

Appendix 8.3 List of Fauna recorded within the Assessment Area

Appendix 8.3 List of Fauna recorded within the Assessment Area

Table A8-1 Avifauna recorded within the Project Area

Scientific Name	Common Name	Status in Hong Kong ⁽¹⁾	Protection status/ Level of Concern ⁽²⁾	Habitat		
				Developed Area	Plantation	Total
<i>Spilopelia chinensis</i>	Spotted Dove	very common resident	--	2		2
<i>Hierococcyx sparveroides</i>	Large Hawk Cuckoo	summer visitor and passage migrant	--		4	4
<i>Cuculus micropterus</i>	Indian Cuckoo	summer visitor and passage migrant	--		1	1
<i>Eudynamys scolopaceus</i>	Asian Koel	recorded in all months, widespread	--		6	6
<i>Centropus bengalensis</i>	Lesser Coucal	widespread and fairly common resident	CRDB (V), CPS (2)		1	1
<i>Apus nipalensis</i>	House Swift	spring migrant and resident	--	4		4
<i>Hirundo rustica</i>	Barn Swallow	abundant passage migrant especially in spring, common breeding species and uncommon winter visitor	--	1	6	7
<i>Motacilla alba</i>	White Wagtail	common in winter and spring	--	4		4
<i>Pycnonotus jocosus</i>	Red-whiskered Bulbul	abundant resident	--	1		1
<i>Copsychus saularis</i>	Oriental Magpie Robin	abundant resident	--	5	3	8
Total number of species recorded:				6	6	10
Total Number of individuals recorded:				17	21	38

Table A8-2 Avifauna recorded within the Assessment Area

Scientific Name	Common Name	Status in Hong Kong ⁽¹⁾	Protection status/ Level of Concern ⁽²⁾	Habitat														Total
				WAA	ActAg	DV	G	HG	OF	O	PL	P	S	V	R	W	AF	
<i>Tachybaptus ruficollis</i>	Little Grebe	present all year on ponds and pools	LC									2						2
<i>Ardeola bacchus</i>	Chinese Pond Heron	winter, migrant and breeding populations in widespread wetlands and damp areas	PRC(RC)									2						2
<i>Milvus migrans</i>	Black Kite	present all year and widespread	Cap. 586, CPS (2), (RC)														2	2

Development of Organic Waste Treatment Facilities, Phase 2
Environmental Impact Assessment Report

			Protection status/ Level of Concern ⁽²⁾	Habitat														
Scientific Name	Common Name	Status in Hong Kong ⁽¹⁾		WAA	ActAg	DV	G	HG	OF	O	PL	P	S	V	R	W	AF	Total
<i>Francolinus pintadeanus</i>	Chinese Francolin	locally-distributed resident	--					2					2					4
<i>Amaurornis phoenicurus</i>	White-breasted Waterhen	common resident	--									1						1
<i>Gallinula chloropus</i>	Common Moorhen	winter visitor, breeding species and migrant	--												1			1
<i>Spilopelia chinensis</i>	Spotted Dove	very common resident	--	1	3	7	6		3	1	2	1	11	11	1			47
<i>Hierococcyx sparveroides</i>	Large Hawk Cuckoo	summer visitor and passage migrant	--					4			3		2	1		5		15
<i>Cuculus micropterus</i>	Indian Cuckoo	summer visitor and passage migrant	--								1							1
<i>Cacomantis merulinus</i>	Plaintive Cuckoo	recorded in all months, mainly in spring and summer	--				1			1								2
<i>Eudynamys scolopaceus</i>	Asian Koel	recorded in all months, widespread	--	1		1				3	2		2	1		3		13
<i>Centropus sinensis</i>	Greater Coucal	widespread and common resident	CRDB (V), CPS (2)	1			1	2					2		1	1		8
<i>Otus lettia</i>	Collared Scops Owl	widespread and common resident	Cap. 586, CPS (2)								1		1					2
<i>Glaucidium cuculoides</i>	Asian Barred Owlet	widespread though locally-distributed resident	--								1							1
<i>Apus nipalensis</i>	House Swift	spring migrant and resident	--								5							5
<i>Alcedo atthis</i>	Common Kingfisher	present all year	--									1 ⁽³⁾			1			2
<i>Halcyon smyrnensis</i>	White-throated Kingfisher	present all year	(LC)									1						1
<i>Hirundo rustica</i>	Barn Swallow	abundant passage migrant especially in spring, common breeding species and uncommon winter visitor	--				1							7				8

