Uncommon	-	-	-		+													
Common Tiger	<i>Danaus genutia genutia</i>	Common	-	-	-	+	+	+		+										
Red-base Jezebel	<i>Delias pasithoe pasithoe</i>	Very common	-	-	-	+	+	+	+	+			+		+	+				
<b>Cornelian</b>	<b><i>Deudorix epijarbas menesicles</i></b>	Rare	-	-	-		+													
Common Palmfly	<i>Elymnias hypermnestra hainana</i>	Common	-	-	-		+							+						
Gram Blue	<i>EUncommonhrysops cnejus cnejus</i>	Uncommon	-	-	-									+	+					
Common Indian Crow	<i>Euploea core amymone</i>	Common	-	-	-	+	+	+		+	+	+	+	+	+	+				+
Blue-spotted Crow	<i>Euploea midamus midamus</i>	Very common	-	-	-		+	+				+	+		+	+				
Three-spot Grass Yellow	<i>Eurema blanda hylama</i>	Common	-	-	-											+				
Common Grass Yellow	<i>Eurema hecabe hecabe</i>	Very common	-	-	-	++	++	+	+	+	+	+	++	++	+	++	+			
Lesser Grass Blue	<i>Zizina otis otis</i>	Common	-	-	-													+		
Gaudy Baron	<i>Euthalia lubentina lubentina</i>	Uncommon	-	-	-		+													
White-edged Blue Baron	<i>Euthalia phemius seitzi</i>	Common	-	-	-		+													
Large Faun	<i>Faunis eumeus eumeus</i>	Common	-	-	-		+								+	+				
Tailed Jay	<i>Graphium agamemnon agamemnon</i>	Common	-	-	-	+	+	+					+	+	+	+				
Common Jay	<i>Graphium doson axion</i>	Common	-	-	-								+							
Common Bluebottle	<i>Graphium sarpedon sarpedon</i>	Very common	-	-	-	+			+	+	+	+	+	+	+	+				
<b>Dark Brown Ace</b>	<b><i>Halpe porus</i></b>	Very rare	LC	-	-		+													
Great Orange Tip	<i>Hebomoia glaUncommonippe glaUncommonippe</i>	Common	-	-	-	+		+						+						
Purple Sapphire	<i>Heliophorus epicles phoenicoparyphus</i>	Common	-	-	-		+							+					+	
Red Ring Skirt	<i>Hestina assimilis assimilis</i>	Common	-	-	-	+	+	+	+	+	+	+	+	+	+	+	+			
Great Egg-fly	<i>Hypolimnas bolina kezia</i>	Common	-	-	-	+	++	+				+	+	+	+	+	+			
<b>Danaid Eggfly</b>	<b><i>Hypolimnas misippus</i></b>	Uncommon	LC	-	-															+
Yellow Orange Tip	<i>Ixias pyrene pyrene</i>	Uncommon	-	-	-	+														
<b>Common Cerulean</b>	<b><i>Jamides celeno celeno</i></b>	Rare	-	-	-									+						

