
SHEUNG SHUI TO LOK MA CHAU SPUR LINE

Environmental Committee Meeting

Minutes of Meeting No. 39 held at 2:00pm
on Tuesday, 28th July 2020,
via Webinar

Present:		
Dr. Xianji Wen	WWF Hong Kong	Member (NGO)
Ms. Karen Barretto	Friends of the Earth (Hong Kong)	Member (NGO)
Mr. Michael Kilburn	The Hong Kong Bird Watching Society	Member (NGO)
Mr. Matthew Wong	Maintenance Manager	Member (MTR)
Ms. Kenny Yiu	Manager-Environmental Engineering	Member (MTR)
Mr. Peter Choi	Environmental Engineer	Member (MTR)
Mr. Paul Leader	Ecological Consultant	Member (consultant)
Ms. Elizabeth Wu	Ecological Consultant	Member (consultant)
Ms. Zoe Ho	Ecological Consultant	Member (consultant)
Absent with apology:		
Ms. Catherine Leung	Environmental Engineering Manager	Member (MTR)

Attachments	
Annex A	Presentation Material of EC Meeting No. 39

<u>Item/Description</u>	<u>Action By</u>
1. Welcomed Members to the EC Meeting No. 39.	Noted
<u>Confirmation of minutes of Meeting No. 38</u>	
2. There were no comments on the minutes of Meeting No. 38 and the minutes were confirmed.	Noted
<u>Ecological Enhancement Works and Monitoring – an Update on Management Works and Look Ahead</u>	
3. <i>A member (consultant)</i> reported on the major habitat enhancement and modification works, ecological monitoring and management works undertaken from January to June 2020 at the LMC EEA (detailed in Annex A) as follows:	
3.1 <i>A member (consultant)</i> reported that 656 Grass Carps and c. 14,000kg Tilapia were stocked. Ponds 3, 4, 5 and 7 were stocked with both Grass Carp and Tilapia. Summer stocking of Tilapia is to allow breeding and thus produce smaller fish for birds. Stocking of Grass Carp helps control vegetation within ponds; this is especially so for those ponds in the western part of the site targeting large waterbirds. More Grass Carps and Tilapia would be stocked in the coming months.	Noted
3.2 <i>A member (consultant)</i> reported that fewer dogs were recorded and that no dog were trapped in the period. More than 300 Red Imported Fire Ant nests were treated in the past six months; down from the peak during 2013 to 2015.	Noted
3.3 <i>A member (consultant)</i> reported that Camellia seed was applied to Ponds 20—22 to control Apple Snails, and lime was applied to Ponds 11 and 19 to kill the unwanted fish, Climbing Perch. It is suspected that the Climbing Perch, which is a carnivorous, may affect the breeding Little Grebe.	Noted
3.4 <i>A member (consultant)</i> reported on the performance of the numerical bird target species; most had met the target level. The density of Little Egret and Black-winged Stilt was almost met the target level whereas the density in LMC EEA was higher than that in Control Areas.	Noted
3.5 <i>A member (consultant)</i> further reported on the non-numerical bird target species. The recorded number of Yellow-breast Bunting in LMC EEA was comparable with Control Areas. The density of Eurasian Wigeon and White-cheeked Starling in LMC EEA were far higher than Control Areas, which implied that the conditions of LMC EEA were more attractive to these species than that of the commercial fishponds.	Noted
3.6 <i>A member (consultant)</i> reported the roost count data. Nearly 3,000 birds were recorded in January and consisted mostly of Great Cormorants. Eastern Cattle	Noted

<u>Item/Description</u>	<u>Action By</u>
<p>Egret, which was not recorded much at day-time, was recorded fairly regularly during the roost counts. Little Egrets peaked at 455 in January. The monthly roost count would be continued, although numbers are higher in winter.</p>	
<p>3.7 <u>A member (consultant)</u> reported on the globally threatened bird species recorded in LMC EEA. Up to 12 Falcated Ducks were recorded in January. It was the highest count in Hong Kong. Both Greater Spotted Eagle and Eastern Imperial Eagle were recorded regularly. Collared Crow was recorded on site every month, and a pair was found breeding just off-site. A rare bird, Manchurian Reed Warbler, was recorded singing on several dates in April.</p>	Noted
<p>3.8 <u>A member (consultant)</u> reported that most of the bird nest boxes provided on site were occupied by White-shouldered Starlings and that the LMC EEA maintained the biggest breeding population of the species in Hong Kong.</p>	
<p>3.9 <u>A member (consultant)</u> reported on breeding birds recorded in the LMC EEA. There was a pair of Cinnamon Bittern seen irregularly in the summer, the male sang irregularly in the site. Besides, there were good numbers of breeding pair of Common Moorhen, five pairs were recorded and two pairs of Little Ringed Plover.</p>	Noted
<p>3.10 <u>A member (consultant)</u> reported that Eurasian Otter was recorded on nine dates at Pond 2 and was recorded regularly using the mammal pass installed at the bottom of the boundary fence. There was continuous high number of Leopard Cat recorded.</p>	Noted
<p>3.11 <u>A member (consultant)</u> reported that a Reeves' Turtle, which is a target species, was recorded in April. There were no records of the other two target species, Chinese Soft-shelled Turtle and Burmese Python.</p>	Noted
<p>3.12 <u>A member (consultant)</u> reported on the number of Red-eared Slider recorded, which is widely established on site. A maximum of six individuals were seen.</p>	Noted
<p>3.13 <u>A member (consultant)</u> reported that the amphibian target species, Chinese Bullfrog, was not recorded. The number of species recorded was fairly typical for the first half of the year and more surveys will be conducted in the season.</p>	Noted
<p>3.14 <u>A member (consultant)</u> reported that 19 dragonfly species were recorded. The number of species recorded was fairly typical for the first half of the year and more surveys will be conducted in the season.</p>	Noted
<p>3.15 <u>A member (NGO)</u> enquired why a table of the quantity of Apple Snail removed was not presented. <u>A member (consultant)</u> replied that the Snail was mainly treated by using Camellia seed. It seemed that Camellia seed is effective for a period of 4 to 6 months. It was applied to Pond 20 early in the year, and the conditions of lily were good after application; now it is the time to re-treat.</p>	Noted

