

EDF Energy

**Sizewell C New Nuclear Power Station:
Terrestrial and Freshwater Ecology, and
Ornithology**

Invertebrate Survey Report 2007-2010

Draft Report

June 2012

AMEC Environment & Infrastructure UK Limited

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EDF Energy

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Draft Invertebrate Survey Report 2007-2010

AMEC Environment and Infrastructure
UK Limited



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1. Introduction

1.1 Purpose of this Report

An area of land directly north of Sizewell B Nuclear Power Station, which is located near Leiston in Suffolk, has been identified as having the potential to accommodate the proposed development of one or more new nuclear reactors. This proposed development is known as Sizewell C. The site of the proposed development has an approximate central National Grid Reference (NGR) of TM473640.

AMEC Environment and Infrastructure UK Ltd ('AMEC') was commissioned in 2007 to provide terrestrial and freshwater ecological, and ornithological services in relation to Sizewell C. The purpose of this report, which outlines the findings of survey work undertaken for invertebrates in the period 2007-2010, is to inform the design of Sizewell C and the Environmental Statement for the scheme.

1.2 Survey Area

The survey areas and methodologies used have been adopted following consultation with statutory and non-statutory consultees and other stakeholders, taking into account best practice guidelines, and site-specific and project-specific characteristics. The survey areas adopted are precautionary in that they allow for the iterative development of the scheme design by covering a larger area than is likely to be affected by the proposals. Based on the information available at the time the surveys were undertaken, it was assessed that the relevant Zones of Influence of the proposed development would be likely not to extend further than the defined study areas.

2. Methods

2.1 Desk Study

A number of sources of information have been used to provide context and background for interpreting the results of the survey work. The major sources that have been identified and used to date (2010) are:

- Sizewell Ecological Surveys (in connection with Sizewell 'C') conducted by Bioscan (UK) (Bioscan, 1991);
- Sizewell Land Management Annual Reviews 1996-2007 compiled by Suffolk Wildlife Trust and ADAS (SWT/ADAS, 1996-2007);
- Aquatic invertebrate surveys of Sizewell Belts SSSI in 1987 and 1988 undertaken by the Nature Conservancy Council (Drake, 1989a,b);
- More recent, currently unpublished data collected by Drake for Buglife in April 2009 (Drake in prep.);
- Survey reports on the ant-lion (*Euroleon nostras*) which cover the Sizewell populations; and
- Invertebrate records for Minsmere RSPB reserve, supplied by the RSPB.

Contextual information regarding white admiral butterfly (*Limenitis camilla*) within the study area was obtained from the following sources:

- The Suffolk Wildlife Trust ¹;
- The Suffolk Butterfly Recorder (Rob Parker);
- RSPB Minsmere (Robin Harvey);
- The United Kingdom Butterfly Monitoring Scheme;
- Suffolk Natural History Society (the Transactions of the Suffolk Natural History Society).

Several other invertebrate records for Sizewell have been obtained by AMEC as part of a wide ranging desk study which has included the review of a considerable number of ecological reports (many associated with the Sizewell C Application). The veracity of some of these records is questionable, and many locations are unclear, but they have nevertheless been summarised here.

¹ Both from personal communications and from the annual land management reviews produced in conjunction with ADAS.

Some sources of information have not been consulted at this stage. These include the Suffolk Naturalist's Society Transactions and recorders for various groups, a spider survey report on Sizewell (Harvey, 1990) and some early general references such as Morley (1899, 1915).

2.2 Field Surveys

2.2.1 2007 Invertebrate Survey

Invertebrates were sampled from a total of twelve sample sites labelled A-L. Table 2.1 provides details of the invertebrate sample locations whilst Figure 2.1 shows these locations. The sampling methods employed at each sample site varied according to circumstances such as possibility of human interference and the presence of sufficient vegetation in which to hide traps. The use of passive traps (such as Malaise traps – see section 2.2.4) was not an option on the beach although these were able to be deployed in woodlands and planted-up sites on the preliminary works area. Table 2.2 provides details of the sampling methods employed at each of the sampling sites.

