

## BEETLES FROM BEDDINGTON SEWAGE FARM

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There are about 4,000 beetle species to be found in the British Isles and, of these, I have recorded 262 from Beddington, about 6.5% of the British total, over the last few years. Other much more well-worked Surrey sites like Richmond Park and Ashted Common now have beetle lists of over 1,000 species. Allowing for the fact that these are both rather larger areas than Beddington, I would still expect the Beddington list to reach 500 species with more recording.

Beetles occur in almost every habitat. I have collected from many terrestrial habitats, but have done very little so far to sample the water beetles. Most of my collecting has been by active searching and by using a sweepnet for low vegetation or a beating tray for trees and bushes, often to the great amusement of the more regular birders. I have not done any light-trapping, pitfall or other trapping. This is important because different collecting techniques usually find a rather different suite of species.

Most beetles are small and unobtrusive, so are unlikely to be noticed unless looked for specially. The few that are larger or more obvious include some of the ground beetles, the devil's coach-horse beetle (*Ocypus olens*), a long thin black beetle often seen in spring running on the ground or under stones, some of the flea beetles, so called because they jump when disturbed, which occur in large aggregations on the willowherb growing around the edge of the lake, and of course, the various species of ladybird beetles. Male stag beetles make an audible clatter as they fly around at dusk in the middle of the summer while females can occasionally be seen crawling over the ground near old trees. Their larvae feed on damp, rotten wood.

While most of the species recorded to date are common or widespread British species, some are of more local distribution and 20 are at least Nationally Notable. For a beetle species to be regarded as Nationally Notable or of Red Data Book status, it has to occur in 100 or fewer actual or estimated 10 km squares of the national grid (Notable B category), in 30 or fewer squares (Notable A category) or less than 15 squares (various Red Data Book categories). Other criteria also apply, especially for the more poorly recorded groups and for the Red Data Book categories. Comments on the notable species recorded from Beddington follow.

The two notable ground beetles (Carabidae) are *Bembidion clarkii*, a species found in the damp ditch adjacent to the horse field and *Platyderus ruficollis*, found among a small pile of logs next to the edge of Beddington Park. The rove beetles (Staphylinidae) include a quarter of all British beetles and many are difficult to identify, requiring dissection for identification. Thus they are not popular with many collectors and are often poorly recorded. For this reason, species nowadays regarded as notable were in the past regarded as rare or very rare. *Xantholinus angularis* was found under the bark of a fallen black poplar tree next to Beddington Lane and *Oxypoda exoleta* was found in the damp ditch with *Bembidion clarkii* above. Although the stag beetle (*Lucanus cervus*) is common enough in this general area of Surrey, it is more or less restricted in Britain to southeast England (Dorset to Suffolk) and so is of Nationally Notable (Nb) status. My farm record for the species was from a large rotten log lying on the ground.

*Opilo mollis* (family Cleridae) is a predator of woodworm beetles in dead wood and I found a single specimen last winter in an old, well-rotted horse chestnut tree trunk next to Beddington Lane just south of the rifle range. *Cryptophagus ruficornis* (family Cryptophagidae) was found in association with the black fungus, *Daldinia concentrica*, commonly known as King Alfred's Cakes, which grows on rotten tree trunks around the farm. *Atomaria scutellaris*, another cryptophagid, was listed as of Red Data Book - Insufficiently Known (RDBK) status in 1994. It was previously

known only from the Scilly Isles, but in the last few years has been found in Sussex and Surrey, usually in small numbers. For a while in 1991 and 1992 it was quite numerous at Beddington and was found by sweeping ruderal weeds on a sandy bank. It seems to be increasing its range in southern England and is probably an adventive species rather than a genuine rarity.

The ladybird beetle, *Hippodamia variegata* is found locally in southern England and occasionally in Wales, generally in drier, well- drained areas. At Beddington it was found in a sandy area among sparse ruderal weeds. The biphyllid beetle, *Diplocoelus fagi*, is a fungal feeder usually found in ancient broad-leaved and pasture woodlands. At Beddington, it was found on a dead sycamore tree killed by the fungus causing sooty bark disease. The same tree also held the lathridiid, *Enicmus brevicornis*, which can be found in thousands on sooty bark. The colydiid, *Cicones undatus*, was listed as RDB1 in 1992, being known then only since 1984 from Windsor Forest. However, since then, it has been found at several London sites, often in large numbers, on sycamore trees with sooty bark disease. Thus, the species appears to be a recent arrival in the UK, is spreading rapidly, and not now actually worthy of its RDB1 status. At Beddington it was found on the same tree as the previous two species.