Appendix 9.8: Butterfly Species Recorded from 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>	Developed Area / Wasteland	Village / Orchard	Agricultural Area		Storm Water Drain / Recreational Pond	Natural Watercourse	Modified Watercourse	Plantation	Grassland	Shrubland	Woodland	Fishponds and Mitigation Ponds	Marsh	Mangrove	Mudflat / Coastal Water Body
								Dry	Wet											
Peacock Pansy	<i>Junonia almana almana</i>	Common	-	-	-			+												
Chocolate Pansy	<i>Junonia iphita iphita</i>	Common	-	-	-		+									+				
Lemon Pansy	<i>Junonia lemonias lemonias</i>	Common	-	-	-		+	+								+				
Blue Admiral	<i>Kaniska canace canace</i>	Common	-	-	-									+						
Long-tailed Blue	<i>Lampides boeticus</i>	Common	-	-	-		+	+					+	+						
Banded Tree Brown	<i>Lethe confusa confusa</i>	Common	-	-	-	+	+													
Dark Evening Brown	<i>Melanitis phedima muskata</i>	Uncommon	-	-	-			+												
Dark Brand Bush Brown	<i>Mycalesis mineus mineus</i>	Very common	-	-	-	++	++	+		+	+	+	+	+	+	++			+	
South China Bush Brown	<i>Mycalesis zonata</i>	Common	-	-	-		+									+				
Quaker	<i>Neopithecops zalmora zalmora</i>	Uncommon	-	-	-		+													
Southern Sullied Sailer	<i>Neptis clinia susruta</i>	Common	-	-	-		+							+						
Common Sailer	<i>Neptis hylas hylas</i>	Very common	-	-	-	+	+	+				+	++	+	++	+	+			
<b>Common Rose</b>	<b><i>Pachliopta aristolochiae goniopeltis</i></b>	Rare	-	-	-	+														
Chinese Peacock	<i>Papilio bianor bianor</i>	Common	-	-	-	+														
Lime Butterfly	<i>Papilio demoleus demoleus</i>	Common	-	-	-		+													
Red Helen	<i>Papilio helenus helenus</i>	Very common	-	-	-	+	+	+				+	+	+	+	+	+			
Great Mormon	<i>Papilio memnon agenor</i>	Very common	-	-	-	++	++			+	+	+	+			+	+			
Paris Peacock	<i>Papilio paris paris</i>	Very common	-	-	-	+	+			+		+	+	+	+	+	+			
Common Mormon	<i>Papilio polytes polytes</i>	Very common	-	-	-	++	+++	+		+	+	+	++	++	++	++	++	+		
Spangle	<i>Papilio protenor protenor</i>	Very common	-	-	-	+	+	+				+	+	+	+	+				
Glassy Tiger	<i>Parantica aglea melanoides</i>	Common	-	-	-							+								
Five-dot Sergeant	<i>Parathyma sulphita</i>	Common	-	-	-		+													
Little Branded Swift	<i>Pelopidas agna agna</i>	Uncommon	-	-	-	+								+						
Indian Cabbage White	<i>Pieris canidia canidia</i>	Very common	-	-	-	++++	++++	++++	++		+	++	+++	++	++	++	++	++		+
Pale Grass Blue	<i>Pseudozizeeria maha</i>	Very common	-	-	-	+++	+++	++	+	+	+	++	+	++	+	++	+	+		
Common Jester	<i>Symbrenthia lilaea lilaea</i>	Common	-	-	-		+									+				
Water Snow Flat	<i>Tagiades litigiosus litigiosus</i>	Common	-	-	-											+				
<b>Grass Demon</b>	<b><i>Udaspes folus</i></b>	Rare	-	-	-		+													
Indian Red Admiral	<i>Vanessa indica indica</i>	Uncommon	-	-	-								+							
Common Five-ring	<i>Ypthima baldus baldus</i>	Very common	-	-	-		+	+					+	+	+					

Notes:

(1) AFCD (2015). Hong Kong Biodiversity Database.

(2) Fellowes *et al.* (2002): LC=Local 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).

Species of conservation importance are in bold type face

Code for Abundance: +++++=dominant; ++++=abundant; +++=frequent; ++=occasional; +=scarce



