

TRUE FLIES (DIPTERA) RECORDS FOR TOWER HAMLETS CEMETERY PARK

Report of Monthly Surveys undertaken throughout 2006

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Introduction

In the autumn of 2005 the author was asked by the wardens of Tower Hamlets Cemetery Park if she would conduct a survey of the Diptera in the park. The author had developed an interest in Diptera a few years prior to this, and readily agreed to visit the park once a month for a year and record the Diptera species she came across. The arrangement was mutually beneficial, as it gave the author a focus and incentive to increase her knowledge of Diptera, and the park management would benefit by an increased understanding of the species present in the park. A full survey of all invertebrates had been undertaken by Colin Plant in 2001, and this 2006 survey is intended to build upon the information contained in Plant's report.

Methodology

A simple approach of visiting the park once a month during 2006 was undertaken. The months of October and December were missed due to unforeseen personal circumstances, but otherwise a monthly survey was carried out. The park was visited each time in the morning between 10.00 and 13.00, and the author walked through the park, taking a fairly consistent route, starting and ending at the Soanes Centre enclosure and circulating through the park in a clockwise direction, taking in the horse chestnut grove, across to the eastern boundary and usually visiting scrapyard field before coming back up the western side of the park. Specimens for identification were netted or pooted as they were come upon during the walk. As part of the recording process, photographs of all specimens were taken in the laboratory, and these are available on request, either as single images of a particular species, or as a CD of the whole collection.

Results

Table 1
Diptera species recorded in Tower Hamlets Cemetery Park, 2006

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
NEMATOCERA PRIMITIVE FLIES														
Anisopodidae Window Midges														
<i>Sylvicola punctatus</i>	•													
Bibonidae Fever Flies														
<i>Dilophus febrilis</i>	•													
<i>Bibio johannis</i>	•													
<i>Bibio marci</i>	•					• ♂								Common. An important pollinator.
Cecidomyiidae Gall Midges														
<i>Contarinia tiliarum</i>	•													
<i>Dasineura crataegi</i>	•													
<i>D fraxini</i>	•													
<i>D glechomae</i>	•													
<i>D loti</i>	•													
<i>D marginemtorquens</i>	•													

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
<i>D urticae</i>	•													
<i>Macrodiplosis dryobia</i>	•													
<i>M volvens</i>	•													
<i>Putoniella marsupialis</i>	•													
<i>Rabdophaga rosaria</i>	•													
<i>Rondaniola bursaria</i>	•													
Culcidae Mosquitoes														
<i>Culex pipiens</i>	•													
Limoniidae Craneflies														
<i>Cheilotrichia cinerascens</i>	•													
<i>Erioptera stricta</i>	•													
<i>Limonia duplicata</i>	•													
<i>L nubeculosa</i>	•													
<i>L tripunctata</i>	•													
Scatopsidae Midges														
<i>Scatopse notata</i>	•													
Sciaridae Dark-winged Fungus Gnats														
<i>Sciaridae sp</i>		•												There are many species, very few of which have been studied.

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
<i>Schwenckfeldina carbonaria</i>	•													
Tipulidae Craneflies														
<i>Tipula marmorata</i>	•													
<i>T oleracea</i>	•					•								
<i>T paludosa</i>	•													
Trichoceridae Winter Gnats														
<i>Trichocera annulata</i>	•													
<i>T saltator</i>	•													
BRACHYCERA Group 1 (includes Soldierflies and their allies and Hoverflies)														
Asilidae Robber flies														
<i>Dioctria baumhaueri</i>	•													
<i>D rufipes</i>	•													
Dolichopidae Big-headed Flies														
<i>Dolichopus griseipennis</i>									• ♂					Det N Vikrev and I Grichanov. RAMSAR species.
<i>Medetera truncorum</i>	•													
Empididae														

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
Assassin Flies														
<i>Empis aestiva</i>	•													
<i>E caudatula</i>	•													
<i>E praevia</i>	•													
<i>Empis tessellata</i> Dance Fly	•					• ♂	• ♂							CP calls this species <i>Euempis tessellata</i> . Strictly speaking it is <i>Empis (Euempis) tessellata</i> ie <i>Euempis</i> is the sub-genus. The largest and commonest <i>Empis</i> . Hunts other flies.
<i>Kritempis livida</i>	•													
<i>Pachymeria femorata</i>	•													
<i>Phamphomyia erythrophthalma</i>	•													
<i>R gibba</i>	•													
<i>R tarsata</i>	•													
<i>Xanthempis trigramma</i>	•													
Hybotidae														
<i>Bicellaria nigra</i>	•													
<i>Hybos culiciformis</i>	•													
<i>H femoratus</i>	•													
<i>Ocydromia glabricula</i>	•													
<i>Platypalpus annulipes</i>	•													
<i>P minutus</i>	•													
<i>P pallidiventris</i>	•													