Table 2.1 Number and Location of Invertebrate Sampling Sites at Sizewell in 2007

Site	OS Grid Ref (TH)	Description
A	47496435	Eastern bund overlooking coastal strip (planted trees and shrubs with clearings)
B	47386436	Northern bund (planted trees and shrubs)
C	47296415	Central riparian belt (carr woodland)
D	472641	Western riparian belt (carr woodland)
E	47016461	Triangular-shaped area of young plantation surrounded by mature plantations, Goose Hill (Dunwich Forest)
F	46596465	Plantation edge and scrub at intersection of rides, Dunwich Forest
G	464645	Carr woodland at Turf Pits, Kenton Hills
H	463644	Plantation at Nursery Covert, Kenton Hills
I	47406401	Southern edge of field/northern edge of young conifer plantation.
J	47286448	<i>Phragmites</i> fen near footbridge
K	47516452	Coastal heath north of power station.
L	4764 (La-e)	Coastal belt (low dunes, shingle, marram, etc).
	47556295 (Lf)	La - e = June 2007, Lf-j = July and Sept 2007
	4763 (Lg-j)	

Table 2.2 Invertebrate Sampling Methods Employed at each of the Sample Sites

Sampling Site	Invertebrate sampling methods used
A	Pitfall traps (10), water trap (1) and Malaise trap (1)
B	Pitfall traps (10) and water trap (1)
C	Pitfall traps (10), water trap (1) and Malaise trap (1)
D	Pitfall traps (10) and water trap (1)
E	Pitfall traps (10) and water trap (1)
F	Pitfall traps (10) and water trap (1)
G	Pitfall traps (10), water trap (1) and Malaise trap (1)
H	Pitfall traps (10) and water trap (1)
I	Water trap (1)
J	Malaise trap (1)
K	Pitfall traps (1)
L	Vacuum (5) and sweep net samples (5)

The traps and samples were emptied or taken at monthly intervals. Descriptions of the different sampling methods used are given below.

Pitfall Traps

Pitfall traps comprising plastic drinking cups were placed in holes in the ground in rows of ten at nine locations giving a possible maximum of 90 pitfall traps per visit. Pitfall traps are used to sample ground-living invertebrates such as wolf spiders, millipedes, woodlice, ground beetles and rove beetles. Antifreeze (ethylene glycol) was added as a preservative. The pitfalls were put down in June 2007 and emptied in July, August and September. Consequently the results represent a maximum of 270 traps, but there were some losses, most notably due to the flooding and heavy rainfall in June and July (notably at Sample Site C). On emptying the traps the contents of each transect of ten traps were pooled into a single pot.

Sweep Netting

Sweep netting was undertaken using a 16 inch diameter net² mounted on a three-foot angling pole. Sweep netting was concentrated on five sampling sites on Sizewell beach on each visit and was undertaken for a period of approximately ten minutes on each visit. The five sites varied with each visit partly because of the problem of re-locating the exact sampling sites on

² Supplied by Marris House Nets, Bournemouth

subsequent visits and in order to cover as much of the beach as possible. The sweep net was passed through low-lying vegetation and over bare or partly vegetated ground. Sweep netting is an excellent means of obtaining low-flying insects and phytophagous insects feeding on herb or shrub layer vegetation. Diptera dominated the sweep net samples with Hymenoptera also frequent along with plant-feeding or active beetles and bugs etc. Target invertebrates within the swept material were selectively removed from the net using an aspirator (or 'pooter'). Sweep netting was only employed on the shore (low dunes, shingle, marram communities, etc) because passive trapping methods could not be employed here due to heavy public usage. Five timed sweep net samples were taken on each monthly visit (excluding August).

Vacuum Sampling

A portable garden vacuum (Ryobi PBV-30) with a muslin bag inserted into the vacuum tube and held in place with a thick rubber band was used at each of the same locations as the sweep net locations on three occasions. Each vacuum sample was timed at three minutes and was used to sample the vegetation and partly bare ground at each site including along the pitfall transects and around each of the water traps. The muslin bag was emptied into a sweep net and material selectively removed with an aspirator. Vacuums provide an excellent means of sampling invertebrates associated with low-growing vegetation and the diurnal ground invertebrate fauna. Vacuum sampling was only employed on the shore (low dunes, shingle, marram communities, etc) because passive trapping methods could not be employed here due to heavy public usage. Five timed vacuum samples were taken on each monthly visit (excluding August).

