

APPENDIX 10.5 RECORDS OF EGRETRIES, ARDEID AND GREAT CORMORANT NIGHT ROOSTS, AND ASSOCIATED FLIGHT PATHS

APPENDIX 10.5A – MAI PO LUNG VILLAGE EGRETRY

Table 1 Number of Nests Recorded at Mai Po Lung Village (MPLV) Egretty

Species	Mar 2022 ⁽¹⁾	Apr 2022	May 2022	Jun 2022	Jul 2022	Aug 2022	Sep 2022 ⁽²⁾
Chinese Pond Heron (<i>Ardeola bacchus</i>)	0	37	50	40	38	12	2
Little Egret (<i>Egretta garzetta</i>)	0	40	11	46	35	11	1
Total:	0	77	61	86	73	23	3

Note:

(1) Nest-building activities were observed in late-March 2022.

(2) Minimal activity and low abundance of young fledglings were observed at MPLV Egretty in mid-September. MPLV Egretty was no longer active in late-September.

Table 2 Number of Flight Path Usage Recorded at Mai Po Lung Village (MPLV) Egretty

Flight Path	Number of Usage	Percentage
Flight Path 1	132	38.9%
Flight Path 2	76	22.4%
Flight Path 3	44	12.9%
Flight Path 4	47	13.8%
Flight Path 5	26	7.6%
Flight Path 6	13	3.8%
Flight Path 7	2	0.6%
Total:	315	100%

Note: Ardeids were observed flying out and returning to the egretty repeatedly. The number of observed flights path usage does not directly reflect the total abundance of ardeids / nests recorded from the egretties.

Table 3 Flight Height of Flight Paths Recorded at Mai Po Lung Village (MPLV) Egretty

Flight Height (m)	Flight Path 1		Flight Path 2		Flight Path 3		Flight Path 4		Flight Path 5		Flight Path 6		Flight Path 7	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 – 10	76	57.5%	40	52.6%	20	45.5%	39	83.0%	9	34.6%	4	30.8%	2	100%
11 – 20	55	41.7%	36	47.4%	24	54.5%	8	17.0%	16	61.5%	3	23.0%	-	-
21 – 30	1	0.8%	-	-	-	-	-	-	1	3.8%	2	15.4%	-	-
> 30	-	-	-	-	-	-	-	-	-	-	4	30.8%	-	-
Total:	132	100%	76	100%	44	100%	47	100%	26	100%	13	100%	2	100%

APPENDIX 10.5B – MAI PO VILLAGE EGRETRY

Table 4 Number of Nests Recorded at Mai Po Village (MPV) Egretty

Species	Mar 2022	Apr 2022	May 2022	Jun 2022	Jul 2022	Aug 2022	Sep 2022 ⁽¹⁾
Chinese Pond Heron (<i>Ardeola bacchus</i>)	0	0	4	18	16	3	0
Little Egret (<i>Egretta garzetta</i>)	46	53	54	66	18	3	0
Total:	46	53	58	84	34	6	0

Note:

(1) MPV Egretty was no longer active in early-September.

Table 5 Number of Flight Path Usage Recorded at Mai Po Village (MPV) Egretty

Flight Path	Number of Usage	Percentage
Flight Path 1	71	26.5%
Flight Path 2	38	14.2%
Flight Path 3	51	19.0%
Flight Path 4	38	14.2%
Flight Path 5	60	22.4%
Flight Path 6	10	3.7%
Total:	268	100%

Note: Ardeids were observed flying out and returning to the egretty repeatedly. The number of observed flights path usage does not directly reflect the total abundance of ardeids / nests recorded from the egrettries.