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
<i>Tachypeza nubila</i>	•													
Lonchopteridae														
<i>Lonchoptera furcata</i>	•													
<i>L lutea</i>	•													
Pipunculidae														
<i>Pipunculus campestris</i>	•													
<i>Verrallia aucta</i>	•													
Rhagionidae Snipe Flies														
<i>Rhagio scolopaceus</i>	•													
<i>R tringarius</i>	•													
Stratiomyidae Soldierflies														
<i>Beris chalybata</i>	•													
<i>B vallata</i>	•													
<i>Chloromyia formosa</i>	•													
<i>Chorisops tibialis</i>	•													
<i>C nagatomii</i>	•													
<i>Microchrysa flavicornis</i>	•													
<i>M polita</i>	•													
<i>Pachygaster atra</i>	•													
<i>P leachii</i>	•													

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
<i>Sargus bipunctatus</i>	•													I have seen this species in the park, but prior to survey starting.
Syrphidae Hoverflies														
<i>Baccha elongata</i>	•				• ♂	•								Hovers low in shady areas. This habit, plus its extremely thin body, means it is often overlooked. The larvae are aphidophagous, preying on a variety of ground-layer species in shaded situations, e.g. <i>Uromelan jaceae</i> on <i>Centaurea scabiosa</i> , <i>Brachycaudina napelli</i> on <i>Aconitum</i> , and the bramble aphid, <i>Sitobion fragariae</i> on <i>Rubus</i> . It overwinters as a larva (www.hoverfly.org.uk).
<i>Melanostoma mellinum</i>	•													
<i>M scalare</i>	•				• ♀ C	• C			• ♂					This is the most common small hoverfly in the park.
<i>Platycheirus albimanus</i>	•				• ♀									Largest and most common of the grey spotted <i>Platycheirus</i> . Usually conspicuous in May. Larvae predate aphids on low growing plants. Favours woodland, hedgerows and gardens. Common and widespread.
<i>P ambiguus</i>					• ♀									Widespread but local. Associated with blackthorn. Most likely to be seen in late April. Like a small <i>P albimanus</i> . Larvae feed on aphids.
<i>P clypeatus</i>	•													
<i>P manicatus</i>	•													

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
<i>P scutatus s l</i>	•						• ♀							This is a species complex. ♀ cannot be distinguished.
<i>Paragus haemorrhous</i>	•													
<i>Chrysotoxum bicinctum</i>	•													
<i>C festivum</i>	•													
<i>Dasysyrphus albostriatus</i>	•													
<i>Epistrophe eligans</i>	•					• C								A characteristic early spring species in the south. Larvae are aphidophagous ie they eat aphids.
<i>E grossulariae</i>	•													
<i>Episyrphus balteatus</i> Marmalade Hoverfly	•	• ♂	• ♂ C	• C	•	• ♂ C	•	•	•	•			•	This species can be seen at any time of year in the park and is the most common species of hoverfly present.
<i>Eupeodes corollae</i>	•													
<i>E luniger</i>	•				• ♀	•	• ♂							Widespread and common. Favours woodland clearings, farmland, urban parks, gardens and waste ground.
<i>Eupeodes Species C</i>										• ♀				See Stubbs British Hoverflies for a discussion of this species.
<i>Leucozona lucorum</i>	•													
<i>Melangyna compositarum</i>	•													
<i>M labiatarum</i>	•													
<i>Melanogaster hirtella</i>					• ♂		• ♀							Common and widespread. Favours rich marsh and water margins with emergent vegetation. Larvae aquatic.