Water Traps

The water traps on this survey comprised yellow plastic washing-up bowls half-filled with tap water. These were placed on the ground at nine of the sample sites. A small amount of detergent was added to each water trap to reduce the tension of the surface film and formalin was added (5-10% volume) as a preservative. Yellow water traps are very effective at trapping flying insects³ such as flower visiting species (Disney *et al.*, 1982; Kirk, 1984). In order of abundance trapped material included Diptera (many families), Hymenoptera (including aculeates such as bees, wasps and ants), Hemiptera (especially Auchenorrhyncha), Coleoptera (such as pollen beetles and flea beetles) and various minor invertebrate orders such as Orthoptera (crickets and grasshoppers). The water traps were emptied on each visit and the material was placed in alcohol for later sorting and identification. Some water traps were clearly affected by the heavy rainfall experienced in June and July 2007.

Malaise Traps

Malaise traps comprise large tent-like structures that act on the flight-interception model. Flying insects, on encountering the vertical screen of mesh, try to fly over the obstacle and in doing so follow the sloping roof and eventually end up in a collecting bottle in the top corner of the trap. Malaise traps are large and conspicuous and are therefore prone to human interference. They are also expensive, relatively fragile and prone to wind damage when sited in exposed locations such as coastal areas. Malaise traps work best on flight-lines such as woodland paths or woodland edges. Because of these potential problems only limited use of these was made on the survey, and they were partly used as 'insurance' in case any of the other sampling methods

³ Yellow and white are the most effective colours for water traps. Other colours have been found to be much less effective.

failed. The large amount of material collected by Malaise traps meant that only a relatively small amount of material has been examined.

Taxonomic Coverage

The taxonomic groups identified varied with the sampling methods. For example, all Coleoptera were identified from all the pitfall traps and from most of the water traps and vacuum samples whilst the Araneae (spiders), Orthoptera (grasshoppers and allies), Blattodea (cockroaches), various other minor insect groups, Auchenorrhyncha (leafhoppers), Heteroptera (true-bugs), Rhopalocera (butterflies), Coleoptera (beetles), selected Diptera (true-flies) and all aculeate Hymenoptera (bees, wasps and ants) were identified from the sweep and vacuum samples. A smaller number of taxa were identified from the water traps (mostly Odonata, Orthoptera, other minor groups, selected Diptera and aculeate Hymenoptera).

2.2.2 2009 Invertebrate Survey

Ditches were selected within Sizewell Belts SSSI for sampling. These were sampled with a standard pond net ⁴ in September 2009.

Each location selected was sampled for a 3-minute period by passing the net along the banks and over the beds of the shallower ditches. The contents of the net were washed and sieved on the bank (this involved placing the sample in a 1cm coarse sieve, with a 500 µm sieve and then a bowl beneath it). After several pourings, the contents of the 1cm sieve were checked for large freshwater invertebrates and if there were none or once these had been noted, the coarse fraction was returned to the watercourse. The finer fraction was placed in a pot for later examination in the lab. The samples were preserved in 10% formalin.

Once in the lab, each bulk sample was divided up into small parts and these were placed in gridded petri-dishes to which water was added. Typically, one sample would require dividing into around thirty petri-dishes for examination. The petri-dishes were then examined under a binocular stereo-microscope and invertebrates were identified and counted.

A number of physical and chemical measurements were made on site including pH, conductivity and water temperature using a Hanna HI 98129 handheld meter. A global GPS was used to obtain accurate grid references of sampling locations and species present, and notes were taken of all the habitats within the SSA that were surveyed. Survey locations are shown on Figure 2.2.

Generally, vouchers of Red Data Book and Nationally Scarce species have been retained and are available to check by third parties (such as national recorders) if this is required. These vouchers will be retained indefinitely by the surveyor. Red Data Book and Nationally Scarce/Notable species have been identified as such using the published and unpublished reviews such as Falk (1991), Falk and Chandler (2005) and Foster (2004). A definition of Red Data Book and Nationally Scarce/Notable statuses is provided in Annex 2, Appendix A.

Details of the prevailing weather conditions were also recorded.

