

SHEUNG SHUI TO LOK MA CHAU SPUR LINE

Environmental Committee Meeting

Minutes of Meeting No. 36 held at 3:00pm

on Monday, 21st January 2019,

at Room 10A, 10/F, MTR Headquarters Building, Telford Plaza, Kowloon Bay

Present:		
Dr. Xianji Wen	WWF Hong Kong	Member (NGO)
Mr. Michael Kilburn	The Hong Kong Bird Watching Society	Member (NGO)
Dr. Ng Cho-nam	The University of Hong Kong	Member (NGO)
Ms. Karen Barretto	Friends of the Earth (Hong Kong)	Member (NGO)
Mr. Poon Sui-hing	Maintenance Manager	Member (MTR)
Ms. Catherine Leung	Environmental Engineering 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)
Absent with apology:		

Attachments	
Annex A	Presentation Material of EC Meeting No. 36

<u>Item/Description</u>	<u>Action By</u>
1. Welcomed Members to the EC Meeting No. 36.	Noted
Item 1 – <u>Confirmation of minutes of Meeting No. 35</u>	
2. There were no comments on the minutes of Meeting No. 35 and the minutes were confirmed.	Noted
Item 2 – <u>Ecological Enhancement Works and Monitoring – an Update on Management Works and Look Ahead</u>	
3. <u>A member (consultant)</u> reported on the major habitat enhancement and modification works, ecological monitoring and management works undertaken in 2018 at the LMC EEA (detailed in Annex A) as follows:	
3.1 <u>A member (consultant)</u> reported the number of dogs trapped and the number of Red Imported Fire Ant nests treated. There was no direct impact caused by the ants to the wild birds.	Noted
3.2 <u>A member (consultant)</u> reported that Camellia seed was used to control Apple Snails and had killed a large number of Snails. Camellia seed was applied to Ponds 20 – 22 in April, when the ponds were drained. Apple Snails are still found in these Ponds, this exercise will be repeated in early 2019. This will be early in the year than in 2018 to allow the lilies more chance to regrow at the start of the wet season <u>A member (NGO)</u> enquired the substance of the Camellia seed that kill Apple Snails. <u>A member (consultant)</u> replied it is a substance called saponin.	Noted
3.3 <u>A member (consultant)</u> reported on the performance of the numerical bird target species. Most of the target species met the target level in the reporting year. <u>A member (NGO)</u> mentioned that Black-winged Stilt was recorded on bare bunds at San Tin area and in channel in high number. <u>A member (consultant)</u> reported that the bund slope and tops were generally more vegetated currently as this was favourable for other targets such as Chinese Pond Heron. However, it was planned to maintain bare bunds at Ponds 3 to 7 in 2019 and stock these ponds with Grass Carps to control the emergent vegetation; while other ponds would be allowed to be overgrown for species like Chinese Pond Heron. <u>A member (consultant)</u> further reported that some ponds were currently kept in low water level to expose wet mud which was expected to attract Black-winged Stilt. He expressed that target levels were not achieved for all of the targets all the time. <u>A member (NGO)</u> agreed with it and mentioned that a balance should be struck as some target species are of more conservation importance than others, but emphasised that there is no harm to have bare bunds on site. <u>A member (consultant)</u> replied that actions were and would be continuously taken to increase the abundance of certain target species e.g. Little Egret and Black-winged Stilt. However, for Bluethroat, which is a species with a low population in Hong Kong, not much things can be done. <u>A member (consultant)</u> mentioned there were five target species only recorded at the LMC EEA (i.e. not recorded in the CAs) and	Noted