			Protection status/ Level of Concern ⁽²⁾	Habitat														
Scientific Name	Common Name	Status in Hong Kong ⁽¹⁾		WAA	ActAg	DV	G	HG	OF	O	PL	P	S	V	R	W	AF	Total
<i>Motacilla cinerea</i>	Grey Wagtail	common winter visitor and passage migrant	--			1												1
<i>Motacilla alba</i>	White Wagtail	present all year, most common in winter and spring	--		3	1						1		4	3			12
<i>Anthus hodgsoni</i>	Olive-backed Pipit	common winter visitor and passage migrant	--										3					3
<i>Pycnonotus jocosus</i>	Red-whiskered Bulbul	abundant resident	--		5 ⁽³⁾	20	13		3		14	1	1	31	6	5		99
<i>Pycnonotus sinensis</i>	Chinese Bulbul	abundant and widespread resident, with migrants and winter visitor	--		1 ⁽³⁾	1	4		2		11		11	13		8		51
<i>Pycnonotus aurigaster</i>	Sooty-headed Bulbul	common resident	--					1										1
<i>Lanius schach</i>	Long-tailed Shrike	common resident	--		1 ⁽³⁾											1		2
<i>Copsychus saularis</i>	Oriental Magpie Robin	abundant resident	--			3	1	2			2		1	3		1		13
<i>Phoenicurus aureus</i>	Daurian Redstart	common winter visitor	--					1		1								2
<i>Saxicola stejnegeri</i>	Stejneger's Stonechat	common passage migrant and winter visitor	--		1							1						2
<i>Turdus hortulorum</i>	Grey-backed Thrush	very common winter visitor and migrant	--		1 ⁽³⁾													1
<i>Garrulax perspicillatus</i>	Masked Laughingthrush	very common resident	--			1		3		3	5	2	4	10		2		30
<i>Prinia flaviventris</i>	Yellow-bellied Prinia	very common resident	--		1		1	4						1				7
<i>Prinia inornata</i>	Plain Prinia	locally common resident	--					1										1
<i>Orthotomus sutorius</i>	Common Tailorbird	widespread and common resident	--							1			1	1		1		4
<i>Phylloscopus fuscatus</i>	Dusky Warbler	very common winter visitor and migrant	--				1											1

Scientific Name	Common Name	Status in Hong Kong ⁽¹⁾	Protection status/ Level of Concern ⁽²⁾	Habitat														
				WAA	ActAg	DV	G	HG	OF	O	PL	P	S	V	R	W	AF	Total
<i>Phylloscopus inornatus</i>	Yellow-browed Warbler	very common and widespread winter visitor and migrant	--								1					1		2
<i>Parus cinereus</i>	Cinereous Tit	common resident	--	1								1	2	2		1		7
<i>Zosterops japonicus</i>	Japanese White-eye	abundant and widespread resident	--			2	1					1	1	22				27
<i>Lonchura punctulata</i>	Scaly-breasted Munia	common resident	--				5											5
<i>Passer montanus</i>	Eurasian Tree Sparrow	very common resident	--		2	6								11				19
<i>Gracupica nigricollis</i>	Black-collared Starling	common resident	--	1	2			1		1	1		1	2	2			11
<i>Acridotheres cristatellus</i>	Crested Myna	very common resident	--			1												1
<i>Dicrurus macrocercus</i>	Black Drongo	common passage migrant, locally-common breeder and winter visitor	--								1							1
<i>Dicrurus hottentottus</i>	Hair-crested Drongo	locally-common resident	--										1					1
<i>Pica pica</i>	Eurasian Magpie	common resident	--				1									2		3
<i>Corvus macrorhynchos</i>	Large-billed Crow	common resident	--					1					3	1				5
Total number of species recorded:				5	10	11	12	11	3	7	14	12	17	16	7	12	1	45
Total Number of individuals recorded:				5	20	44	36	22	8	11	50	15	49	121	15	31	2	429

Notes for Tables A8-1 and A8-2:

(1) Nomenclature follows HKBWS (2013); Status in Hong Kong follows Allcock et al. (2012).

