

Appendix 8.3a: Avifauna Species Recorded within the Assessment Area

Common Name ⁽¹⁾	Scientific Name	Distribution in Hong Kong ⁽³⁾	Principal Status ⁽⁴⁾	Level of Concern ⁽⁵⁾	Protection Status in China ⁽⁶⁾	China Red Data Book ⁽⁷⁾	Red List of China's Vertebrates ⁽⁸⁾	IUCN Red List (Version 2021.1) ⁽⁹⁾	Project Site			500m Assessment Area										
									DA/WL	SL	MWC	DA/WL	VO	GL	SL	PLT	MWL	MWC	AGL	Marsh	Pond	WC
Spotted Dove	<i>Spilopelia chinensis</i>	Abundant resident	R	-	-	-	Least Concern	Least Concern	+			++	++	+	+		+		+	+		
Red-billed Blue Magpie	<i>Urocissa erythroryncha</i>	Common resident. Widely distributed in woodland edges throughout Hong Kong	R	-	-	-	Least Concern	Least Concern					+		+				+			
Japanese White-eye	<i>Zosterops japonicus</i>	Abundant resident	R,?W	-	-	-	Least Concern	Least Concern				+		+	+		+			+		

Notes:

(1) All wild birds are protected under the Wild Animals Protection Ordinance (Cap. 170).

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

(3) Agriculture, Fisheries and Conservation Department (AFCD) (2021). Hong Kong Biodiversity Database.

(4) Carey, G.J., Chalmers, M.L., Diskin, D.A., Carey, G.J., Chalmers, M.L., Diskin, D.A., Kennerley, P.R., Leader, P. J., Leven, M.R., Lewthwaite, R.W., Melville, D.S., Turnbull, M. & Young, L. (2001). The Avifauna of Hong Kong. Hong Kong Bird Watching Society, Hong Kong. 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

(5) Fellowes, J.R., Lau, M.W.N., Dudgeon, D., Reels, G.T., Ades, G.W.J., Carey, G.J., Chan, B.P.L., Kendrick, R.C., Lee, K.S., Leven, M.R., Wilson, K.D.P. & Yu, Y.T. (2002). Wild Animals to Watch: Terrestrial and Freshwater Fauna of Conservation Concern in Hong Kong. *Memoirs of the Hong Kong Natural History Society* 25:123-159: 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 nesting and/or roosting sites rather than in general occurrence.

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

(7) Zheng, G.-M. & Wang, Q.-S. (1998). China Red Data Book of Endangered Animals: Aves. First Edition. Beijing: Science Press.

(8) Jiang, Z.G., et al. (2016). Red List of China's Vertebrates. *Biodiversity Science* 24(5): 500-551.

(9) International Union for the Conservation of Nature (IUCN) (2021). IUCN Red List of Threatened Species. Version 2021.1.

(10) Wetland-dependent species (including wetland-dependent species and waterbirds).

Species of conservation importance is in bold type face.

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

Habitats are abbreviated as follows: DA/WL = Developed Area/Wasteland, SL = Shrubland, MWC = Modified Watercourse, VO = Village/Orchard, GL = Grassland, PLT = Plantation, MWL = Mixed Woodland, AGL = Agricultural Land and WC = Watercourse.