<u>Item/Description</u>	<u>Action By</u>
<p>3.16 <u>A member (NGO)</u> enquired if it was the first breeding record of Cinnamon Bittern on site. <u>A member (consultant)</u> replied that a juvenile was seen in July 2015 suggesting that the species had breed on site. <u>A member (NGO)</u> enquired if there was record of Pheasant-tailed Jacana. <u>A member (consultant)</u> replied that no breeding pair was found, but maximum of two numbers of Pheasant-tailed Jacana were recorded in LMC EEA, despite the good condition of the lilies in Ponds 15 and 20.</p> <p>3.17 <u>A member (NGO)</u> enquired if there was any impact on the wetland as there was little rain this summer. <u>A member (consultant)</u> replied that there was no significant impact and the water capacity was within the range of the last five years.</p>	<p>Noted</p> <p>Noted</p>
<p><u>Any Other Business</u></p> <p>4. None.</p>	<p>n/a</p>
<p><u>Date of Next Meeting</u></p> <p>5. The date of the next meeting is to be advised.</p>	<p>MTR</p>

Roost Count from January to June 2020

- In accordance with the latest HCMP (2019), roost counts will be conducted monthly for one year, as a trial;
- Roost is mainly located at Pond 2

Bird Taxa	Jan	Feb	Mar	Apr	May	Jun
Black-faced Spoonbill*	23	62	6	1	-	-
Chinese Pond Heron	100	132	51	20	5	4
Eastern Cattle Egret	18	96	39	17	1	-
Grey Heron	12	-	-	2	-	-
Purple Heron	-	-	-	-	1	-
Great Egret	201	123	40	80	49	28
Little Egret	455	148	50	12	6	5
Great Cormorant	2,152	2,146	98	1	-	-
Total Large Waterbirds	2,961	2,707	284	133	62	37

Breeding Birds (in addition to nest box)

- Number of pair recorded:

Little Grebe	10
Cinnamon Bittern	1
Common Moorhen	5
Little Ringed Plover	2

Globally Threatened Bird Species (maximum number) from January to June 2020

Species	IUCN	Jan	Feb	Mar	Apr	May	Jun
Falcatel Duck	NT	12	7	-	-	-	-
Black-faced Spoonbill	EN	91	31	67	6	-	-
Greater Spotted Eagle	VU	1	1	1	-	-	-
Eastern Imperial Eagle	VU	1	1	-	-	-	-
Collared Crow	VU	3	2	3	5	3	3
Manchurian Reed Warbler	VU	-	-	-	1	-	-

Mammal Targets Recorded in the Past 10 Years

- Eurasian Otter was recorded on 9 days in this reporting period;
- Leopard Cat was recorded on 40 days with an OI of 76.0.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 [®]
Eurasian Otter <i>Lutra lutra</i>										
Maximum Count	0	1	1	2	0	1	1	1	1	1
No. of Records ¹	0	1	13 [#]	5 [^]	0	1	2	5	6	9
Leopard Cat <i>Prionailurus bengalensis</i>										
No. of Records ¹ /OI ²	121	11	111	871	114 ^{1, %}	65 ^{1, 25.2²}	51 ^{1, 24.1²}	54 ^{1, 22.6²}	70 ^{1, 31.2²}	40 ^{1, 76.0²}

Note:
1. Number of dates recorded by all installed cameras plus direct observations.
2. Occurrence index.

Key:
Including one dead individual found at LMC EEA
^ Including direct observation of one individual at Pond 12
% Footprints were recorded
® Include data from January to June.

Nest Box Occupation from April to June 2020

- 122 nest boxes are accessible for survey;
- 118 nest boxes were occupied: 84 nest boxes with eggs/chicks, 34 with nesting materials only;
- 83 boxes with eggs/chicks were occupied by White-shouldered Starling (one was occupied by Oriental Magpie Robin).