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
<i>Meliscaeva auricollis</i> var <i>maculicornis</i>			• ♂			•	• ♀							This species very early emergence probably indicates hibernating adults, but the author in the past has seen larvae for this species also very early (March). The spring brood will be darker (var <i>maculicornis</i>). Associated with woodland rides and edges and mature gardens. Males will hover over paths. Common and
<i>Meliscaeva auricollis</i>	•								•					
<i>Scaeva pyrastris</i>	•													
<i>Sphaerophoria scripta</i>	•													
<i>Syrphus ribesii</i>	•					• ♂ C	• ♀ C		• ♀					Common. Larvae eat aphids.
<i>S vitripennis</i>	•					• ♂ C			• ♂					
<i>Xanthogramma pedisequum</i>	•													
<i>Cheilosia pagana</i>	•													
<i>C proxima</i>	•													
<i>C vulpina</i>	•							• ♂						Note correct spelling.
<i>C vernalis</i>								•						
<i>Ferdinandea cuprea</i>	•													
<i>Neoascia podagrica</i>	•													
<i>Neocnemodon brevidens</i>	•													
<i>Eristalis arbustorum</i>	•				•			•	•					Common.

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
					♂			♀	C					
<i>E pertinax</i>	•							• ♂	•			• ♀		
<i>E tenax</i> Dronefly	•		• ♀ C			• C			•	• ♂				A robust species, often the first hoverfly of the season to be seen. Emerges earlier than the very similar <i>E pertinax</i> and can be distinguished from this species by its dark front tarsi. Note also the bands of hair on the eyes. Abdominal markings very variable, often very dark without conspicuous orange markings. All <i>Eristalis</i> have a strong dip in the 4 th wing vein. Their larvae are rat-tailed maggots, living in slurry and other organically enriched mud. Adults overwinter and can be seen on warm days through the winter. Widespread and very common. Males patrol paths and hold territories at about head height. The species is an extremely convincing honey bee mimic.
<i>Helophilus pendulus</i>	•													
<i>Myathropa florea</i>	•						• ♂		•					Larvae are saprobic ie feeding on decaying organic material in close to anaerobic conditions. Associated with maple, beech, horse chestnut, poplar, aspen, willow, pine. Larvae are parasitised by an ichneumon wasp <i>Rhembobius</i> .
<i>Eumerus tuberculatus</i> Lesser Bulb Fly	•													
<i>Merodon equestris</i> Bulb Fly	•						•							Larvae feed on bulbs of <i>narcissus</i> and bluebells. Has a range of colour forms mimicking bumblebees.

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
<i>Pipizella varipes</i>	•													
<i>P virens</i>	•													
<i>Volucella bombylans var lucorum</i>	•						•							Variable species, with different varieties imitating different bumble bees. The larvae develop in social wasp nests and survive by scavenging ie they are not parasitoid of the wasp larva, but are inquilines.
<i>Volucella bombylans var lapidarius</i>	•						•							
<i>V inanis</i>	•													
<i>V pellucens</i>	•													
<i>V zonaria</i>	•								•					Notable. The larvae develop in social wasp nests and survive by scavenging ie they are not parasitoid of the wasp larva, but are inquilines.
<i>Syrirta pipiens</i>	•					• ♂			•					Common. Larvae live in compost, manure, rotting organic material.
<i>Xylota segnis</i>	•													
<i>X sylvarum</i>	•													
Therevidae Stiletto Flies														
<i>Therea nobilitata</i> Stiletto Fly	•													
BRACHYCERA Group 2 (Acalyptrates)														
Agromyzidae Leaf-mining Flies														
<i>Agromyza alnibetulae</i>	•													

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
<i>A reptans</i>	•													
<i>A pseudoreptans</i>	•													
<i>Liriomyza amoena</i>	•											•		Host: Elder <i>Sambucus nigra</i> .
<i>Phytomyza conyzae</i>	•													
<i>P heracliata</i>	•													
<i>P ilicis</i>	•													
Chloropidae														
<i>Dicraeus vagans</i>	•													
<i>Elachiptera cornuta</i>	•													
Conopidae														
<i>Conops ceriaeformis</i>	•													
<i>C quadrifasciata</i>	•								• C					Large numbers congregated on ragwort flowers. Local. Larvae are internal parasites on <i>Bombus lucorum</i>
<i>Physocephala rufipes</i>	•													
<i>Sicus ferrugineus</i>	•						•							Feeding on comfrey flowers. Local. Larva are internal parasites on many <i>Bombus spp.</i>
<i>Thecophora atra</i>	•													
Heleomyzidae														
<i>Suillia variegata</i>	•													
<i>Tephrochlamys rufiventris</i>	•													
Lauxaniidae														
<i>Calliopum aeneum</i>	•													