Table 6 Flight Height of Flight Paths Recorded at Mai Po Village (MPV) Egretty

Flight Height (m)	Flight Path 1		Flight Path 2		Flight Path 3		Flight Path 4		Flight Path 5		Flight Path 6	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 – 10	32	45.1%	7	18.4%	38	74.5%	31	81.6%	23	38.3%	2	20%
11 – 20	39	54.9%	28	73.7%	11	21.6%	1	2.6%	36	60%	3	30%
21 – 30	-	-	3	7.9%	2	3.9%	6	15.8%	1	1.7%	5	50%
Total:	71	100%	38	100%	51	100%	38	100%	60	100%	10	100%

APPENDIX 10.5C – SAN TIN OPEN STORAGE NIGHT ROOST

Table 7 Number of Night-Roosting Ardeids Recorded at San Tin Open Storage Night Roost

Species ⁽¹⁾	Dec 2022 ⁽²⁾	Jan 2023	Feb 2023	Mar 2023
Ardeids	53	48	15	6
Total:	53	48	15	6

Note:

(1) Only ardeids were recorded roosting at San Tin Open Storage Night Roost.

(2) San Tin Open Storage Night Roost was first identified during additional site visit in December 2022. Survey on the night roost was continued until the end of the dry season.

Table 8 Number of Flight Path Usage Recorded at San Tin Open Storage Night Roost

Flight Path	Number of Usage	Percentage
Flight Path 1	34	15.3%
Flight Path 2	58	26.2%
Flight Path 3	28	12.6%
Flight Path 4	48	21.6%
Flight Path 5	50	22.5%
Flight Path 6	4	1.8%
Total:	222	100%

Note: Birds individuals were observed flying out and returning to the night roost repeatedly. The number of observed flights path usage does not directly reflect the total abundance of birds recorded from the night roost.

Table 9 Flight Height of Flight Paths Recorded at San Tin Open Storage Night Roost

Flight Height (m)	Flight Path 1		Flight Path 2		Flight Path 3		Flight Path 4		Flight Path 5		Flight Path 6	
	No.	%	No.	No.	No.	%	%	%	No.	%	No.	%
0 – 10	33	97.1%	57	98.3%	23	82.1%	30	62.5%	45	90%	4	100%
11 – 20	1	2.9%	1	1.7%	5	17.9%	18	37.5%	5	10%	0	0%
Total:	34	100%	58	100%	28	100%	48	100%	50	100%	4	100%

APPENDIX 10.5D – HA WAN TSUEN NIGHT ROOST

Table 10 Number of Night-Roosting Ardeids and Great Cormorants Recorded at Ha Wan Tsuen Night Roost

Species	Jan 2022 ⁽¹⁾	Feb 2022	Mar 2022	Apr 2022	May 2022	Jun 2022	Jul 2022	Aug 2022	Sep 2022	Oct 2022
Ardeids	28	56	25	0	0	0	0	0	20	21
Great Cormorants (<i>Phalacrocorax carbo</i>)	143	80	0	0	0	0	0	0	0	0
Total:	171	136	25	0	0	0	0	0	20	21

Note:

(1) Ha Wan Tsuen Night Roost was first identified in January 2022.

Table 11 Number of Flight Path Usage Recorded at Ha Wan Tsuen Night Roost

Flight Path	Number of Usage	Percentage
Flight Path 1	246	92.1%
Flight Path 2	13	4.9%
Flight Path 3	7	2.6%
Flight Path 4	1	0.4%
Total:	267	100%

Note: Birds individuals were observed flying out and returning to the night roost repeatedly. The number of observed flights path usage does not directly reflect the total abundance of birds recorded from the night roost.