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

Abbreviations for Protection Status/ Level of Concern:

Cap. 586 – Listed in Protection of Endangered Species of Animals and Plants Ordinance;

CPS – Listed in “National Key Protected Species” in mainland China; 1 = Grade 1; 2 = Grade 2;

CRDB – China Red Data Book: E = Endangered, V = Vulnerable, R = Rare, I = Indeterminate (Zheng & Wang 1998);

Level of Concern – LC = Local Concern, RC = Regional Concern, PRC = Potential 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. (Fellowes et al. 2002)

(3) An individual of carcass was recorded.

Table A8-3 Mammals recorded within the Assessment Area

Scientific Name	Common Name	Protection status/ Listing ⁽¹⁾	Status ⁽²⁾	Habitat		Total
				Developed Area	Active Agricultural Area	
<i>Cynopterus sphinx</i>	Short-nosed Fruit Bat	Cap. 170, CRDB (I)	Very Common	5	2 (carcasses)	7
--	Unidentified Pipistrelle	Cap. 170 ⁽³⁾	--		17 (carcasses)	17
Total number of species recorded:				1	2	2
Total Number of individuals recorded:				5	19	24

Notes:

- (1) Abbreviations for Protection Status/ Listing: Cap. 170 – Listed in Wild Animals Protection Ordinance;
CRDB – China Red Data Book of Endangered Animals: Mammalia (Wang, 1998); Letters in parentheses: E = Endangered, V = Vulnerable, R = Rare, I = Indeterminate
- (2) Shek and Chan (2006).
- (3) All bats found in Hong Kong are protected under the Wild Animals Protection Ordinance (Cap.170).

Table A8-4 Herpetofauna recorded within the Assessment Area

Scientific Name	Common Name	Commonness	ActAg	DV	G	PL	P	S	V	R	Total
<i>Bufo melanostictus</i>	Asian Common Toad	Abundant ⁽²⁾		7				2	1		10
<i>Calotes versicolor</i>	Changeable Lizard	Common ⁽¹⁾			2						2
<i>Eumeces chinensis chinensis</i>	Chinese Skink	Common ⁽³⁾			1						1
<i>Fejervarya limnocharis</i>	Paddy Frog	Very Common ⁽²⁾	2	3	8			5			18
<i>Kalophrynus interlineatus</i>	Spotted Narrow-mouthed Frog	Common ⁽²⁾		1							1
<i>Kaloula pulchra pulchra</i>	Asiatic Painted Frog	Common ⁽²⁾	1	5	1			3			10
<i>Mabuya longicaudata</i>	Long-tailed Skink	Common ⁽³⁾			1	1			1		3
<i>Pareas margaritophorus</i>	White-spotted Slug Snake	Fairly Common ⁽¹⁾		1							1
<i>Polypedates megacephalus</i>	Brown Tree Frog	Very Common ⁽²⁾	1	4	1	3					9
<i>Rana guentheri</i>	Gunther's Frog	Very Common ⁽²⁾	2		7		6	1		3	19
Total number of species recorded:			4	6	7	2	1	4	2	1	10
Total Number of individuals recorded:			6	21	21	4	6	11	2	3	74

- Notes: (1) Karsen et. al, 1998.
(2) Chan et al., 2005.
(3) Hong Kong Biodiversity No. 17 (Chan et al., 2009).

Table A8-5 Butterflies recorded within the Project Area

Scientific Name	Common Name	Local Restrictedness ⁽¹⁾	Habitat		
			Developed Area	Plantation	Total
<i>Abisara echerius echerius</i>	Plum Judy	Very Common		3	3
<i>Ariadne ariadne alterna</i>	Angled Castor	Common		1	1
<i>Athyma selenophora leucophryne</i>	Staff Sergeant	Common	1		1
<i>Borbo cinnara</i>	Formosan Swift	Common		1	1
<i>Catopsilia pomona pomona</i>	Lemon Emigrant	Common	1		1
<i>Elymnias hypermnestra hainana</i>	Common Palmfly	Common		1	1
<i>Euploea midamus midamus</i>	Blue-spotted Crow	Very Common		1	1
<i>Eurema hecabe hecabe</i>	Common Grass Yellow	Very Common		1	1
<i>Hebomoia glaucippe glaucippe</i>	Great Orange Tip	Common		1	1
<i>Hypolimnas bolina kezia</i>	Great Egg-fly	Common		2	2
<i>Papilio helenus helenus</i>	Red Helen	Very Common	1	3	4
<i>Papilio memnon agenor</i>	Great Mormon	Very Common		1	1
<i>Papilio paris paris</i>	Paris Peacock	Very Common		6	6
<i>Papilio polytes polytes</i>	Common Mormon	Very Common	1	3	4
<i>Pieris canidia canidia</i>	Indian Cabbage White	Very Common	5	6	11
<i>Ypthima baldus baldus</i>	Common Five-ring	Very Common		1	1
Total number of species recorded:			5	14	16
Total Number of individuals recorded:			9	31	40