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
Lonchaeidae														
<i>Lonchaea fumosa</i>	•													
Opomyzidae														
<i>Opomyza florum</i>	•													
<i>O germinationis</i>	•													
<i>Geomyza balachowskyi</i>	•													
Pallopteridae														
<i>Palloptera qunquemaculata</i>	•													
<i>P umbellatarum</i>	•													
<i>P ustulata</i>	•													
Platystomatidae														
<i>Platystoma seminationis</i>	•													
Psilidae														
<i>Psila merdaria</i>	•													
<i>P rosae</i>	•													
Sciomyzidae Snail-killing flies														
<i>Tetanocera elata</i>	•											•		Common. Hosts: Marsh Slug <i>Deroceras laeve</i> , Netted Slug <i>D reticulatum</i> .
Sepsidae Ensign Flies														
<i>Nemopoda nitidula</i>	•													

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
<i>Themira annulipes</i>	•													
<i>Sepsis cynipsea</i>	•													
<i>S fulgens</i>	•					•								Breeds in dung.
<i>S punctum</i>	•													
Tephritidae Picture-winged flies														
<i>Anomoia purmunda</i>	•													
<i>Euleia cognata</i>	•													
<i>E heraclei</i>	•													
<i>Paroxyna misell</i>	•													
<i>Tephritis bardanae</i>	•													
<i>T cometa</i>	•													
<i>T cometa</i>	•													
<i>T hyoscyami</i>	•													
<i>Terellia ruficauda</i>	•													
<i>T (Cerajocera) tussilaginis</i>								•						Det J Smit. Don't be fooled by the scientific name – hardly ever associated with Coltsfoot. Preferred host Burdock <i>Arctium</i> .
<i>Trypeta zoë</i>	•													
<i>Urophora cardui</i>	•													
<i>U stylata</i>	•													
<i>Xyphosia militaria</i>	•													

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
Ulidiidae														CP uses old family name Otitidae.
<i>Ceroxys urticae</i>	•													
BRACHYCERA Group 3 (Calyprates)														
Anthomyiidae														
Anthomyiidae sp				• ♂	• ♀	•	• ♀							
<i>Delia</i> sp A Cabbage Root Fly		• ♀ C	• ♂	• ♂ C		• C	•		•				•	
<i>Botanophila</i> sp								•						Tentative ID.
Calliphoridae Blow flies														
<i>Calliphora vicina</i> A Bluebottle	•	•	• C	• C		• C	•	•	•	•			•	This species can be seen any time of year in the park. Can be distinguished from <i>C vomitoria</i> by red on face and black beard (<i>C vomitoria</i> has a black face and red beard). Note that many specimens identified as <i>C vomitoria</i> by inexperienced dipterists may be this species. <i>C vomitoria</i> features in all the general insect field guides eg various volumes by Chinery, and <i>C vicina</i> only gets a passing mention. It is easy to get the impression that any bluebottle you see will be <i>C vomitoria</i> . However, <i>C vomitoria</i> may never have been the more common, and does not seem to be now.
<i>C vomitoria</i> A Bluebottle	•													

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
<i>Lucilia caesar</i> A Greenbottle	•													<p><i>Lucilia</i> are extremely difficult to separate to species level, and the author has been unable to find an expert who can help with this genus. They are, however, easy to separate into 2 groups of species. <i>L caesar</i> belongs to one group and <i>L richardsi</i> and <i>L sericata</i> to the other. None of the specimens collected proved to be <i>L caesar</i>. Therefore, all of the records for THCP belong to the second group and <i>L sericata</i> has been chosen as the species on the balance of probabilities as it is the one most associated with urban environments. (Note that there is only one other species in this group apart from</p>
<i>L richardsi</i> A Greenbottle	•													
<i>L sericata</i> A Greenbottle	•					• C	•		•			•		
<i>Pollenia rudis</i> Cluster Fly	•		• ♀		• ♂		•		•					<p><i>Pollenia</i> ID to species level with certainty is almost impossible, even with expert help and specimens. <i>P rudis</i> is the most likely species. Parasites of earthworms. Known for hibernating in houses.</p>
<i>Protocalliphora azurea</i>	•													
Muscidae House Flies														
<i>Musca autumnalis</i> Face Fly										• ♂				Common. Larvae lives in the dung of domestic horses and cattle.
<i>Muscina levida</i>				• ♀ C		•	•							Saproxylic ie dependent on dead wood. Larvae feed on carrion.
<i>Helina duplicata</i>					•	•	• ♀							Species level is tentative ID.
<i>Phaonia subventa</i>		•	•	•		•	•							Saproxylic ie dependent on dead wood. Common in

