Appendix 12-9 Methodology and Results of Odonata Surveys

Methodology

Odonate surveys were conducted from March to November 2008 by ENSR (2009) in LMC Loop and the surrounding 500m, while LUPCAFS also included odonate surveys from May to August 2008. Thus, odonate information for much of the ecological study area was considered adequate. However, surveys to confirm conditions remained the same were carried out early in both wet seasons of 2009 and 2010. Surveys in other areas of the study area were carried out from March to October (**Table A12-19**).

Table A12-19 Schedule of odonate surveys

	2009				2010			
Site	Jun	Jul	Aug	Sep	Oct	Mar	Apr	May
LMC Loop, Ha Wan Tsuen, LMC Tsuen, Hoo Hok								
Wai areas close to the Loop (i.e. areas within the		1					1	1
500-m boundary from the Loop)								
Areas close to Lung Hau Road, Chau Tau, Pun Uk								
Tsuen, Hoo Hok Wai areas outside the 500-m	1	1	1	1	1	1	1	1
boundary from the Loop, Ma Tso Lung and Tse Koo	1	1	1	1	1	1	1	1
Hang.								

Survey methods followed that documented in EIAO Guidance Note No. 10/2004. Daytime transect counts were conducted once per month as above in all potential habitats for odonates (i.e. stream, pond, marsh, reedbed). Individuals observed within an estimated 5m of a standard transect were recorded and counted, with the aid of binoculars. Netting was used only to confirm identification.

Results

LMC Loop

16 odonate species were recorded. Except Common Evening Hawker *Anaciaeschna jaspidea*, all species are considered to be common in HK (Wilson 2004). Scarlet Basker *Urothemis signata* was also recorded. This species was once considered to be of local conservation concern by Fellowes *et al.* (2002), but is now considered to be common in HK (Wilson 2004). Common Evening Hawker was recorded in the reedbed while Scarlet Basker was recorded in grassland, pond and reedbed.

Area of Western Connection Road)

A total of 26 species were recorded; all are considered to be common in HK (Wilson 2004). Among these, Ruby Darter *Rhodothemis rufa* and Scarlet Basker are considered to be of local conservation concern (Fellowes *et al.* 2002); they were mainly observed in abandoned ponds. Nevertheless, these two species are not considered so rare now (Wilson 2004). These two species were found in abandoned pond, marsh and wet agricultural land.

Area of Eastern Connection Road, Border Road Area and Hoo Hok Wai

A total of 27 odonate species were recorded in this Area. Three of the species, Coastal Glider *Macrodiplax cora*, Sapphire Flutterer *Rhyothemis triangularis* and Scarlet Basker, are considered to be of local conservation conern (Fellowes *et al* 2002). However, apart from Coastal Glider, all species observed are considered to be common in HK (Wilson 2004). Although Coastal Glider is not considered to be locally common, it is regarded as one of the

most abundant and widespread dragonfly species in the world (Wilson 2004). These three species were mainly recorded in abandoned fish ponds.

Tse Koo Hang and Ma Tso Lung

A total of 25 species were observed. All are considered to be common in HK (Wilson 2004). Ruby Darters were recorded in the natural watercourses at Tse Koo Hang and Ma Tso Lung.

Table A12-20 Maximum counts of odonates in different areas. WCR = Western Connection Road

Scientific Name	Common Name	Conservation Status	LMC Loop	Area of WCR	ннพ	Tse Koo Hang and Ma Tso Lung
Ceriagrion auranticum	Orange-tailed Sprite 琉球橘黃蟌	-	3	22	24	21
Copera marginipes	Yellow Featherlegs 黃狹扇蟌	-	0	8	17	30
Ischnura senegalensis	Common Bluetail 褐斑異痣蟌	-	6	10	12	1
Pseudagrion rubriceps	Orange-faced Sprite 丹頂斑蟌	-	0	1	0	1
Prodasineura autumnalis	Black Threadtail 烏齒原蟌	-	0	0	2	0
Ictinogomphus pertinax	Common Flangetail 霸王葉春蜓	-	0	2	10	1
Anaciaeschna jaspidea	Common Evening Hawker 碧翠蜓	Uncommon (Wilson 2004)	5	0	0	0
Anax guttatus	Pale-spotted Emperor 斑偉蜓	-	7	1	3	1
Anax immaculifrons	Fiery Emperor 黃 偉蜓	-	0	0	0	1
Epophthalmia elegans	Regal Pond Cruiser 閃藍麗大蜻	-	0	1	1	0
Acisoma panorpoides	Asian Pintail 錐腹 蜻	-	1	0	3	0
Brachydiplax chalybea	Blue Dasher 藍額 疏脈蜻	-	2	10	30	8
Brachythemis contaminata	Asian Amberwing 黃翅蜻	-	1	50	96	9
Crocothemis servilia	Crimson Darter 紅 蜻	-	15	9	5	1
Diplacodes trivialis	Blue Percher 紋藍 小蜻	-	0	1	0	0
Hydrobasileus croceus	Amber-winged Glider 臀斑楔翅蜻	-	2	1	1	0
Macrodiplax cora	Coastal Glider 高翔 漭蜻	Local Concern (Fellowes <i>et</i> <i>al</i> . 2002)	0	0	1	0
Neurothemis tullia	Pied Percher 截	-	10	1	1	2

Scientific Name	Common Name	Conservation Status	LMC Loop	Area of WCR	HHW	Tse Koo Hang and Ma Tso Lung
	斑脈蜻					C
Orthetrum chrysis	Red-faced Skimmer 華麗灰蜻	-	0	1	0	1
Orthetrum glaucum	Common Blue Skimmer 黑尾灰蜻	-	0	1	1	7
Orthetrum luzonicum	Marsh Skimmer 呂宋灰蜻	-	0	3	1	2
Orthetrum pruinosum	Common Red Skimmer 赤褐灰蜻	-	0	19	1	18
Orthetrum sabina	Green Skimmer 狹腹灰蜻	-	35	37	33	3
Orthetrum triangulare	Lesser Blue Skimmer 鼎異色灰蜻	-	0	4	5	5
Pantala flavescens	Wandering Glider 黄蜻	-	30	100+	100+	100+
Pseudothemis zonata	Pied Skimmer 玉帶 蜻	-	0	9	50	10
Rhodothemis rufa	Ruby Darter 紅胭蜻	Local Concern (Fellowes et al. 2002)	0	2	0	2
Rhyothemis triangularis	Sapphire Flutterer 三角麗翅蜻	Local Concern (Fellowes <i>et</i> <i>al</i> . 2002)	0	0	2	0
Rhyothemis variegata	Variegated Flutterer 斑麗翅蜻	-	45	76	100+	21
Tholymis tillarga	Evening Skimmer 雲 斑蜻	-	1	2	5	0
Tramea virginia	Saddlebag Glider 華 斜痣蜻	-	3	5	14	1
Trithemis aurora	Crimson Dropwing 曉褐蜻	-	0	3	0	13
Trithemis festiva	Indigo Dropwing 慶 褐蜻	-	0	0	0	9
Urothemis signata	Scarlet Basker 赤斑曲鈎脈蜻	Local Concern (Fellowes <i>et</i> <i>al</i> . 2002)	4	12	5	0
Zyxomma petiolatum	Dingy Dusk-darter 細腹綠眼蜻	-	0	0	0	3