Table A8-6 Butterflies recorded within the Assessment Area

Table A6-5 Butterflies Recorded within the Assessment Area																
Scientific Name	Common Name	Local Restrictedness ⁽¹⁾	Habitat													
			WAA	ActAg	DV	G	HG	OF	O	PL	P	S	V	R	W	Total
<i>Abisara echerius echerius</i>	Plum Judy	Very Common												2		2
<i>Ariadne ariadne alterna</i>	Angled Castor	Common		1												1
<i>Athyma nefte seitzi</i>	Colour Sergeant	Common									1					1

Development of Organic Waste Treatment Facilities, Phase 2
Environmental Impact Assessment Report

Scientific Name	Common Name	Local Restrictedness ⁽¹⁾	Habitat														Total
			WAA	ActAg	DV	G	HG	OF	O	PL	P	S	V	R	W		
<i>Catopsilia pomona pomona</i>	Lemon Emigrant	Common			1		4		1	3					1	10	
<i>Cupha erymanthis erymanthis</i>	Rustic	Very Common				1										1	
<i>Delias pasithoe pasithoe</i>	Red-base Jezebel	Very Common				1	2			4			2			9	
<i>Erionota torus</i>	Banana Skipper	Uncommon							4							4	
<i>Euploea core amymone</i>	Common Indian Crow	Common													1	1	
<i>Eurema hecabe hecabe</i>	Common Grass Yellow	Very Common		1			2									3	
<i>Faunis eumeus eumeus</i>	Large Faun	Common												1	1	2	
<i>Graphium agamemnon agamemnon</i>	Tailed Jay	Common			1											1	
<i>Hebomoia glaucippe glaucippe</i>	Great Orange Tip	Common		2		2										4	
<i>Heliophorus epicles phoenicoparyphus</i>	Purple Sapphire	Common						2		1						3	
<i>Hestina assimilis assimilis</i>	Red Ring Skirt	Common								1			1			2	
<i>Hypolimnas bolina kezia</i>	Great Egg-fly	Common								1	1					2	
<i>Junonia almana almana</i>	Peacock Pansy	Common					1									1	
<i>Mycalesis mineus mineus</i>	Dark-brand Bush Brown	Very Common	1					1	1						1	4	
<i>Neptis hylas hylas</i>	Common Sailer	Very Common					2		2							4	
<i>Papilio helenus helenus</i>	Red Helen	Very Common					1	1			1		2		5	10	
<i>Papilio memnon agenor</i>	Great Mormon	Very Common			2				2	3	1	1	2	1	1	13	
<i>Papilio paris paris</i>	Paris Peacock	Very Common	2		1	1	2		1	2	1			1	3	14	
<i>Papilio polytes polytes</i>	Common Mormon	Very Common	4			1	3		4	1	1		6		4	24	
<i>Papilio protenor protenor</i>	Spangle	Very Common				1				1						2	
<i>Parantica aglea melanoides</i>	Glassy Tiger	Common											1			1	
<i>Parnara guttata</i>	Common Straight Swift	Common										1				1	
<i>Pieris canidia canidia</i>	Indian Cabbage White	Very Common	16	21	20	20	5	44		5	18	1	40	5	17	212	
<i>Ypthima baldus baldus</i>	Common Five-ring	Very Common	2				1			1		3			11	18	
<i>Zizeeria maha serica</i>	Pale Grass Blue	Very Common										1				1	
Total number of species recorded:			5	4	5	7	10	4	7	12	6	5	7	5	10	28	
Total Number of individuals recorded:			25	25	25	27	23	48	15	24	23	7	54	10	45	351	

Notes for Tables A8-5 and A8-6:

Development of Organic Waste Treatment Facilities, Phase 2 Environmental Impact Assessment Report

(1) Local Restrictedness follows AFCD (2011).