2020/04/20 18:28:04



2020/06/11 10:30:22

Mammal Targets - Eurasian Otter



5-May (03:46hr), Pond 2



9-May (21:25hr), Pond 2



23-May (04:05hr), Pond 2



25-May (21:13hr), Pond 2

Mammal Targets - Eurasian Otter



Reptile Targets - Reeves' Turtle



Mammal Targets - Leopard Cat



Red-eared Slider Records since 2015

- A maximum of 6 individuals were recorded on one day (in February);
- Recorded in Compartments B and C;
- Maximum number recorded in the past years:
 - 2019 – 7;
 - 2018 – 19, egg laying also noted;
 - 2017 – 14, mating also noted;
 - 2016 – 2, egg laying also noted;
 - 2015 – 7.

Reptile Targets Recorded in the past 10 years

- Burmese Python and Chinese Soft-shelled Turtle were not recorded in 2020 yet.
- Reeves' Turtle was recorded once in April 2020.

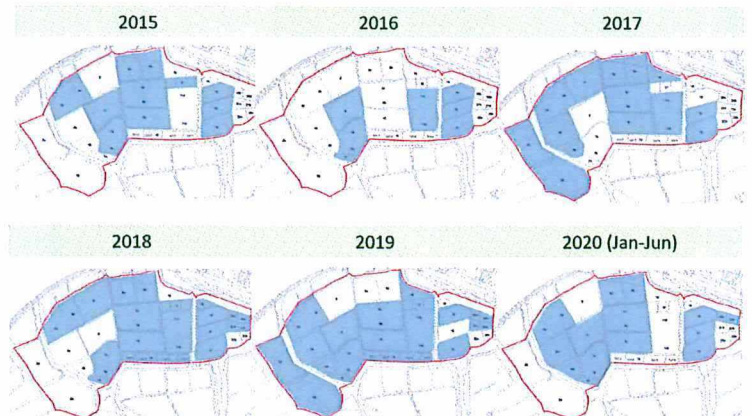
Species	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 ^a
Reeves' Turtle <i>Mauremys reevesii</i>	-	-	-	-	2 (1)	4 (2)	8 (2)	-	2 (1)	1 (1)
Chinese Soft-shelled Turtle <i>Pelodiscus sinensis</i>	1 (1)	1 (1)	2 (1)	2(1)	2* (1)	*	3 (1)	1 (1)	0 (0)	0 (0)
Burmese Python <i>Python bivittatus</i>	0 (0)	0 (0)	1 (1)	3 (1)	1 ^b (1)	1 (1)	0 (0)	0 (0) #	0 (0)	0 (0)

Reeves' Turtle became target species from November 2019.
Number of surveys recorded is indicated in the table, whereas the numbers in brackets are the maximum count per survey.

Key:
% Sighting reported by the reprofiling contractor
* Include one record of track
It was recorded in the Clean-up Reedbed

@ Include data from January to June.

Red-eared Slider Records since 2015



Amphibian Findings since 2006

- Target species, Chinese Bullfrog, was not recorded in 2020 yet.

Species/ Maximum Total Number of Individuals Recorded in All Ponds in LMC EEA	2006 – 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 [ⓐ]
Asian Common Toad <i>Bufo melanostictus</i>	4	3	1	2	7	1	7	15	6	8
Asiatic Painted Frog <i>Xoloula pulchra</i>	2	2	1	-	-	-	-	1	2	-
Butler's Pigmy Frog <i>Microhyla butleri</i>	2	-	2	-	-	-	-	45	-	-
Ornate Pigmy Frog <i>Microhyla ornata</i>	128	5	7	4	-	-	-	20	18	-
Marbled Pigmy Frog <i>Microhyla pulchra</i>	-	-	-	1	-	-	-	50	-	-
Paddy Frog <i>Fejervarya limnocharis</i>	35	20	6	1	10	35	19	13	6	7
Chinese Bullfrog <i>Hoplobatrachus chinensis</i>	4 (9)	2 (8)	1 (2)	1 (2)	0 (0)	0 (0)	4 (9)	0 (0)	1 (2)	0 (0)
Günther's Frog <i>Rana guentheri</i>	157	132	108	293	115	82	342	172	127	73
Two-striped Grass Frog <i>Rana taipehensis</i>	2	1	1	-	2	-	-	-	-	-
Brown Tree Frog <i>Polypedates megalophalus</i>	33	12	14	7	3	6	6	1	5	7
Number of species recorded	8	8	9	7	5	4	5	8	7	4

Maximum count (per survey) is indicated in the table; for Chinese Bullfrog, the number in brackets are the total number of individuals recorded in the year.

[ⓐ] Include data from January to June.

Dragonfly Findings since 2006

Dragonfly Recorded as Adults or Exuviae at LMC EEA	2006 – 2011	2012	2013	2014	2015 [*]	2016 [*]	2017 [*]	2018	2019	2020 [ⓐ]
Number of Species Recorded	25	25	22	21	17	21	25	21	24	19
Total Number of Species Recorded	35									

Key: * A Midget species was also recorded.
[ⓐ] Include data from January to June.

Species recorded are presented in Appendix for reference.

Thank You