⁴ 1mm mesh bag, net supplied by EFE/GB Nets Ltd, Totnes

2.2.3 2010 Invertebrate Survey

Ditches were selected within Sizewell Belts SSSI for sampling. These were sampled in groups in June 2010 with a 16 inch diameter sweep net attached to a six foot angling pole. The net was passed through bankside vegetation, over the ditches and alongside overhanging bushes and trees. Figure 2.3 shows the locations of the ditches sampled. Invertebrates recorded were selectively removed with an aspirator (or pooter) and placed in alcohol for later determination. Conspicuous insects such as butterflies, day-flying moths, dragonflies and certain bumblebees were recorded in the field. Reedbed insects within the SSA were sampled by means of two Malaise traps which were erected in early and late June 2010 at two separate locations (the location of the Malaise traps are indicated in Figure 2.3). Malaise traps are large flight interception traps that work by impeding an insect's forward movement, forcing the individual to move around the obstacle and in doing so, ending up in a collecting head containing preservative. Malaise traps collect large quantities of material and are particularly effective in reedbeds and fens. Norfolk hawkers were recorded by locating adults and checking these using binoculars.

2.2.4 2007 White Admiral Survey

Surveys were undertaken of habitats considered suitable to support white admiral in Goose and Kenton Hills. These were aimed at detecting adult insects. Surveys were carried out on the following dates:

- 7, 8 and 10 July;
- 4, 5 and 10 August.

White admiral generally has a single brood with adults flying from late June to mid-August (Asher *et al.*, 2001). The surveys were therefore conducted within the optimal period for this species. During each visit a 2-hour walked transect was carried out across the survey area during the middle of the day (avoiding any unfavourable weather conditions, such as rain or fog). The transects were divided into 15 minute intervals in order to continuously assess the weather conditions and help with mapping any white admiral sightings. For each sighting, the location was recorded with a hand-held GPS device and notes on apparent behaviour were made. Following a sighting, the recorders remained within the vicinity for a further 5 minutes to record any other individuals. Figure 2.4 shows the transect route taken.

2.2.5 2009 White Admiral Larval Survey

Preliminary Survey

The survey area was visited on 10 June 2009 and searched over a four hour period for suitable sites to carry out the larval searches later in the season. The frequency of suitable areas of habitat and general occurrence of the larval food plant, honeysuckle (*Lonicera periclymenum*) was greater in the western part of the survey area (Kenton Hills) with the most suitable habitat (ride/woodland edge and clearings in partial sun) being in the southern part of the woodland. Despite the considerable area of conifer plantation in the eastern part of the survey area (Goose Hills), which appears superficially similar in character to Kenton Hills, honeysuckle was found to be more occasional and as such opportunities for establishing search areas were far more limited.

A total of 20 search areas were selected during the preliminary survey and each was photographed. Each search area comprised a 50m x 50m square area of woodland found to hold a sufficient quantity of larval food plant (accessible to the surveyor) to enable a 30-minute search to be carried out within each search area. These were numbered 1 – 20 and centred on the 8-figure grid references detailed in Table 2.3.

Table 2.3 White Admiral Search Areas

Search Area	Grid Reference	Search Area	Grid Reference	Search Area	Grid Reference	Search Area	Grid Reference
1	TM4668 6467	6	TM4637 6456	11	TM4624 6403	16	TM4585 6401
2	TM4675 6477	7	TM4654 6442	12	TM4608 6407	17	TM4579 6422
3	TM4682 6488	8	TM4657 6431	13	TM4598 6431	18	TM4572 6390
4	TM4662 6473	9	TM4645 6420	14	TM4595 6408	19	TM4566 6390
5	TM4645 6458	10	TM4633 6414	15	TM4591 6404	20	TM4563 6382

The locations of the search areas are shown on Figure 2.5.

Larval Survey

This survey was carried out on 11 and 12 August 2009 and comprised a 30-minute search of honeysuckle up to a height of 3m from ground level at each of the 20 search areas listed above. The site and number of white admiral larvae, or unassociated occasions of characteristic feeding damage (i.e. damage likely to have been caused by separate larvae), was recorded. Due to the habit of adult butterflies laying ova singly and the localised feeding pattern of individual pre-hibernation larvae (Heath and Emmet, 1990), where two or three leaves in close proximity showed feeding damage it was only recorded as a single instance of damage.