Appendix 8.3d: Herpetofauna Species Recorded within the Assessment Area

Common Name	Scientific Name	Distribution in Hong Kong ⁽¹⁾	Level of Concern ⁽²⁾	Protection Status in China ⁽³⁾	China Red Data Book ⁽⁴⁾	Red List of China's Vertebrates ⁽⁵⁾	IUCN Red List (Version 2021.1) ⁽⁶⁾	Project Site			500m Assessment Area										
								DA/WL	SL	MWC	DA/WL	VO	GL	SL	PLT	MWL	MWC	AGL	Marsh	Pond	NWC
Amphibians																					
Asian Common Toad	<i>Duttaphrynus melanostictus</i>	Widely distributed	-	-	-	-	Least Concern				+	+	+	++			+++ (tadpoles)	+			+++ (tadpoles)
Asiatic Painted Frog	<i>Kaloula pulchra pulchra</i>	Widely distributed	-	-	-	-	Least Concern				+			+							
Butler's Pigmy Frog	<i>Microhyla butleri</i>	Widely distributed	-	-	-	-	Least Concern											+			
Ornate Pigmy Frog	<i>Microhyla fissipes</i>	Widely distributed	-	-	-	-	Least Concern					+						+			
Paddy Frog	<i>Fejervarya limnocharis</i>	Widely distributed	-	-	-	-	Least Concern					+	+						+		+
Lesser Spiny Frog	<i>Quasipaa exilispinosa</i>	Occurs throughout the territory	PGC	-	-	-	Vulnerable											+			
Gunther's Frog	<i>Hylarana guentheri</i>	Widely distributed	-	-	-	-	Least Concern	+			+	++	+					++		+	+
Greenhouse Frog	<i>Eleutherodactylus planirostris</i>	Introduced	-	-	-	-	Least Concern					+					+				
Brown Tree Frog	<i>Polypedates megacephalus</i>	Widely distributed	-	-	-	-	Least Concern				+	+							+		+
Reptiles																					
Chinese Gecko	<i>Gekko chinensis</i>	Very common and widely distributed	-	-	-	-	Least Concern	Least Concern	+			+	+		+			+			
Bowring's Gecko	<i>Hemidactylus bowringii</i>	Distributed throughout Hong Kong	-	-	-	-	Least Concern	Least Concern					+					+	+		
Changeable Lizard	<i>Calotes versicolor</i>	Widely distributed	-	-	-	-	Least Concern	-											+		
Long-tailed Skink	<i>Eutropis longicaudata</i>	Widely distributed	-	-	-	-	Least Concern	Least Concern					+	+							
Bamboo Snake	<i>Cryptelytrops albolabris</i>	Distributed in shrubland, grassland throughout Hong Kong	-	-	-	-	Least Concern											+			

Notes:

(1) Agriculture, Fisheries and Conservation Department (AFCD) (2021). Hong Kong Biodiversity Database.

(2) Fellowes, J.R., Lau, M.W.N., Dudgeon, D., Reels, G.T., Ades, G.W.J., Carey, G.J., Chan, B.P.L., Kendrick, R.C., Lee, K.S., Leven, M.R., Wilson, K.D.P. & Yu, Y.T. (2002). Wild Animals to Watch: Terrestrial and Freshwater Fauna of Conservation Concern in Hong Kong. *Memoirs of the Hong Kong Natural History Society* 25:123-159: 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 nesting and/or roosting sites rather than in general occurrence.

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

(4) Zhao, E.M. (1998). China Red Data Book of Endangered Animals. Amphibia and Reptilia. First Edition. Beijing: Science Press.

(5) Jiang, Z.G., et al. (2016). Red List of China's Vertebrates. *Biodiversity Science* 24(5): 500-551.

(6) International Union for the Conservation of Nature (IUCN) (2021). IUCN Red List of Threatened Species. Version 2021.1.

Species of conservation importance is in bold type face.

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

Habitats are abbreviated as follows: DA/WL = Developed Area/Wasteland, SL = Shrubland, MWC = Modified Watercourse, VO = Village/Orchard, GL = Grassland, PLT = Plantation, MWL = Mixed Woodland, AGL = Agricultural Land and WC = Watercourse.