Appendix 9.9: Odonate Species Recorded from 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 <sup>(5)</sup>	Developed Area / Wasteland	Village / Orchard	Agricultural Area		Storm Water Drain / Recreational Pond	Natural Watercourse	Modified Watercourse	Plantation	Grassland	Shrubland	Woodland	Fishponds and Mitigation Ponds	Marsh	Mangrove	Mudflat / Coastal Water Body	
									Dry	Wet												
<b>Damselfly</b>																						
Chinese Greenwing	<i>Neurobasis chinensis chinensis</i>	Common	-	-	-	-						+										
Common Blue Jewel	<i>Rhinocypha perforata perforata</i>	Abundant	-	-	-	-						+	+									
Black-banded Gossamerwing	<i>Euphaea decorata</i>	Abundant	-	-	-	-						+										
Orange-tailed Sprite	<i>Ceriagrion auranticum ryukyuanum</i>	Abundant	-	-	-	-		+				+	+							+		
Common Bluetail	<i>Ischnura senegalensis</i>	Abundant	-	-	-	-		+	+			+								+		
Black-kneed Featherlegs	<i>Copera ciliata</i>	Abundant	-	-	-	-							++									
Yellow Featherlegs	<i>Copera marginipes</i>	Abundant	-	-	-	-	+	+	+++			+	+									
Black Threadtail	<i>Prodasineura autumnalis</i>	Abundant	-	-	-	-							+									
<b>Dragonfly</b>																						
Lesser Emperor	<i>Anax parthenope julius</i>	Common	-	-	-	-						+										
Common Flangetail	<i>Ictinogomphus pertinax</i>	Abundant	-	-	-	-					+	+	+							+		
Asian Pintail	<i>Acisoma panorpoides panorpoides</i>	Common	-	-	-	-							+		+							
Blue Dasher	<i>Brachydiplax chalybea flavovittata</i>	Common	-	-	-	-														+		
Asian Amberwing	<i>Brachythemis contaminata</i>	Abundant	-	-	-	-			+		++	+	+							++		
Crimson Darter	<i>Crocothemis servilia servilia</i>	Abundant	-	-	-	-		+	+				+		+					++		
Blue Percher	<i>Diplacodes trivialis</i>	Abundant	-	-	-	-			+						+							
Russet Percher	<i>Neurothemis fulvia</i>	Abundant	-	-	-	-		+				+	+	+	+					+		
Red-faced Skimmer	<i>Orthetrum chrysis</i>	Common	-	-	-	-	+		+			+			+	+						
Common Blue Skimmer	<i>Orthetrum glaucum</i>	Abundant	-	-	-	-	+	+	+			+		+	+	+				+		
Marsh Skimmer	<i>Orthetrum luzonicum</i>	Abundant	-	-	-	-		+														
Common Red Skimmer	<i>Orthetrum prunosum neglectum</i>	Abundant	-	-	-	-	+	++	++++			+++	+++		+		+			++		
Green Skimmer	<i>Orthetrum sabina sabina</i>	Common	-	-	-	-	+	+	++++		+	++	++	+	+					+		
Wandering Glider	<i>Pantala flavescens</i>	Abundant	-	-	-	-	++++	+++	++++		+	+	++	++	++++	++	+			+++	++	+++
Pied Skimmer	<i>Pseudothemis zonata</i>	Common	-	-	-	-			+											+		
Variagated Flutterer	<i>Rhyothemis variegata arria</i>	Common	-	-	-	-	+	+	+					+	+					+		
Saddlebag Glider	<i>Tramea virginia</i>	Common	-	-	-	-	+				+			+								
Crimson Dropwing	<i>Trithemis aurora</i>	Abundant	-	-	-	-	+	+	+			++	++	+	+					+		
Indigo Dropwing	<i>Trithemis festiva</i>	Abundant	-	-	-	-	+	+	+			++	+		+					+		
<b>Scarlet Basker</b>	<b><i>Urothemis signata signata</i></b>	Common	LC	-	-	-														+		
Dingy Dusk-darter	<i>Zyxomma petiolatum</i>	Common	-	-	-	-							+									

Notes:

(1) AFCD (2015). Hong Kong Biodiversity Database.

(2) Fellowes *et al.* (2002): LC=Local 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 (2016). IUCN Red List of Threatened Species. Version 2016-1.

Species of conservation importance are in bold type face

Code for Abundance: +++++=dominant; ++++=abundant; +++=frequent; ++=occasional; +=scarce

Appendix 9.10a: Freshwater Communities Recorded from the Assessment Area (Dry Season)