Table A8-7 Dragonfly recorded within the Project Area

Scientific Name	Common Name	Commonness ⁽¹⁾	Habitat		
			Developed area	Plantation	Total
<i>Pantala flavescens</i>	Wandering Glider	Abundant	1	10	11
Total number of species recorded:			1	1	1
Total Number of individuals recorded:			1	10	11

Table A8-8 Dragonflies recorded within the Assessment Area

Scientific Name	Common Name	Commonness ⁽¹⁾	Habitat							Total
			DV	G	O	PL	P	S	R	
<i>Copera marginipes</i>	Yellow Featherlegs	Abundant	1	1			1		6	9
<i>Crocothemis servilia servilia</i>	Crimson Darter	Abundant					2			2
<i>Orthetrum luzonicum</i>	Marsh Skimmer	Abundant		1					1	2
<i>Pantala flavescens</i>	Wandering Glider	Abundant		2	15		5			22
<i>Prodasineura autumnalis</i>	Black Threadtail	Abundant							2	2
<i>Pseudothemis zonata</i>	Pied Skimmer	Common		1			10		2	13
<i>Rhyothemis variegata arria</i>	Variegated Flutterer	Common		1		1		4		6
Total number of species recorded:			1	5	1	1	4	1	4	7
Total Number of individuals recorded:			1	6	15	1	18	4	11	56

Notes for Tables A8-7 and A8-8:

(1) Tam et al. (2011).

Abbreviations for Habitat Types in Tables A8-1 to A8-8:

WAA = Wet Abandoned Agricultural Land;

ActAg = Active Agricultural Land;

DV = Developed Area;

G = Grassland;

HGL = Hillside Grassland;

OF = Open Field;

O = Orchard;

PL = Plantation;

P = Pond;

R = Watercourse;

S = Shrubland;

V = Village;

W = Woodland;

AF = At Flight

Note: No records from habitat types not listed.

Table A8-9 Aquatic fauna recorded within the Assessment Area

			Protection Status/ Listing ⁽¹⁾	P1	P3	P4	W1	W2
Scientific Name	Common Name	Commonness						
Freshwater Fish								
<i>Channa maculata</i>	Spotted Snakehead	Uncommon in wild, cultivated	--				+	
<i>Cyprinus carpio</i>	Common Carp	Not common in streams, occurs in reservoirs and cultivated in fish ponds	IUCN (VU)			++	+	
<i>Gambusia affinis</i>	Mosquito Fish	Common	--				+++	++
<i>Glossogobius giuris</i>	Fork Tongue Goby	Common	--				+	
<i>Nicholsicypris normalis</i>	Nichols' minnow	Common	--				+	
<i>Oreochromis niloticus</i>	Nile Tilapia	Common	--			++	++++	+
<i>Puntius semifasciolatus</i>	Chinese Barb	Common	--				++	
<i>Rhinogobius duospilus</i>	--	Common	--				+	+
Freshwater Invertebrates								
<i>Metrocoris sp.</i>	--	--	--		+		+++	++++
<i>Hydropsychidae</i>	--	--	--					+
<i>Helicopsychidae</i>	--	--	--					++
<i>Oligochaete</i>	--	--	--				++++	++++
<i>Pomacea canaliculata</i>	Apple Snail	Common	--	+	+		+	+
<i>Sinotaia quadrata</i>	--	--	--		+++			++++
<i>Melanoides tuberculata</i>	--	--	--				+	++++
<i>Andonata woodiana</i>	--	--	--				++	
<i>Macrobrachium hainanense</i>	--	--	--				++	+
<i>Caridina cantonensis</i>	--	Common	--					+
Total number of species recorded:				1	3	2	14	12

Note: "+" denotes the Relative Abundance;

+ = 1-10 individuals

++ = 10-20 individuals

+++ = 20-30 individuals

++++ = >30 individuals

(1) Abbreviations for Protection Status/ Listing: IUCN – IUCN Red List of Threatened Species (Version 2012.1); VU = Vulnerable