Three other notable species associated with old wood at Beddington are the tenebrionid, *Scaphidema metallicum*, found among a pile of old logs next to Beddington Park, the salpingid, *Lissodema quadripustulatum*, beaten from dead elm branches and the aderid, *Aderus populneus*, beaten from a small area of old hawthorns along Milne Hedge.

The notable phytophagous beetles belong to the families Chrysomelidae, the leaf beetles, and the Curculionidae, weevils. *Longitarsus ballotae*, as its name suggests, feeds on *Ballota nigra*, the black horehound which is widespread on the farm and the beetle has been found along a good stretch of the Mile Road from the bridge eastwards. *Podagrica fuscicornis* feeds on mallow which is one of the most abundant plants on the farm, although I have only so far found the beetle on the bridge at the start of Mile Road. *Dorytomus ictor* occurs on the old poplars alongside Beddington Lane. The overwintering adults are easy to find as they hibernate in cracks in the bark of the old trees near to the ground and their larvae probably develop in catkins. *Ceutorhynchus rapae* occurs on various crucifers and has been found once on the farm. Lastly, *Drupenatus nasturtii* occurs in wet ditches and streams where its foodplant, watercress, grows and it has been recorded from the now virtually nonexistent ditch roughly midway between Mile Road and Beddington Park.

Thus, for the notable species, it can be seen that the especially important habitats on the farm are the permanently damp ditches and the old trees, both living and dead, including the fungi associated with the latter. The disturbed sandy areas and their ruderal weeds also provide homes for some of the other notable species.

## List of beetles recorded from Beddington Sewage Farm

### CARABIDAE (ground beetles)

*Carabus granulatus* Linnaeus  
*Notiophilus substriatus* Waterhouse  
*Nebria brevicollis* (Fabricius)  
*Trechus obtusus* Erichson  
*T. quadristriatus* (Schrank)  
*Asaphidion curtum* (von Heyden)  
*Bembidion lampros* (Herbst)  
*B. guttula* (Fabricius)  
*B. femoratum* Sturm  
*B. tetracolum* Say  
*B. properans* (Stephens)  
*B. harpaloides* Audinet-Serville  
*B. clarkii* (Dawson) Nb  
*B. assimile* Gyllenhal  
*Pterostichus madidus* (Fabricius)  
*P. melanarius* (Illiger)  
*P. niger* (Schaller)  
*P. vernalis* (Panzer)  
*P. nigrita* (Paykull)  
*Calathus fuscipes* (Goeze)  
*C. piceus* (Marsham)  
*C. melanocephalus* (Linnaeus)  
*Platyderus ruficollis* (Marsham) Nb  
*Agonum dorsale* (Pontopiddan)  
*A. albipes* (Fabricius)  
*A. fuliginosum* (Panzer)  
*Amara familiaris* (Duftschmid)  
*A. similata* (Gyllenhal)  
*A. eurynota* (Panzer)  
*A. aenea* (De Geer)  
*A. anthobia* Villa & Villa  
*Harpalus affinis* (Schrank)  
*H. rufibarbis* (Fabricius)  
*H. rufipes* (De Geer)  
*Anisodactylus binotatus* (Fabricius)  
*Stenolophus mixtus* (Herbst)  
*Acupalpus dubius* Schilsky  
*Badister bipustulatus* (Fabricius)  
*Dromius quadrinotatus* (Zenker)  
*D. linearis* (Olivier)  
*D. melanocephalus* Dejean  
*D. meridionalis* Dejean  
*Demetrias atricapillus* (Linnaeus)

### DYTISCIDAE (water beetles)

*Colymbetes fuscus* (Linnaeus)

### HYDROPHILIDAE

*Helophorus aequalis* Thomson  
*Megasternum obscurum* (Marsham)  
*Cercyon marinus* Thomson  
*C. analis* (Paykull)  
*Hydrobius fuscipes* (Linnaeus)