Common name	Scientific Name	Family	Distribution in Hong Kong	Level of Concern <sup>(1)</sup>	Protection Status in China <sup>(2)</sup>	China Red Data Book <sup>(3)</sup>	Red List of China's Vertebrates <sup>(4)</sup>	IUCN Red List <sup>(5)</sup>	Watercourse 1 (Natural)		Watercourse 2 (Modified)		Watercourse 3 (Modified)			Watercourse 4 (Modified)		
									W1-M	W1-L	W2-M	W2-L	W3-U	W3-M	W3-L	W4-U	W4-M	W4-L
<b>Freshwater Fish <sup>(6) (7)</sup></b>																		
Nile Tilapia	<i>Oreochromis niloticus</i>	Cichlidae	Common	-	-	-	-	-		+					++++			
<b>Predaceous Chub</b>	<b><i>Parazacco spilurus</i></b>	Cyprinidae	Common	-	-	Vulnerable	Least Concern				++++			++++				
Mozambique Tilapia <sup>(9)</sup>	<i>Oreochromis mossambicus</i>	Cichlidae	Common	-	-	-	-	Near threatened				++++						
<b>Amphibian <sup>(8)</sup></b>																		
Unidentified frog (tadpoles)	undetermined	-	-	-	-	-	-	-									++++	
<b>Crustaceans <sup>(8)</sup></b>																		
Golden Bee Shrimp	<i>Caridina cantonensis</i>	Atyidae	-	-	-	-	-	-	+++	++++								
<b>Gastropods</b>																		
Channelled Apple Snail	<i>Pomacca canaliculata</i>	Ampullariidae	-	-	-	-	-	-			++++	++++				++++	++++	++++
Prosobranch Snail	<i>Brotia hainanensis</i>	Thiaridae	-	-	-	-	-	Least Concern				+++						
Freshwater Limpet	-	Ancylidae	-	-	-	-	-	-									+++	
<b>Insect</b>																		
-	-	Heptageniidae	-	-	-	-	-	-	+	++								
Backswimmer	<i>Enithares</i> sp.	Notonectidae	-	-	-	-	-	-		++								
Water Strider	<i>Metrocoris</i> sp.	Gerridae	-	-	-	-	-	-	+++									
Whirligig beetle	-	Gyrinidae	-	-	-	-	-	-	+									
Craneflies	-	Tipulidae	-	-	-	-	-	-		+								

Notes:

- (1) Fellowes *et al.* (2002).  
(2) List of Wild Animals Under State Protection (promulgated by State Forestry Administration and Ministry of Agriculture on 14 January, 1989).  
(3) Zheng, G. M. and Wang, Q. S. (1998).  
(4) Jiang *et al.* (2016).  
(5) IUCN (2016). IUCN Red List of Threatened Species. Version 2016-1.  
(6) AFCD (2015). Hong Kong Biodiversity Database.  
(7) AFCD (2004). Field Guide to the Freshwater Fish of Hong Kong.  
(8) Dudgeon, D. (2004) Hong Kong Field Guides - Hill streams, The Department of Ecology & Biodiversity, The University of Hong Kong.  
(9) This species is an exotic and invasive in Hong Kong; therefore, it is not considered as a species of conservation importance  
Species of conservation importance are in bold type face.  
Code for Abundance: +++++=dominant; ++++=abundant; +++=frequent; ++=occasional; +=scarce

Appendix 9.10b: Freshwater Communities Recorded from the Assessment Area (Wet Season)

Common name	Scientific Name	Family	Distribution in Hong Kong	Level of Concern <sup>(1)</sup>	Protection Status in China <sup>(2)</sup>	China Red Data Book <sup>(3)</sup>	Red List of China's Vertebrates <sup>(4)</sup>	IUCN Red List <sup>(5)</sup>	Watercourse 1 (Natural)		Watercourse 2 (Modified)		Watercourse 3 (Modified)			Watercourse 4 (Modified)			Watercourse 5 (Natural)		Watercourse 6 (Natural)	Watercourse 6 (Modified)
									W1-M	W1-L	W2-M	W2-L	W3-U	W3-M	W3-L	W4-U	W4-M	W4-L	W5-M	W5-L	W6-M	W6-L
<b>Freshwater Fish <sup>(6) (7)</sup></b>																						
Nile Tilapia	<i>Oreochromis niloticus</i>	Cichlidae	Common	-	-	-	-	-									++++	++++	++	++		
Mozambique Tilapia <sup>(9)</sup>	<i>Oreochromis mossambicus</i>	Cichlidae	Common	-	-	-	-	Near threatened			+++			++	++++		++++					
<b>Predaceous Chub</b>	<i>Parazacco spilurus</i>	Cyprinidae	-	-	-	Vulnerable	Least Concern	-		+++	++++		++		++							
Chinese Barb, Chinese Half-striped Barb, Six-banded Barb	<i>Puntius semifasciolatus</i>	Cyprinidae	Common	-	-	-	-	-												+		
Variable Platyfish	<i>Xiphophorus variatus</i>	-	Common	-	-	-	-	-								++	++++					
<b>Crustaceans</b>																						
Golden Bee Shrimp	<i>Caridina cantonensis</i>	Atyidae	-	-	-	-	-	-	++++	++++												
Mitten Crab	<i>Eriocheir japonicus</i>	Grapsidae	-	-	-	-	-	-	++													
<b>Gastropods</b>																						
Channelled Apple Snail	<i>Pomacca canaliculata</i>	Ampullariidae	-	-	-	-	-	-								++++	++++		++	+++		
<b>Insect</b>																						
Backswimmer	<i>Enithares</i> sp.	Notonectidae	-	-	-	-	-	-		++												
Water Skater	<i>Ptilomera tigrina</i>	Gerridae	-	-	-	-	-	-	+										+			
Water Strider	<i>Metrocoris</i> sp.	Gerridae	-	-	-	-	-	-	+++													
Unidentified Insect species 1	-	Pertidae	-	-	-	-	-	-	+													