Item/Description	Action By
<p>suggested that the eagle targets (Greater Spotted Eagle and Eastern Imperial Eagle) are more important when compare to more common and widespread target species like Black-winged Stilt. He assured that actions would be taken to increase the abundance of the target species for which targets are not being met. <u>A member (consultant)</u> further reported on the performance of the non-numerical bird target species. <u>A member (NGO)</u> enquired if rice planting benefited Yellow-breasted Bunting. <u>A member (consultant)</u> replied that Yellow-breasted Bunting preferred paddy field or grass bund and that rice planting was beneficial to this species.</p>	
<p>3.4 <u>A member (consultant)</u> reported that the winter roost continued to be important to the LMC EEA, with high number of ardeids recorded (e.g. over 300 Chinese Pond Herons). It is important to incorporate the roost count into evaluating the target performance as it was part of the site management to enhance a roost site. The maximum count of the species amongst all different types of bird count within a week will be used for target performance evaluation. Nearly 2,000 Great Cormorant roosted at the LMC EEA. <u>A member (NGO)</u> enquired if the roosting Great Cormorants killed the trees (droppings). <u>A member (consultant)</u> replied that they did not kill the trees, which regrow every summer.</p>	Noted
<p>3.5 <u>A member (consultant)</u> reported nest boxes were provided on site continuously, but many of the boxes were lost during the super typhoon Mangkhut. Damaged nest boxes will be replaced and more will be added in 2019. <u>A member (NGO)</u> enquired if there were sufficient number of trees for installing the boxes. <u>A member (consultant)</u> replied that more than one boxes can be installed on a tree and there is a long strip of suitable trees at the south of Pond 14.</p>	Noted
<p>3.6 <u>A member (consultant)</u> reported on breeding birds recorded in the LMC EEA. <u>A member (NGO)</u> noted there was a nest of Collared Crow on site and enquired if it was the first breeding record of the species at the LMC EEA. <u>A member (consultant)</u> replied that it was, and that the nest was built in mid-December. <u>A member (NGO)</u> enquired if Collared Crow is the target species. <u>A member (consultant)</u> replied that it was not.</p>	Noted
<p>3.7 <u>A member (consultant)</u> reported that Eurasian Otter were recorded on five dates and good numbers of Leopard Cat. A video of a Eurasian Otter passing through a mammal pass installed at the bottom of the boundary fence was shown. <u>A member (NGO)</u> enquired if the recent study on Eurasian Otter by the University of Hong Kong identified the individuals in the Deep Bay area. <u>A member (consultant)</u> believed that this would be part of the study but the progress of the study was not known.</p>	Noted
<p>3.8 <u>A member (consultant)</u> reported that one of the reptile target species, Burmese Python, was not recorded in the LMC EEA, but it was recorded twice in the Clean-up Reedbed (which is adjacent to the LMC EEA). Another reptile target, Chinese Soft-shelled Turtle, was recorded in low numbers. <u>A member (consultant)</u> mentioned that it was proposed to trap Red-eared Slider in the latest five-yearly review, and feedback was received from AFCD that the trapped individuals should not be euthanised. <u>A member (consultant)</u> noted that Reeves' Turtle was proposed as a target in the latest</p>	Noted