Table 12 Flight Height of Flight Paths Recorded at Ha Wan Tsuen Night Roost

Flight Height (m)	Flight Path 1		Flight Path 2		Flight Path 3		Flight Path 4	
	No.	%	No.	%	No.	%	No.	%
0 – 10	241	98.0%	5	38.5%	3	42.9%	1	100%
11 – 20	5	2.0%	8	61.5%	4	57.1%	-	-
Total:	246	100%	13	100%	7	100%	1	100%

APPENDIX 10.5E – LIN BARN TSUEN NIGHT ROOST

Table 13 Number of Night-Roosting Ardeids Recorded at Lin Barn Tsuen Night Roost

Species ⁽¹⁾	Jan 2022 ⁽²⁾	Feb 2022	Mar 2022	Apr 2022	May 2022	Jun 2022	Jul 2022	Aug 2022	Sep 2022	Oct 2022
Ardeids	21	8	0	0	0	0	0	0	25	17
Total:	21	8	0	0	0	0	0	0	25	17

Note:

- (1) Only ardeids were recorded roosting at Lin Barn Tsuen Night Roost.
- (2) Lin Barn Tsuen Night Roost was first identified in January 2022.

Table 14 Number of Flight Path Usage Recorded at Lin Barn Tsuen Night Roost

Flight Path	Number of Usage	Percentage
Flight Path 1	21	38.2%
Flight Path 2	25	45.4%
Flight Path 3	9	16.4%
Total:	55	100%

Note: Birds individuals were observed flying out and returning to the night roost repeatedly. The number of observed flights path usage does not directly reflect the total abundance of birds recorded from the night roost.

Table 15 Flight Height of Flight Paths Recorded at Lin Barn Tsuen Night Roost

Flight Height (m)	Flight Path 1		Flight Path 2		Flight Path 3	
	No.	%	No.	%	No.	%
0 – 10	15	71.4%	17	68%	9	100%
11 – 20	3	14.3%	5	20%	-	-
21 – 30	3	14.3%	3	12%	-	-
Total:	21	100%	25	100%	9	100%

APPENDIX 10.5F – SAM PO SHUE NIGHT ROOST

Table 16 Number of Night-Roosting Ardeids and Great Cormorants Recorded at Sam Po Shue Night Roost

Species	Nov 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022	Apr 2022	May 2022	Jun 2022	Jul 2022	Aug 2022	Sep 2022	Oct 2022
Ardeids	84	174	310	181	187	74	10	9	13	26	31	27
Great Cormorants (<i>Phalacrocorax carbo</i>)	395	795	408	354	29	0	0	0	0	0	0	253
Total:	479	969	718	535	216	74	10	9	13	26	31	280

Table 17 Number of Flight Path Usage Recorded at Sam Po Shue Night Roost

Flight Path	Number of Usage	Percentage
Flight Path 1	334	8.2%
Flight Path 2	986	24.2%
Flight Path 3	601	14.7%
Flight Path 4	928	22.8%
Flight Path 5	588	14.4%
Flight Path 6	180	4.4%
Flight Path 7	44	1.1%
Flight Path 8	417	10.2%
Total:	4078	100%

Note: Birds individuals were observed flying out and returning to the night roost repeatedly. The number of observed flights path usage does not directly reflect the total abundance of birds recorded from the night roost.

Table 18 Flight Height of Flight Paths Recorded at Sam Po Shue Night Roost

Flight Height (m)	Flight Path 1		Flight Path 2		Flight Path 3		Flight Path 4		Flight Path 5		Flight Path 6		Flight Path 7		Flight Path 8	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 – 10	154	46.1%	285	28.9%	202	33.6%	639	68.9%	320	54.4%	91	50.5%	41	93.2%	241	57.8%
11 – 20	178	53.3%	643	65.2%	396	65.9%	281	30.3%	268	45.6%	84	46.7%	3	6.8%	176	42.2%
21 – 30	2	0.6%	54	5.5%	2	0.3%	1	0.1%	-	-	2	1.1%	-	-	-	-
> 30	-	-	4	0.4%	1	0.2%	7	0.7%	-	-	3	1.7%	-	-	-	-
Total:	334	100%	986	100%	601	100%	928	100%	588	100%	180	100%	44	100%	417	100%

APPENDIX 10.5G – TAM KON CHAU NIGHT ROOST

Table 19 Number of Night-Roosting Ardeids Recorded at Tam Kon Chau Night Roost

Species ⁽¹⁾	Nov 2021	Dec 2021	Jan 2022	Feb 2022	Mar 2022	Apr 2022	May 2022	Jun 2022	Jul 2022	Aug 2022	Sep 2022	Oct 2022
Ardeids	95	210	232	75	88	0	0	0	0	0	0	0
Total:	95	210	232	75	88	0	0	0	0	0	0	0

Note:

(1) Only ardeids were recorded roosting at Tam Kon Chau Night Roost.