(1) Fellowes *et al.* (2002).

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

(3) Zheng, G. M. and Wang, Q. S. (1998).

(4) Jiang *et al.* (2016).

(5) IUCN (2016). IUCN Red List of Threatened Species. Version 2016-1.

(6) AFCD (2015). Hong Kong Biodiversity Database.

(7) AFCD (2004). Field Guide to the Freshwater Fish of Hong Kong.

(8) Dudgeon, D. (2004) Hong Kong Field Guides - Hill streams, The Department of Ecology & Biodiversity, The University of Hong Kong.

(9) This species is an exotic and invasive in Hong Kong; therefore, it is not considered as a species of conservation importance

Species of conservation importance are in bold type face.

Code for Abundance: +++++=dominant; ++++=abundant; +++=frequent; ++=occasional; +=scarce

Appendix 9.11a: Intertidal Species Recorded from the Assessment Area (Dry Season)

Survey Type	Distribution in Hong Kong	IUCN Red List <sup>(4)</sup>	Transect 1	Walkthrough Survey	Core Survey			Transect 2	Walkthrough Survey	Core Survey			Transect 3	Walkthrough Survey	Core Survey			Transect 4	Walkthrough Survey	Core Survey		
					High Shore	Mid Shore	Low Shore			High Shore	Mid Shore	Low Shore			High Shore	Mid Shore	Low Shore			High Shore	Mid Shore	Low Shore
<b>Polychaetes</b>																						
<i>Sigambra hanaokai</i>	-	-		+	++	++			+	+			+	+	+			+	+	+	+	
<i>Neathes flandincincta</i>	-	-		+	++				+			+	+					+	+			
<i>Capitella capitata</i>	-	-											+	+					+		+	
<i>Hydroides elegans</i>	-	-											+								+	
<b>Ceriths</b>																						
<i>Batillaria zonalis</i>	Common <sup>(2)</sup>	-						+	+													
<i>Cerithidea cingulata</i>	Very common <sup>(2)</sup>	-		+				+	+				+	+								
<i>Cerithidea diadjariensis</i>	Very common <sup>(2)</sup>	-	++	+				++	+++					++++								
<b>Nerita</b>																						
<i>Nerita lineata</i>	Common <sup>(3)</sup>	-	+	+									+	+++								
<i>Nerita chamaeleon</i>	Common <sup>(3)</sup>	-		+				+	++					+++								
<i>Clithon oualaniensis</i>	-	-												+								
<b>Bivalves</b>																						
<i>Saccostrea cucullata</i>	Very common <sup>(1)</sup>	-		++				<1%	+				5%	+								
<i>Geloina expansa</i>	-	-	+	+										+								
<i>Laternula marilina</i>	-	-												+	+							
<i>Potamocorbula amurensis</i>	-	-												+	+							
<b>Barnacles</b>																						
<i>Balanus amphitrite</i>	Very common <sup>(1)</sup>	-						5.00%	+													
<b>Crustaceans</b>																						
<i>Uca lactea</i>	Common <sup>(2)</sup>	-	++	+++			+	+++	+++				++	+++				++	+++			
<i>Sesarmops sinensis</i>	-	-	+	++			+		++				++	+++				+	++			
<i>Metaplex elegans</i>	-	-	++	+++					++				+	+++				+	++			
Unknown shrimp juvenile	-	-											+									
<b>Fish</b>																						
<i>Omobranchus fasciolatoceps</i>	-	-											+	++								

Note:

(1) Gray (2003).