Item/Description	Action By
<p>five-yearly review and there was literature suggesting that the declining population of the Reeves' Turtle was partly due to the competition with Red-eared Slider. As the LMC EEA is not an area opened to the public (i.e. no mercy release), it is a good opportunity to decrease the number of Red-eared Slider. The treatment of the trapped Red-eared Slider would be further discussed with AFCD when the latest HCMP is approved.</p>	
<p>3.9 <u>A member (consultant)</u> reported the amphibian target species, Chinese Bullfrog, was not recorded in this reporting period. This may be because of the dry start of the wet season or the drain-down of Ponds 20 – 22 for Apple Snail treatment. <u>A member (NGO)</u> expressed that it was good to see there were some species recorded after several years' absence from the site.</p>	Noted
<p>3.10 <u>A member (consultant)</u> reported the number of dragonfly species recorded in this reporting period. The slightly lower number of species recorded in 2018 may also be related to the dry start of the wet season.</p>	Noted
<p>3.11 <u>A member (consultant)</u> reported rice planting trial was carried out in August 2018. <u>A member (NGO)</u> enquired the type of the rice planted. <u>A member (consultant)</u> replied that it was long-grain rice. <u>A member (consultant)</u> further reported that 19 Yellow-breasted Bunting recorded in the LMC EEA and only two in the Control Areas. <u>A member (consultant)</u> suggested that the global population of this species is declining and it was planned to increase the rice planting area at the LMC EEA in 2019. Pond 17 had recently been cut and would be flooded during the summer to avoid re-generation of vegetation such that it would be ready for rice planting in the autumn. <u>A member (NGO)</u> enquired if it was possible to have rice planted all year. <u>A member (consultant)</u> replied that clearing vegetation, which proliferated in the summer, would be time consuming and might not get the area ready for planting by the autumn. In addition, autumn is the peak season for buntings and rice planting would target this period.</p>	Noted
<p>3.12 <u>A member (NGO)</u> reported that trespassers were occasionally sighted fishing within Pond 2 and suggested to rectify the fence or install signs to deter trespassers in the 35th EC Meeting. <u>A member (MTR)</u> replied that barbed wire had been installed at potential climbing points and signs were also installed but these had been removed by unknown parties; more rectification works would be investigated. <u>A member (MTR)</u> presented the photos of installed barbed wire and re-installed signs at Pond 2, while the feasibility of installing cameras will be further investigated.</p>	MTR
<p>3.13 <u>A member (MTR)</u> reported on publicity events of LMC EEA including organizing a guided-tour for the public in October 2018 as part of the programmes of Hong Kong Biodiversity Festival 2018. In addition, fish donation was arranged in December 2018. <u>A member (NGO)</u> enquired if this activity would be done continuously. <u>A member (MTR)</u> replied that fish donation would be conducted once every two years. <u>A member (NGO)</u> enquired for the availability of the videos taken for the publicity campaign. <u>A member (MTR)</u> replied they would send the link later.</p>	Noted

<u>Item/Description</u>	<u>Action By</u>
<p>[post-meeting note: links were sent to the EC members on 21st January 2019. Eng: https://www.youtube.com/watch?v=2Rp5bslE9k0 Chi: https://www.youtube.com/watch?v=Sz76rQjL2R8]</p>	
<p>Item 3 – <u>Any Other Business</u></p> <p>4. <u>A member (NGO)</u> mentioned that there were some works carrying out by the pond owners at the San Tin fishpond areas (e.g. cables lying) and asked that MTR Corporation be aware of such activities. <u>A member (MTR)</u> replied that they would pay attention to it.</p> <p>5. <u>Members (NGO)</u> were invited to have a site visit to the LMC EEA in the autumn. MTR would arrange the site visit.</p> <p>6. <u>A member (MTR)</u> thanked the other EC members for their time and valuable suggestions.</p>	<p>Noted</p> <p>MTR</p> <p>Noted</p>
<p>Item 4 – <u>Date of Next Meeting</u></p> <p>7. The date of the next meeting is to be advised.</p>	<p>MTR</p>

Lok Ma Chau Spur Line 36th Environmental Committee Meeting

Report on Ecological Monitoring and Management, and Works Programme
January – December 2018

21st January 2019



www.aechk.hk

1

Management Works: Pest Management

Dog Trapping

- Dog trapping – Two puppies and two adult dogs were trapped.

Pest Management (Red Imported Fire Ant)

- 269 Red Imported Fire Ant nests were treated with the approved pesticide;
- Red Imported Fire Ant nest treatment using the approved pesticide will be continued.

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
No. of Nests Treated	170	164	(n.a.)	315	790	1,760	1,211	1,333	939	969	269



Lok Ma Chau Spur Line
36th Environmental Committee Meeting
Report on Ecological Monitoring and Management, and
Works Programme (Jan – Dec 2018)

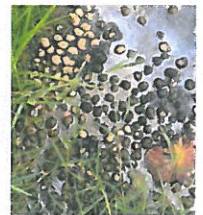
www.aechk.hk

2

Management Works: Pest Management

Pest Management (Apple Snail – Camellia seed)

- HKBWS uses Camellia seed to control Apple Snails in Long Valley;
- Camellia seed was applied as a trial, mainly at Ponds 20 – 22;
- 350kg was applied in April when the Ponds were in low water level, another 165kg was also applied when the pond was re-filled.