Appendix 8.3e: Mammal Species Recorded within the Assessment Area

Common Name	Scientific Name	Distribution in Hong Kong ⁽³⁾	Level of Concern ⁽⁴⁾	Protection Status in China ⁽⁵⁾	China Red Data Book ⁽⁶⁾	Red List of China's Vertebrates ⁽⁷⁾	IUCN Red List (Version 2021.1) ⁽⁸⁾	Project Site			500m Assessment Area											
								DA/WL	SL	MWC	DA/WL	VO	GL	SL	PLT	MWL	MWC	AGL	Marsh	Pond	NWC	
Himalayan Leaf-nosed Bat ⁽¹⁾	<i>Hipposideros armiger</i>	Very Common	(LC)	-	-	Least Concern	Least Concern				+			+								
Chinese Noctule ⁽¹⁾	<i>Nyctalus plancyi</i>	Common	PRC, (RC)	-	-	Least Concern	Least Concern				++			+			+	+				
Japanese Pipistrelle ⁽¹⁾	<i>Pipistrellus abramus</i>	Very Common	-	-	-	Least Concern	Least Concern				++	+		+			+	+				
Unknown Vespertilionidae sp. 1 ⁽¹⁾	Vespertilionidae sp. 1	Uncommon	-	-	-	Near Threatened	Least Concern				+			+								
Unknown Vespertilionidae sp. 2 ⁽¹⁾	Vespertilionidae sp. 2	Rare; Species of Conservation Concern	(LC)	-	-	Near Threatened	Least Concern				+			+								
Lesser Bamboo Bat ⁽¹⁾	<i>Tylonycteris pachypus</i>	Very Common	(LC)	-	Rare	Least Concern	Least Concern				+							+				
Unidentified Rat	-	-	-	-	-	-	-											+				
East Asian Porcupine ⁽¹⁾	<i>Hystrix brachyura</i>	Very Common	PGC	-	-	Least Concern	Least Concern										+					

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) Agriculture, Fisheries and Conservation Department (AFCD) (2021). Hong Kong Biodiversity Database.

(4) Fellowes, J.R., Lau, M.W.N., Dudgeon, D., Reels, G.T., Ades, G.W.J., Carey, G.J., Chan, B.P.L., Kendrick, R.C., Lee, K.S., Leven, M.R., Wilson, K.D.P. & Yu, Y.T. (2002). Wild Animals to Watch: Terrestrial and Freshwater Fauna of Conservation Concern in Hong Kong. *Memoirs of the Hong Kong Natural History Society* 25:123-159; 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 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) Wang, S. (1998). China Red Data Book of Endangered Animals. Mammalia. First Edition. Beijing: Science Press.

(7) Jiang, Z.G., et al. (2016). Red List of China's Vertebrates. *Biodiversity Science* 24(5): 500-551.

(8) International Union for the Conservation of Nature (IUCN) (2021). IUCN Red List of Threatened Species. Version 2021.1.

Species of conservation importance is in bold type face.

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

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.

Habitats are abbreviated as follows: DA/WL = Developed Area/Wasteland, SL = Shrubland, MWC = Modified Watercourse, VO = Village/Orchard, GL = Grassland, PLT = Plantation, MWL = Mixed Woodland, AGL = Agricultural Land and WC = Watercourse.