### HISTERIDAE

*Onthophilus striatus* (Forster)  
*Paralister carbonarius* (Hoffmann)  
*P. purpurascens* (Herbst)

*Paromalus flavicornis* (Herbst)  
*Kissister minimus* (Aubé)

### LEIODIDAE

*Catops fuliginosus* Erichson

### STAPHYLINIDAE (rove beetles)

*Metopsia retusa* (Stephens)  
*Dropephylla vilis* (Erichson)  
*Platystethus degener* Mulsant & Rey  
*P. nitens* (Sahlberg)  
*P. alutaceus* Thomson  
*Carpelimus gracilis* (Mannerheim)  
*C. rivularis* (Motschulsky)  
*C. corticinus* (Gravenhorst)  
*Anotylus rugosus* (Fabricius)  
*Stenus similis* (Herbst)  
*S. formicetorum* Mannerheim  
*S. cicindeloides* (Schaller)  
*S. boops* Ljungh  
*S. canaliculatus* Gyllenhal  
*S. juno* (Paykull)  
*Lathrobium multipunctum* Gravenhorst  
*Sunius propinquus* (Brisout)  
*Rugilus orbiculatus* (Paykull)  
*Othius laeviusculus* Stephens  
*Leptacinus batychrus* (Gyllenhal)  
*Gyrophypnus fracticornis* (Müller)  
*G. angustatus* Stephens Na  
*Xantholinus angularis* Ganglbauer Na  
*Philonthus quisquiliarius* (Gyllenhal)  
*P. cognatus* Stephens  
*Gabrieus pennatus* Sharp  
*Ocypus olens* (Müller)  
*Sepedophilus marshami* (Stephens)  
*Tachyporus hypnorum* (Fabricius)  
*T. nitidulus* (Fabricius)  
*T. solutus* Erichson  
*T. pusillus* Gravenhorst  
*Tachinus signatus* Gravenhorst  
*T. laticollis* Gravenhorst  
*Cypha longicornis* (Paykull)  
*Oligota punctulata* Heer  
*Bolitochara obliqua* Erichson  
*B. bella* Markel  
*Cordalia obscura* (Gravenhorst)  
*Falagria caesa* Erichson  
*Gnypeta carbonaria* (Mannerheim)  
*G. rubrior* Tottenham  
*Aloconota sulcifrons* (Stephens)  
*Plataraea brunnea* (Fabricius)  
*Amischa forcipata* Mulsant & Rey  
*A. soror* (Kraatz)  
*A. decipiens* (Sharp)  
*Nehemitropia sordida* (Marsham)  
*Dinaraea angustula* (Gyllenhal)  
*D. aequata* (Erichson)  
*Atheta crassicornis* (Fabricius)