Lok Ma Chau Spur Line
36th Environmental Committee Meeting
Report on Ecological Monitoring and Management, and
Works Programme (Jan – Dec 2018)

www.aechk.hk

4

Numerical Bird Target Performance in the Past 5 Years

Year	2014			2015			2016			2017			2018		
Density (mean/ha)	LMC	CA	Ratio	LMC	CA	Ratio	LMC	CA	Ratio	LMC	CA	Ratio	LMC	CA	Ratio
Great Cormorant	6.8	0.5	13.3	5.8	0.4	13.6	6.2	0.5	12.7	7.4	0.6	13.2	8.9	0.5	18.7
Grey Heron	2.1	0.2	11.7	1.8	0.2	12.2	2.1	0.1	19.6	2.3	0.2	13.9	2.2	0.1	15.3
Great Egret	1.5	0.3	4.9	1.5	0.4	4.0	1.5	0.6	2.3	2.4	0.5	4.6	1.9	0.4	4.6
Little Egret	0.9	0.4	1.9	0.9	0.5	2.0	0.6	1.0	0.6	1.1	0.8	1.5	0.7	0.7	1.0
Chinese Pond Heron	0.9	0.3	3.0	0.9	0.5	1.9	0.8	0.6	1.3	1.3	0.6	2.0	1.6	0.7	2.4
Black-faced Spoonbill	0.4	0.1	5.8	0.5	<0.1	14.2	0.5	<0.1	17.2	0.7	0.1	12.3	0.5	0.1	7.8
Eurasian Teal	1.2	0.1	10.6	1.6	<0.1	170.6	2.2	<0.1	374.5	0.5	<0.1	24.2	0.3	<0.1	51.3
Greater Spotted Eagle	<0.1	<0.1	50.2	<0.1	0.0	LMC	<0.1	0.0	LMC	<0.1	0.0	LMC	<0.1	0.0	LMC
Eastern Imperial Eagle	<0.1	<0.1	24.5	<0.1	0.0	LMC	<0.1	0.0	LMC	<0.1	0.0	LMC	<0.1	0.0	LMC
Japanese Quail	<0.1	0.0	LMC	0.0	0.0	nr	0.0	0.0	nr	<0.1	0.0	LMC	<0.1	0.0	LMC
Eurasian Coot	<0.1	<0.1	56.4	<0.1	0.0	LMC	0.1	<0.1	295.9	<0.1	<0.1	189.9	<0.1	0.0	LMC
Pheasant-tailed Jacana	<0.1	0.0	LMC	<0.1	<0.1	11.3	<0.1	<0.1	19.7	<0.1	0.0	LMC	<0.1	<0.1	51.8
Greater Painted-snipe	<0.1	0.0	LMC	<0.1	<0.1	2.9	<0.1	0.0	LMC	<0.1	0.0	LMC	<0.1	0.0	LMC
Black-winged Stilt	0.5	0.1	5.1	0.3	0.1	5.6	0.3	0.1	0.9	0.2	0.1	1.5	0.1	0.2	0.5
Pintail/Swinhoe's Snipe ¹	<0.1	<0.1	11.0	<0.1	<0.1	55.1	<0.1	<0.1	47.7	<0.1	<0.1	36.2	0.1	<0.1	70.7
Common Snipe	0.1	0.1	17.9	0.1	<0.1	9.0	0.1	<0.1	11.6	<0.1	<0.1	2.8	<0.1	<0.1	2.0
Bluethroat	<0.1	<0.1	6.1	<0.1	<0.1	22.1	0.0	0.0	nr	<0.1	<0.1	0.4	<0.1	<0.1	1.1
Pallas's Grasshopper Warbler	<0.1	<0.1	4.9	<0.1	<0.1	13.1	<0.1	<0.1	2.5	<0.1	<0.1	19.7	<0.1	<0.1	46.9
Zitting Cisticola	0.1	0.1	0.8	0.1	0.1	1.0	<0.1	0.8	<0.1	0.1	0.8	0.1	<0.1	<0.1	2.0
Japanese Yellow Bunting	0.0	0.0	nr	0.0	<0.1	CA	0.0	0.0	nr	0.0	0.0	nr	0.0	<0.1	CA
Red-billed Starling	0.2	0.2	0.8	1.2	0.6	2.0	3.0	0.4	7.2	3.0	0.4	6.8	3.2	0.2	16.9