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
			C	C		C								the south.
<i>Phaonia signata</i>			•		• ♀									Species level is tentative ID.
<i>Polietes lardarius</i> Larder Fly							• ♂							
Sarcophagidae Flesh Flies														
<i>Amobia signata</i>							•							Saprophylic ie dependent on dead wood.
<i>Sarcophaga carnaria</i> A Flesh Fly	•					• C	•		• C				•	Species shows considerable size difference – influenced by availability of food. Common.
<i>S nigriventris</i> A Coffin Fly	•													
<i>S (Heteronychia) dissimilis</i>						•								Det D Smith, who commented that 'They are not uncommon, very much under recorded.'
Scathophagidae Dung Flies														
<i>Scathophaga furcata</i> A Dung Fly	•				• ♀									
<i>S stercoraria</i> Common Yellow Dung Fly	•			•		•								
Tachinidae Parasitoid Flies														
<i>Eriothrix rufomaculata</i>	•					•	• ♀	•						Host: unknown. This is a common and very visible Tachinid.

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
<i>Gymnochaeta viridis</i>					•									Hosts: Small Dotted Buff <i>Photedes minima</i> , Small Wainscot <i>P.pygmina</i> , Common Rustic <i>Mesapamea secalis</i> (all Lepidoptera: Noctuidae).
<i>Macquartia grisea</i>												•		Often mistaken for a Muscid. Det T Zeegers. Hosts: Nettle Leaf Beetle <i>Chrysolina fastuosa</i> , <i>C oricalcia</i> (a leaf beetle, local, notable, found by the author at Rainham, so possible for THCP), <i>C sanguinolenta</i> (a leaf beetle)
<i>Pales pavidata</i>							•						•	Hosts: Zygaenidae: 6 Spot Burnet Moth <i>Zygaena filipendulae</i> , Narrow Bordered 5 Spot Burnet Moth <i>Zygaena Ionicerae</i> , 5 Spot Burnet Moth <i>Zygaena trifolii</i> ; Tortricidae: Carnation Tortrix <i>Cacoecimorpha pronubana</i> ; Lulworth Skipper Butterfly <i>Thymelicus acteon</i> , Essex Skipper Butterfly <i>Thymelicus lineola</i> ; Clouded Yellow Butterfly <i>Colias croceus</i> ; Large Copper Butterfly <i>Lycaena dispar</i> ssp. <i>Batavus</i> , Small Copper Butterfly <i>Lycaena phlaeas</i> ; Small Tortoiseshell Butterfly <i>Aglais urticae</i> , Red Admiral Butterfly <i>Vanessa atalanta</i> ; Large Heath Butterfly <i>Coenonympha tullia</i> ; Geometridae: Rannock Brindled Beauty Moth <i>Lycia lapponaria</i> , Scarce Umber Moth <i>Agriopsis aurantiaria</i> , Spring Usher Moth <i>Agriopsis leucophaearia</i> , Dotted Border Moth <i>Agriopsis marginaria</i> , Scalloped Hazel Moth <i>Odontopera bidentata</i> , March Moth <i>Alsophila aescularia</i> ; Lymantriidae: Brown Tail <i>Euproctis chryorrhoea</i> ; White Satin <i>Leucoma salicis</i> , Vapourer Moth <i>Orgyia antiqua</i> ; Arctiidae: White Ermine <i>Spilosoma lubricipeda</i> , Garden Tiger Moth <i>Arctia caja</i> ;