2.3 Personnel

For the 2007-2009 invertebrate surveys, Andy Godfrey undertook all the management and organisation of the work, the field sampling and reporting as well as the identification of minor insect groups, some Hemiptera, Rhopalocera, some Diptera and aculeate Hymenoptera. Andy was formerly employed as an Entomologist with the Nature Conservancy Council and has specialised in studying invertebrates whilst based in various museums and for ecological consultancies. Since 1999 Andy has worked solely as an entomologist working on conservation and development projects. Andy's particular expertise is with the Diptera which, because they are species-rich (around 7,000 British species), abundant and identifiable make them one of the most suitable group for ecological surveys. Hymenoptera with similar species-richness are much more difficult to identify (except the species-poor aculeates) and all other taxonomic groups (such as the Coleoptera and Lepidoptera) include far fewer species.

Other specialists undertook the sorting and identification of other taxonomic groups during the Invertebrate Survey 2007 are as follows:

- Araneae (spiders): Dr Jan Woodward;

- Auchenorrhyncha (froghoppers, leafhoppers): Dr Jan Woodward;
- Heteroptera (true bugs): Dr Jan Woodward (vacuum and water trap samples).
Andy Godfrey (sweep net and water trap samples: selected species only);
- Coleoptera (beetles): Mike Denton.

In addition, Harry Beaumont undertook the identification of a few micromoths and Dr Adrian Legg (Bournemouth Museum) identified the pseudoscorpions from the vacuum samples.

During the Invertebrate Surveys 2009:

- The National Mollusc Recorder Adrian Norris checked the *Valvata* (valve snails) specimens collected from Sizewell on the survey, commented on the mollusc list and updated the species names.
- Mike Denton (Yorkshire Aleocharinae Recorder) identified the aquatic weevils, Staphylinidae and other terrestrial Coleoptera caught in the pond net samples.

The white admiral 2007 and 2009 surveys were carried out by suitably qualified and experienced entomologists Tim Sykes and Sean Clay respectively.

3. Results

3.1 Desk Study

The invertebrate surveys undertaken by Bioscan included several taxonomic groups but appeared to concentrate particularly on spiders and moths. Some of the arguments for excluding taxa from the survey (for example, most Diptera are very poorly known, p.11) and the reasons for not using some methods (such as pitfall traps because of the potential for human disturbance on the relatively undisturbed Sizewell Belts) are questionable. Some taxa (notably the aculeate Hymenoptera which would be expected to be important on Sandlings habitats) are not mentioned. Seven Red Data Book and 31 Notable (= Nationally Scarce) species were recorded in the year-long survey conducted by Bioscan and details of these have been summarised in Table 3.1. Some of the Red Data Book and Notable species listed by Bioscan as such have since been downgraded. The results appear to incorporate the records of the aquatic invertebrate surveys undertaken on Sizewell Belts by Drake (1989a, 1989b).

Table 3.1 Invertebrates of High Nature Conservation Significance Recorded by Bioscan (1991)

Species	Family	Status
<i>Odontomyia argentata</i>	Stratiomyidae	RDB2
<i>Odontomyia ornata</i>	Stratiomyidae	RDB2
<i>Pediasia fascelinella</i>	Pyralidae	pRDB2
<i>Archanara neurica</i>	Noctuidae	RDB3
<i>Clubiona frisia</i>	Clubionidae	RDB3
<i>Nyctegretis lineana</i>	Pyralidae	pRDB3
<i>Pima boisduvaliella</i>	Pterophoridae	pRDB3
<i>Mythimna flammea</i>	Noctuidae	Notable A
<i>Nascia ciliaris</i>	Pyralidae	Notable A
<i>Agrotis ripae</i>	Noctuidae	Notable B
<i>Earias chlorana</i>	Noctuidae	Notable B
<i>Eulamprotes wilkella</i>	Gelechiidae	Notable B
<i>Euxoa cursoria</i>	Noctuidae	Notable B