<i>A. amicola</i> (Stephens)		<i>Biphyllus lunatus</i> (Fabricius)	
<i>A. fungi</i> (Gravenhorst)		<i>Diplocoelus fagi</i> Guérin-Ménéville	Nb
<i>A. graminicola</i> (Gravenhorst)			
<i>A. parvula</i> (Mannerheim)		EROTYLIDAE	
<i>Drusilla canaliculata</i> (Fabricius)		<i>Dacne bipustulata</i> (Thunberg)	
<i>Oxypoda exoleta</i> Erichson	N		
		PHALACRIDAE	
PSELAPHIDAE		<i>Olibrus liquidus</i> Erichson	
<i>Euplectus infirmus</i> Raffray		<i>O. aeneus</i> (Fabricius)	
		COCCINELLIDAE (ladybirds)	
LUCANIDAE (stag beetles)		<i>Coccidula rufa</i> (Herbst)	
<i>Lucanus cervus</i> (Linnaeus)	Nb	<i>Rhyzobius litura</i> (Fabricius)	
<i>Dorcus parallelepipedus</i> (Linnaeus)		<i>Stethorus punctillum</i> (Weise)	
		<i>Exochomus quadripustulatus</i> (Linnaeus)	
ELATERIDAE (click beetles)		<i>Anisosticta novemdecimpunctata</i> (Linnaeus)	
<i>Melanotus erythropus</i> (Gmelin)		<i>Tytthaspis sedecimpunctata</i> (Linnaeus)	
<i>Cidnopus minutus</i> (Linnaeus)		<i>Propylea quatuordecimpunctata</i> (Linnaeus)	
		<i>Psyllobora vigintiduopunctata</i> (Linnaeus)	
CANTHARIDAE (soldier beetles)		<i>Hippodamia variegata</i> (Goeze)	Nb
<i>Cantharis rustica</i> Fallén		<i>Adalia bipunctata</i> (Linnaeus)	
<i>C. livida</i> Linnaeus		<i>A. decempunctata</i> (Linnaeus)	
		<i>Coccinella septempunctata</i> Linnaeus	
ANOBIIDAE (woodworm beetles)		<i>C. undecimpunctata</i> Linnaeus	
<i>Ochina ptinoides</i> (Marsham)		<i>Subcoccinella vigintiquatuorpunctata</i> (Linnaeus)	
<i>Hemicoelus fulvicornis</i> (Sturm)			
<i>Anobium punctatum</i> (De Geer)		LATHRIDIIDAE	
<i>Ptilinus pectinicornis</i> (Linnaeus)		<i>Enicmus brevicornis</i> (Mannerheim)	N
		<i>Aridius bifasciatus</i> (Reitter)	
CLERIDAE		<i>Corticicara gibbosa</i> (Herbst)	
<i>Opilo mollis</i> (Linnaeus)	Nb	<i>Corticarina fuscata</i> (Gyllenhal)	
<i>Necrobia violacea</i> (Linnaeus)			
		CIIDAE	
MELYRIDAE		<i>Octotemnus glabriculus</i> (Gyllenhal)	
<i>Malachius bipustulatus</i> (Linnaeus)		<i>Cis boleti</i> (Scopoli)	
		<i>C. bilamellatus</i> Wood	
NITIDULIDAE (sap and pollen beetles)		<i>C. fagi</i> Waltl	
<i>Brachypterus glaber</i> (Stephens)		<i>C. setiger</i> Mellié	
<i>B. urticae</i> (Fabricius)		<i>C. pygmaeus</i> (Marsham)	
<i>Brachypterolus pulicarius</i> (Linnaeus)			
<i>Meligethes flavipes</i> Sturm		MYCETOPHAGIDAE	
<i>M. morosus</i> Erichson		<i>Litargus connexus</i> (Fourcroy)	
<i>M. difficilis</i> (Heer)		<i>Mycetophagus quadripustulatus</i> (Linnaeus)	
<i>Epuraea aestiva</i> (Linnaeus)			
<i>Pocadius ferrugineus</i> (Fabricius)		COLYDIIDAE	
		<i>Cicones undatus</i> Guérin-Ménéville	(RDB1)
RHIZOPHAGIDAE		<i>Bitoma crenata</i> (Fabricius)	
<i>Monotoma bicolor</i> Villa & Villa			
<i>M. picipes</i> Herbst		TENEBRIONIDAE	
		<i>Scaphidema metallicum</i> (Fabricius)	Nb
CRYPTOPHAGIDAE		<i>Lagria hirta</i> (Linnaeus)	
<i>Telmatophilus typhae</i> (Fallén)		<i>Isomira murina</i> (Linnaeus)	
<i>Cryptophagus dentatus</i> (Herbst)			
<i>C. rotundatus</i> Coombs & Woodroffe		SALPINGIDAE	
<i>C. ruficornis</i> Stephens	N	<i>Lissodema quadripustulatum</i> (Marsham)	Nb
<i>C. pallidus</i> Sturm		<i>Rhinosimus planirostris</i> (Fabricius)	
<i>Atomaria scutellaris</i> Motschulsky	RDBK	<i>Vincenzellus ruficollis</i> (Panzer)	
<i>A. nitidula</i> (Marsham)			
<i>A. ruficornis</i> (Marsham)		SCRAPTIIDAE	
<i>A. fuscata</i> (Schönherr)		<i>Anaspis maculata</i> Fourcroy	
		<i>A. humeralis</i> (Fabricius)	
BIPHYLLIDAE			