(2) Chan and Caley (2003).

(3) Tam and Wong (2002).

(4) IUCN (2016). IUCN Red List of Threatened Species. Version 2016-1.

Quadrat on every 3 m.

Code for Abundance: +++++=dominant; ++++=abundant; +++=frequent; ++=occasional; +=scarce

Appendix 9.11b: Intertidal Species Recorded from the Assessment Area (Wet Season)

Survey Type	Distribution in Hong Kong	IUCN Red List <sup>(4)</sup>	Transect 1	Walkthrough Survey	Core Survey			Transect 2	Walkthrough Survey	Core Survey			Transect 3	Walkthrough Survey	Core Survey			Transect 4	Walkthrough Survey	Core Survey		
					High Shore	Mid Shore	Low Shore			High Shore	Mid Shore	Low Shore			High Shore	Mid Shore	Low Shore			High Shore	Mid Shore	Low Shore
<b>Polychaetes</b>																						
<i>Sigambra hanaokai</i>	-	-	++	++		++						++	++	+					+		+	
<i>Neathes flandicincta</i>	-	-							+	++	+	+	++	++	+	+	+					
<i>Capitella capitata</i>	-	-	++	++															+	+	++	+
<b>Ceriths</b>																						
<i>Cerithidea cingulata</i>	Very common <sup>(2)</sup>	-	+	+++			++	++				++	++									
<i>Cerithidea diadjariensis</i>	Very common <sup>(2)</sup>	-	++	+++			++	++				+++	++									
<b>Nerita</b>																						
<i>Nerita lineate</i>	Common <sup>(3)</sup>	-					+	+														
<i>Nerita albicilla</i>	Common <sup>(1)</sup>	-					+	+				++	+									
<i>Nerita chamaeleon</i>	Common <sup>(3)</sup>	-					+	+														
<b>Littorinidae</b>																						
<i>Littoraria articulata</i>	Common <sup>(1)</sup>	-										+	+									
<b>Ellobiidae</b>																						
<i>Ellobium chinensis</i>	Common <sup>(3)</sup>	-										++	++									
<b>Bivalves</b>																						
<i>Caecella chinensis</i>	Uncommon <sup>(2)</sup>	-										+	+									
<i>Saccostrea cucullata</i>	Very common <sup>(1)</sup>	-										+	+									
<i>Meretrix meretrix</i>	Common <sup>(2)</sup>	-											+	+								
<b>Barnacles</b>																						
<i>Balanus amphitrite</i>	Very common <sup>(1)</sup>	-										<1%	+									
<b>Hermit Crabs</b>																						
<i>Clibanarius</i> sp.	Common <sup>(1)</sup>	-					+	+														
<i>Diogenes spinifrons</i>	Common <sup>(2)</sup>	-					+															
<b>Crustaceans</b>																						
<i>Uca arcuata</i>	Common <sup>(3)</sup>	-						+												+++		
<i>Uca lactea</i>	Common <sup>(2)</sup>	-	+++	+++		+	+++	+++				+	+				++	+++				
<i>Sesarmops sinensis</i>	-	-	+++	+++			+++	+++				+++	+++				++	+++				
<i>Metaplex elegans</i>	-	-	+	+		+	+	+				+++	+				+	+++				
<i>Perisesama bidens</i>	-	-	++	+			+	++				++	++					+++				
<b>Horseshoe Crab</b>																						
<i>Carcinoscorpius rotundicauda</i>	Rare <sup>(2)</sup>	Data Deficient	+	+			+	+														
<b>Fish</b>																						
<i>Periophthalmus modestus</i>	-	-	++	+++			+	++				++	++				+	++++				
<i>Boleophthalmus pectinirostris</i>	-	-		++																		
<i>Omobranchus fasciolatoiceps</i>	-	-	++	++			+	+				++	++									

Note:

- (1) Gray (2003).
  - (2) Chan and Caley (2003).
  - (3) Tam and Wong (2002).
  - (4) IUCN (2016). IUCN Red List of Threatened Species. Version 2016-1.
- Quadrat on every 3 m.  
Code for Abundance: +++++=dominant; ++++=abundant; +++=frequent; ++=occasional; +=scarce  
Species of conservation importance are in bold type face