nr – Not recorded within LMC EEA or Control Areas during the period
Blue – Target met (i.e. density in EEA at least twice that in Control Areas)
Yellow – Target not met, although density higher than in Control Areas
Red – Target not met and density lower than in Control Areas

1. Includes one species pair, Pintail/Swinhoe's Snipe, not distinguishable in the field.



Lok Ma Chau Spur Line
36th Environmental Committee Meeting
Report on Ecological Monitoring and Management, and
Works Programme (Jan – Dec 2018)

www.aechk.hk

5

Management Works: Pest Management

Pest Management (Apple Snail – hand picking)

- Manual removal of Apple Snails in Compartment C continued;
- Apple Snails removed in Compartment C in 2018:

Month	Apple Snail Removed (kg)						
	Pond 15	Pond 16	Pond 17	Pond 18	Pond 19	Ponds 20 – 22	Total
Jan	-	-	-	-	-	20	20
Feb	-	-	-	-	-	144	144
Mar	-	-	-	-	-	395	395
Apr	-	-	-	-	-	310	310
May	-	-	-	-	-	9	9
Jun	-	-	-	-	-	-	0
Jul	-	-	-	-	-	1	1
Aug	-	-	-	-	-	-	0
Sep	-	-	-	-	-	-	0
Oct	-	-	-	-	-	13	13
Nov	-	-	-	-	-	-	0
Dec	-	-	-	-	-	-	0
Total	0	0	0	0	0	892	892



Lok Ma Chau Spur Line
36th Environmental Committee Meeting
Report on Ecological Monitoring and Management, and
Works Programme (Jan – Dec 2018)

www.aechk.hk

3

Non-numerical Bird Target Performance in the Past 5 Years

Year	2014			2015			2016			2017			2018		
Species/Density (mean/ha)	LMC	CA	Ratio	LMC	CA	Ratio	LMC	CA	Ratio	LMC	CA	Ratio	LMC	CA	Ratio
Eurasian Wigeon	0.4	<0.1	13.7	1.2	<0.1	1009.9	1.5	0.0	LMC	<0.1	0.0	LMC	<0.1	<0.1	7.1
Little Grebe	0.9	0.5	1.8	1.1	0.9	1.3	1.3	0.7	1.7	1.3	0.7	1.7	1.0	0.9	1.1
Cinnamon Bittern	<0.1	0.0	LMC	<0.1	<0.1	20.8	<0.1	0.0	LMC	<0.1	0.0	LMC	<0.1	<0.1	4.9
Black-crowned Night Heron	0.2	<0.1	9.4	0.1	<0.1	2.6	0.1	<0.1	10.1	0.4	<0.1	23.4	0.4	<0.1	8.8
Intermediate Egret	<0.1	<0.1	12.5	<0.1	<0.1	1.4	0.1	<0.1	10.6	0.2	<0.1	10.1	0.1	<0.1	11.4
White-cheeked Starling	0.1	0.1	1.1	0.4	<0.1	20.3	0.6	<0.1	17.9	0.2	0.1	3.7	0.3	<0.1	10.8
White-shouldered Starling	0.7	0.1	11.5	1.2	0.1	15.8	1.2	0.1	15.5	1.2	0.1	12.3	1.1	0.1	10.7
Yellow-breasted Bunting	0.0	0.0	nr	0.0	<0.1	CA	<0.1	<0.1	9.9	<0.1	<0.1	9.2	<0.1	<0.1	23.4

The above species became target species from October 2014
nr – Not recorded within LMC EEA or Control Areas during the period
Blue – Density in LMC EEA at least twice that in Control Areas
Yellow – Density higher in LMC EEA than in Control Areas
Red – Density in LMC EEA lower than in Control Areas



Lok Ma Chau Spur Line
36th Environmental Committee Meeting
Report on Ecological Monitoring and Management, and
Works Programme (Jan – Dec 2018)

www.aechk.hk

6

Winter Roost Count in 2018

- Winter roost survey was conducted in January to March, and November and December;
- Winter roost is mainly located at Pond 2, including the island and the northern bund.