SPECIES NAME	CP	J	F	M	A	M	J	J	A	S	O	N	D	COMMENTS
														Noctuidae: Rustics <i>Xestia</i> sp, Alder Moth <i>Acronicta alni</i> , Knot Grass Moth <i>Acronicta rumicis</i> , Copper Underwinged Moth <i>Amphipyra pyramidea</i> , Clouded Bordered Brindle Moth <i>Apamea crenata</i> , Brown Spot Pinion <i>Agrochola litura</i> , Bright Line Brown Eye Moth <i>Lacanobia oleracea</i> , Southern Wainscot <i>Mythimna straminea</i> , Wainscots <i>Mythimna</i> sp, Powdered Quaker <i>Orthosia gracilis</i> , Common Quaker Moth <i>Orthosia cerasi</i> ; Small Quaker Moth <i>Orthosia cruda</i> , Blossom Underwing <i>Orthosia miniosa</i> , Twin Spotted Quaker Moth <i>Orthosia munda</i> , Quakers and Drabs <i>Orthosia</i> sp, Scarce Bordered Straw Moth <i>Heliothis armigera</i> , Purple Clay Moth <i>Diarsia brunnea</i> , Large Yellow Underwing Moth <i>Noctua pronuba</i> , Toadflax Brocade Moth <i>Calophasia lunula</i> , Red Swordgrass Moth <i>Xylena vetusta</i> , Dark Mottled Willow Moth <i>Spodoptera ciliun</i> ; Notodontidae: Coxcomb Prominent Moth <i>Ptilodon capucina</i> ; Lasiocampidae: Oak Eggar Moth <i>Lasiocampus quercus</i> , Lackey Moth <i>Malacostroma neustria</i> ; Thyatiridae: Frosted Green Moth <i>Polyploca ridens</i> ; Pterophoridae: a Plume Moth <i>Oidaematophorus lithodactyla</i> ; Sphingidae: Lime Hawkmoth <i>Mimas tiliae</i> .
<i>Phania funesta</i>						•								Det T Zeegers. Host: a Burrowing Shield Bug <i>Legnotus limbosus</i> . Common.
<i>Solieria pacifica</i>								• ♀						Host: Small Tortioseshell Butterfly <i>Aglais urticae</i> . Common.
<i>Siphona geniculata</i>						•			• C	•				Det C Raper. Host: <i>Tipula</i> spp. The most common <i>Siphona</i> sp.

A dot in the column headed CP means that the species has been recorded in the park by Colin Plant in 2001.

♀ or ♂ indicates the sex if only one specimen was checked

C indicates that the species was numerous in the park on the day of the visit.

Visits to the site were made monthly (with no visit being made in October or December). Notes on the weather conditions were taken on the following visits:

19 March 2006 – Weather cold but sunny with a light breeze developing into a strong wind by 11.00.

20 May 2006 – Weather warm and sunny with squally windy episodes.

19 August 2006 – Weather overcast, cool, developing into steady rain

Photographs of all the species recorded in the 2006 surveys are available on request.

Tower Hamlets Cemetery Park's grid reference is TQ367824.

There is a marked difference in the species recorded in Plant's 2001 survey and this one, particularly in certain families (Tachinidae, Muscidae) and sub-orders (Nematocera). (See Plant's report Introduction para 1.6 for his comments on this phenomena.) This may reflect differing seasonal conditions or differing collecting techniques. Plant made roughly twice as many visits to the park, but was surveying for a much wider range of invertebrates. It may also be that the recorders' knowledge, resources and interest in certain families played a part. Plant recorded 172 species from 37 families (out of a possible 6750+ species in 101 families). The 2006 survey recorded 59 species from 16 families. Of the 59 species recorded in 2006, 24 species were new records for the park. Note that Hoverflies (Syrphidae) is by no means the largest family of UK Diptera, but they are generally highly visible, attractive flies, in the main easy to identify to species level, which probably accounts for their apparent dominance in both the 2001 and the 2006 surveys. There are a number of species known to occur in the park that (frustratingly) have not been present during the time of the 2006 survey, and so do not appear on the list eg Dark-edged Bee-fly *Bombylius major* (Bombyliidae) and *Tachina fera* (Tachinidae). Both of these species are relatively large and visible flies, the *Bombylius*, an early spring to early summer species seen visiting flowers and a parasitoid of a wide range of *Andrena spp*; the *Tachina* an autumn species seen on woodland edges and visiting umbellifers, a parasitoid of many Noctuidae.

It is worth noting how many species are either parasitoids or dependent on decaying organic material (often dead wood, but also dung), as this information may have a bearing on the park's management for biodiversity in the future.

Conclusions

Most species present in the park are common and widespread, but it is obvious that the park provides an important haven for a wide

variety of species nonetheless. Species with habitat requirements ranging from wet grassland to shaded woodland to open flowery meadow are all present.

Susan Walter April 2007

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