OEDEMERIDAE			<i>Sitona lineatus</i> (Linnaeus)
<i>Oedemera lurida</i> (Marsham)			<i>Hypera rumicis</i> (Linnaeus)
			<i>Leiosoma deflexum</i> (Panzer)
			<i>Magdalis armigera</i> (Fourcroy)
ANTHICIDAE (ant beetles)			<i>Euophryum confine</i> (Broun)
<i>Anthicus antherinus</i> (Linnaeus)			<i>Rhyncolus lignarius</i> (Marsham)
			<i>Acalles misellus</i> Boheman
ADERIDAE			<i>Dorytomus ictor</i> (Herbst) Nb
<i>Aderus populneus</i> (Creutz)	Nb		<i>Notaris acridulus</i> (Linnaeus)
			<i>Trichosirocalus troglodytes</i> (Fabricius)
CERAMBYCIDAE (longhorn/timber beetles)			<i>Ceutorhynchus rugulosus</i> (Herbst)
<i>Grammoptera ruficornis</i> (Fabricius)			<i>C. pollinarius</i> (Forster)
			<i>C. erysimi</i> (Fabricius)
BRUCHIDAE (seed beetles)			<i>C. floralis</i> (Paykull)
<i>Bruchus rufipes</i> Herbst			<i>C. rapae</i> Gyllenhal Nb
			<i>Cidnorhinus quadrimaculatus</i> (Linnaeus)
CHRYSOMELIDAE (leaf beetles)			<i>Drupenatus nasturtii</i> (Germar) Nb
<i>Oulema melanopus</i> (Linnaeus)			<i>Rhinoncus pericarpus</i> (Linnaeus)
<i>Phyllodecta laticollis</i> Suffrian			<i>R. perpendicularis</i> (Reich)
<i>Phaedon tumidulus</i> (Germar)			<i>Phytobius quadrituberculatus</i> (Fabricius)
<i>P. cochleariae</i> (Fabricius)			<i>Amalus scortillum</i> (Herbst)
<i>Lochmaea crataegi</i> (Forster)			<i>Anthonomus rubi</i> (Herbst)
<i>Phyllotreta ochripes</i> (Curtis)			<i>Curculio pyrrhoceras</i> Marsham
<i>P. nigripes</i> (Fabricius)			<i>Tychius picirostris</i> (Fabricius)
<i>P. undulata</i> Kutschera			<i>Mecinus pyraister</i> (Herbst)
<i>Aphthona euphorbiae</i> (Schrank)			<i>Gymnetron antirrhini</i> (Paykull)
<i>Longitarsus ballotae</i> (Marsham) Nb			<i>G. pascuorum</i> (Gyllenhal)
<i>L. flavicornis</i> (Stephens)			<i>Rhynchaenus alni</i> (Linnaeus)
<i>L. melanocephalus</i> (De Geer)			<i>R. quercus</i> (Linnaeus)
<i>Altica lythri</i> Aubé			
<i>Chalcoides plutus</i> (Latreille)			SCOLYTIDAE (bark beetles)
<i>C. aurea</i> (Fourcroy)			<i>Scolytus multistriatus</i> (Marsham)
<i>C. aurata</i> (Marsham)			<i>S. rugulosus</i> (Müller)
<i>Podagrica fuscicornis</i> (Linnaeus) Nb			<i>Hylesinus crenatus</i> (Fabricius)
<i>Chaetocnema concinna</i> (Marsham)			<i>Xylocleptes bispinus</i> (Duftschmid)
<i>Psylliodes affinis</i> (Paykull)			
<i>P. cuprea</i> (Koch)			
<i>Cassida rubiginosa</i> Müller			
ATTELABIDAE (weevils)			
<i>Rhynchites aequatus</i> (Linnaeus)			
APIONIDAE (weevils)			
<i>Apion malvae</i> (Fabricius)			
<i>A. aeneum</i> (Fabricius)			
<i>A. radiolus</i> (Marsham)			
<i>A. rufirostre</i> (Fabricius)			
<i>A. miniatum</i> Germar			
<i>A. hookeri</i> Kirby			
<i>A. hydrolapathi</i> (Marsham)			
<i>A. gibbirostre</i> (Gyllenhal)			
<i>A. onopordi</i> Kirby			
<i>A. dichroum</i> Bedel			
<i>A. nigrifoveata</i> Kirby			
CURCULIONIDAE (weevils)			
<i>Trachyploeus angustisetulus</i> Hansen			
<i>Phyllobius pyri</i> (Linnaeus)			
<i>P. pomaceus</i> Gyllenhal			
<i>P. viridiaeris</i> (Laicharting)			
<i>Barypeithes pellucidus</i> (Boheman)			