Appendix 8.3f: Freshwater Fauna Species Recorded within the Assessment Area

Common Name	Scientific Name	Distribution in Hong Kong ⁽¹⁾⁽²⁾⁽³⁾	AFCD Species of Conservation Concern	Level of Concern ⁽⁴⁾	Protection Status in China ⁽⁵⁾	China Red Data Book ⁽⁶⁾	Red List of China's Vertebrates ⁽⁷⁾	IUCN Red List (Version 2021.1) ⁽⁸⁾	Freshwater Sampling Points				500m Assessment Area		
									FS1	FS2	FS3	FS4	MWC	NWC	
Flat-headed Loach	<i>Oreonectes platycephalus</i>	Common. It can be found in upper streams throughout Hong Kong	-	-	-	-	Least Concern	Least Concern							+
Mosquito Fish	<i>Gambusia affinis</i>	Common. Introduced species.	-	-	-	-	-	Least Concern					+	++	
Guppy	<i>Poecilia reticulata</i>	Common	-	-	-	-	-	-					+	+	
Variable Platyfish	<i>Xiphophorus variatus</i>	Common	-	-	-	-	-	Least Concern					+		
Nile Tilapia	<i>Oreochromis niloticus</i>	Common. Also cultivated.	-	-	-	-	-	Least Concern					++		
Large Stream Snail	<i>Sulcospira hainanensis</i>	Abundant and widespread; Very Common ⁽²⁾	-	-	-	-	-	Least Concern							+
Apple Snail	<i>Pomacea canaliculata</i>	Invasive species	-	-	-	-	-	Least Concern	+	+			+	+	
Tadpole Snail	<i>Haitia acuta</i>	-	-	-	-	-	-	Least Concern							+
	<i>Planorbidae</i>	-	-	-	-	-	-	-	+	++			+	+	
Canton Bee Shrimp	<i>Caridina cantonensis</i>	Common and widespread	-	-	-	-	-	Least Concern							++
Backswimmer	Family Notonectidae	Very Common	-	-	-	-	-	-	+	+			+	+	
Waterskater/Water strider	<i>Gerris</i> sp.	-	-	-	-	-	-	-	+	+					
Non-biting Midge	Family Chironomidae	Very Common	-	-	-	-	-	-	+++	++			++		
Blood Worm	<i>Chironomus plumosus</i>	Abundant in polluted waters; Very Common	-	-	-	-	-	-	++	++			++		
Yellow Featherlegs	<i>Copera marginipes</i>	Abundant; Very Widespread	-	-	-	-	-	Least Concern	+						
Common Blue Skimmer (Nymph)	<i>Orthetrum glaucum</i>	Abundant	-	-	-	-	-	Least Concern	+				++	+	
Hainan Clubtail (Nymph)	<i>Asiagomphus hainanensis</i>	Common	-	-	-	-	-	Least Concern	+						
Fiery Emperor (Nymph shed)	<i>Anax immaculifrons</i>	Common; Sparse	-	-	-	-	-	Least Concern					+		
Crimson Dropwing (Nymph shed)	<i>Trithemis aurora</i>	Abundant	-	-	-	-	-	Least Concern					++		
Indigo Dropwing (Nymph shed)	<i>Trithemis festiva</i>	Abundant	-	-	-	-	-	Least Concern					++		
Asian Common Toad (Tadpole)	<i>Duttaphrynus melanostictus</i>	Widely distributed	-	-	-	-	-	Least Concern					+++	+++	

Notes:

(1) Lee, L. F., Lam, K. S., Ng, K. Y., Chan, K. T. and Young, L. C. (2004). *Field Guide to the Freshwater Fish of Hong Kong*. Friends of the Country Parks.

(2) Agriculture, Fisheries and Conservation Department (AFCD) (2021). Hong Kong Biodiversity Database.

(3) Dudgeon, D. (2003). Hillstreams - Hong Kong Field Guides 2. The Department of Ecology and Biodiversity, The University of Hong Kong. Hong Kong: Wan Li Book Co., Ltd.

(4) Fellowes, J.R., Lau, M.W.N., Dudgeon, D., Reels, G.T., Ades, G.W.J., Carey, G.J., Chan, B.P.L., Kendrick, R.C., Lee, K.S., Leven, M.R., Wilson, K.D.P. & Yu, Y.T. (2002). Wild Animals to Watch: Terrestrial and Freshwater Fauna of Conservation Concern in Hong Kong. *Memoirs of the Hong Kong Natural History Society* 25:123-159: 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 nesting and/or roosting sites rather than in general

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

(6) Yue, P.Q. & Chan, Y.Y. (1998). China Red Data Book of Endangered Animals. Pisces. First Edition. Beijing: Science Press.

(7) Jiang, Z.G., et al. (2016). Red List of China's Vertebrates. *Biodiversity Science* 24(5): 500-551.

(8) International Union for the Conservation of Nature (IUCN) (2021). IUCN Red List of Threatened Species. Version 2021.1.

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

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