Table 20 Number of Flight Path Usage Recorded at Tam Kon Chau Night Roost

Flight Path	Number of Usage	Percentage
Flight Path 1	180	8.8%
Flight Path 2	567	27.8%
Flight Path 3	236	11.6%
Flight Path 4	217	10.7%
Flight Path 5	591	29.0%
Flight Path 6	45	2.2%
Flight Path 7	73	3.6%
Flight Path 8	128	6.3%
Total:	2037	100%

Note: Birds individuals were observed flying out and returning to the night roost repeatedly. The number of observed flights path usage does not directly reflect the total abundance of birds recorded from the night roost.

Table 21 Flight Height of Flight Paths Recorded at Tam Kon Chau Night Roost

Flight Height (m)	Flight Path 1		Flight Path 2		Flight Path 3		Flight Path 4		Flight Path 5		Flight Path 6		Flight Path 7		Flight Path 8	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 – 10	56	31.1%	395	69.7%	39	16.5%	129	59.2%	455	76.7%	31	68.9%	31	42.5%	38	29.7%
11 – 20	26	14.4%	146	25.7%	178	75.4%	81	37.2%	20	3.4%	10	22.2%	35	47.9%	14	10.9%
21 – 30	98	54.5%	26	4.6%	19	8.1%	8	3.6%	118	19.9%	4	8.9%	7	9.6%	76	59.4%
Total:	180	100%	567	100%	236	100%	218	100%	591	100%	45	100%	73	100%	128	100%

APPENDIX 10.5H – OTHER MAJOR FLIGHT PATHS

Table 22 Number of Flight Path Usage Recorded across LMC BCP and LMCL (Dry Season)

Flight Path	Number of Usage	Percentage
Flight Path A	212	10.6%
Flight Path B	428	21.4%
Flight Path C	270	13.5%
Flight Path D	766	38.3%
Flight Path E	268	13.4%
Flight Path F	55	2.8%
Total:	1999	100%

Table 23 Flight Height of Flight Paths Recorded across LMC BCP and LMCL (Dry Season)

Flight Height (m)	Flight Path A		Flight Path B		Flight Path C		Flight Path D		Flight Path E		Flight Path F	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 – 10	11	5.2%	37	8.6%	90	33.3%	373	48.7%	39	14.5%	15	27.3%
11 – 20	155	73.1%	64	15.0%	180	66.7%	253	33.0%	154	57.5%	15	27.3%
21 – 30	44	20.8%	232	54.2%	-	-	127	16.6%	67	25.0%	24	43.6%
> 30	2	0.9%	95	22.2%	-	-	13	1.7%	8	3.0%	1	1.8%
Total:	212	100%	428	100%	270	100%	766	100%	268	100%	55	100%

Table 24 Number of Flight Path Usage Recorded across LMC BCP and LMCL (Wet Season)

Flight Path	Number of Usage	Percentage
Flight Path G	88	43.4%
Flight Path H	107	52.7%
Flight Path J	8	3.9%
Total:	203	100%

Table 25 Flight Height of Flight Paths Recorded across LMC BCP and LMCL (Wet Season)

Flight Height (m)	Flight Path G		Flight Path H		Flight Path J	
	No.	%	No.	%	No.	%
0 – 10	4	4.6%	23	21.5%	6	75%
11 – 20	1	1.1%	15	14.0%	-	-
21 – 30	-	-	16	15.0%	2	25%
> 30	83	94.3%	53	49.5%	-	-
Total:	88	100%	107	100%	8	100%