Bird Taxa	Jan-18	Feb-18	Mar-18	Nov-18	Dec-18
Ardeids*	487	544	713	192	473
Great Cormorant	1,690	1,973	291	1,655	1,944
Total of Large Waterbirds[^]	2,177	2,517	1,004	1,847	2,417

* Including Chinese Pond Heron, Eastern Cattle Egret, Grey Heron, Great Egret, Intermediate Egret and Little Egret.
[^] Excluding starlings/mynas.

Breeding Birds

- Chicks of Little Grebe were recorded in 3 ponds (Ponds 2, 8 and 21), with a maximum of 7 chicks recorded on one date;
- Chicks of White-breasted Waterhen were recorded 7 ponds (Ponds 2, 3, 5, 8, 11, 13 and 14), with a maximum of 4 chicks recorded on one date;
- Two chicks of Common Moorhen were recorded at Ponds 20 and 21 in April and June respectively.

Nest Box Occupation in 2018

- 75 out of 85 bird nest boxes are accessible for survey (the others are too high, outside the boundary fence etc.), in which one was missing;
- All of these 75 nest boxes were occupied: 61 recorded with eggs/chicks (one was occupied by Oriental Magpie Robin and the others by White-shouldered Starlings), 14 with nesting materials only.



Mammal Targets Recorded in the Past 10 Years

- Eurasian Otter was recorded on five days in this reporting period;
- Leopard Cat was recorded on 54 days with an OI of 22.6;
- A PhD study on Eurasian Otter is on-going.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Eurasian Otter <i>Lutra lutra</i>											
Maximum Count	2	1	3*	0	1	1	2	0	1	1	1
No. of Records ¹	2	1	2	0	1	13 ^h	5 ^h	0	1	2	5
Leopard Cat <i>Prionailurus bengalensis</i>											
No. of Records ¹ /OI ²	51	91	201	121	11	111	871	114 ^{1, %}	65 ¹ , 25.2 ²	51 ¹ , 24.1 ²	54 ¹ , 22.6 ²

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

Key:

* Up to 3 individuals recorded between Ponds 1 and 2 by AFCD

^h Including one dead individual found at LMC EEA

^h Including direct observation of one individual at Pond 12

% Footprints were recorded

Other species in appendix for reference.

Nest Box Occupation in 2018

- 6 nest boxes of larger size were installed and targeted for tree ducks (a pair of Lesser Whistling Ducks recorded in the summer of 2017).
- A single Lesser Whistling Duck was recorded during July to September.
- All 6 boxes were occupied: 2 with eggs (Starlings), 4 with nesting materials only.



Mammal Targets



Mammal Targets



Amphibian Findings since 2006

- Target species, Chinese Bullfrog, was not recorded.

Species/ Maximum Total Number of Individuals Recorded in All Ponds in LMC EEA	2006 - 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Asian Common Toad <i>Bufo melanostictus</i>	3	2	4	3	1	2	7	1	7	15
Asiatic Painted Frog <i>Kaloula pulchra</i>	-	-	2	2	1	-	-	-	-	1
Butler's Pigmy Frog <i>Microhyla butleri</i>	1	2	-	-	2	-	-	-	-	45
Ornate Pigmy Frog <i>Microhyla ornata</i>	46	128	25	5	7	4	-	-	-	20
Marbled Pigmy Frog <i>Microhyla pulchra</i>	-	-	-	-	-	1	-	-	-	50
Paddy Frog <i>Fejervarya limnocoraria</i>	35	12	7	20	6	1	10	35	19	13
Chinese Bullfrog <i>Haplobatrachus chinensis</i>	2 (2)	4 (9)	2 (5)	2 (8)	1 (2)	1 (2)	0 (0)	0 (0)	4 (9)	0 (0)
Günther's Frog <i>Rana guentheri</i>	157	137	86	132	108	293	115	82	342	172
Two-striped Grass Frog <i>Rana taipehensis</i>	-	2	1	1	1	-	2	-	-	-
Brown Tree Frog <i>Polypedates megacephalus</i>	33	27	33	12	14	7	3	6	6	1
Number of species recorded	7	8	8	8	9	7	5	4	5	8

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.

Reptile Targets Recorded in the past 10 years

- Burmese Python was not recorded in 2018.
- Chinese Soft-shelled Turtle was sighted in September at Pond 4.

Species	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Burmese Python <i>Python bivittatus</i>	1 (1)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1)	3 (1)	1* (1)	1 (1)	0 (0)	0 (0) #
Chinese Soft-shelled Turtle <i>Pelodiscus sinensis</i>	1* (1)	2* (1)	1 (1)	1 (1)	1 (1)	2 (1)	2 (1)	2* (1)	*	3 (1)	1 (1)

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 replanting contractor
* Include one record of track
It was recorded in the Clean-up Reedbed

Other species in appendix for reference.

Dragonfly Findings since 2006

Dragonfly Recorded as Adults or Exuviae at LMC EEA	2006 - 2009	2010	2011	2012	2013	2014	2015*	2016*	2017*	2018
Number of Species Recorded	25	24	21	25	22	21	17	21	25	21
Total Number of Species Recorded	34									

Key: * A Midget species was also recorded.

Species recorded are presented in Appendix for reference.

Red-eared Slider Recorded since 2015

- A maximum of 19 individuals were recorded on one day (in February);
- Recorded in all compartments;
- Egg laying was also recorded.
- Maximum number recorded in the past three years:
 - 2017 – 14, mating also noted;
 - 2016 – 2, egg laying also noted;
 - 2015 – 7.

Management Works : Rice Planting Trial



Management Works : Rice Planting Trial

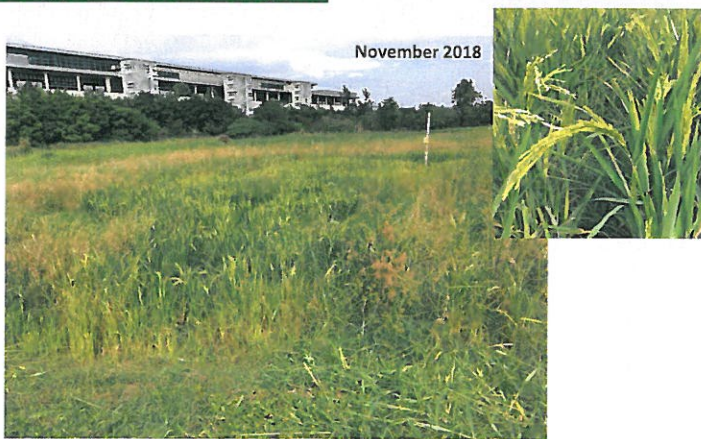


Management Works : Rice Planting Trial

Total Number of Yellow-breasted Bunting Recorded

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
5	4	12	1	6	3	6	0	0	4	14	19

Management Works : Rice Planting Trial



Thank You



Management Works : Rice Planting Trial

Yellow-breasted Bunting recorded in
2018

- LMC (a total of 19 individuals)
 - 22nd Oct: 3 (3 in Pond 17)
 - 31st Oct: 5
 - 8th Nov: 6 (2 in Pond 17)
 - 14th Nov: 3
 - 30th Nov: 2
- MPST (0)
- ST (a total of 2 individuals)
 - 12th Oct: 1
 - 15th Nov: 1

14th November 2018, Pond 17