Species	Family	Status
<i>Mythimna litoralis</i>	Noctuidae	Notable B
<i>Pediasia contaminella</i>	Pyralidae	Notable B
<i>Schoenobius gigantella</i>	Pyralidae	Notable B
<i>Sideridis albicolon</i>	Noctuidae	Notable B
<i>Simyra albovenosa</i>	Noctuidae	Notable B
<i>Agabus conspersus</i>	Dytiscidae	Notable B
<i>Anacaena bipustulata</i>	Hydrophilidae	Notable B
<i>Coelambus paralellogrammus</i>	Dytiscidae	Notable B
<i>Demetrias imperialis</i>	Carabidae	Notable B
<i>Enochrus melanocephalus</i>	Hydrophilidae	Notable B
<i>Enochrus ochropterus</i>	Hydrophilidae	Notable B
<i>Haliphus apicalis</i>	Haliplidae	Notable B
<i>Helophorus griseus</i>	Helophoridae	Notable B
<i>Ochthebius nanus</i>	Hydraenidae	Notable B
<i>Peltodytes caesius</i>	Haliplidae	Notable B
<i>Rhantus grapii</i>	Dytiscidae	Notable B
<i>Rhantus suturalis</i>	Dytiscidae	Notable B
<i>Brachyton pratense</i>	Aeshnidae	Notable
<i>Aulacigastra leucopeza</i>	Aulacigastridae	Notable
<i>Beris clavipes</i>	Stratiomyidae	Notable
<i>Neoascia geniculata</i>	Stratiomyidae	Notable
<i>Odontomyia tigrina</i>	Stratiomyidae	Notable
<i>Oxycera morrisii</i>	Stratiomyidae	Notable
<i>Stratiomys potamida</i>	Stratiomyidae	Notable
<i>Stratiomys singularior</i>	Stratiomyidae	Notable

The Sizewell Land Management Annual Reviews for 1996-2007 contain records of invertebrates recorded on the Sizewell Estate. Moth trapping has been undertaken in most years and the reports contain lists of the species recorded annually. Most of the additional invertebrates mentioned belong to popular groups such as the Rhopalocera (butterflies), Odonata or Orthoptera or mention distinctive species such as the ant-lion. One species protected under the Wildlife and Countryside Act 1981 has been recorded in most years since 1999 (the Norfolk hawker dragonfly [*Aeshna isosceles*]), whilst one Red Data Book, eighteen Nationally Scarce species and one Suffolk BAP species (the ant-lion) are also mentioned in the annual reports. Two insects which are new arrivals and may be of conservation importance are also mentioned. Table 3.2 lists these species.

Table 3.2 Invertebrates of High Nature Conservation Significance Recorded in the Sizewell Land Management Annual Reviews between 1996 and 2007

Species	Family	Status
<i>Argiope bruennichi</i>	Araneidae	Nationally Scarce
<i>Euroleon nostras</i>	Mymeleontidae	Suffolk BAP species
<i>Ectobius panzeri</i>	Blattellidae	Nationally Scarce
<i>Metrioptera roeselii</i>	Tettigoniidae	Nationally Scarce
<i>Aeshna isosceles</i>	Aeshnidae	Protected WCA (1981)
<i>Brachytron pratense</i>	Aeshnidae	Nationally Scarce
<i>Erythromma viridulum</i>	Coenagrionidae	New to Britain in 1999
<i>Apion affine</i>	Apionidae	Nationally Scarce
<i>Ancylis upupana</i>	Tortricidae	Nationally Scarce
<i>Calamotropha paludella</i>	Pyralidae	Nationally Scarce
<i>Chortodes elymi</i>	Noctuidae	Nationally Scarce
<i>Crambus pratella</i>	Pyralidae	Nationally Scarce
<i>Dioryctria sylvestrella</i>	Pyralidae	New to Britain in 2000
<i>Earias chlorana</i>	Noctuidae	Nationally Scarce
<i>Mythimna flammea</i>	Noctuidae	Nationally Scarce
<i>Nascia ciliaris</i>	Pyralidae	Nationally Scarce
<i>Pediasia contaminella</i>	Pyralidae	Nationally Scarce
<i>Pima boisduvaliella</i>	Pterophoridae	pRDB3

Species	Family	Status
<i>Scopula emutaria</i>	Geometridae	Nationally Scarce
<i>Sideridis albicolon</i>	Noctuidae	Nationally Scarce
<i>Xestia rhomboidea</i>	Noctuidae	Nationally Scarce
<i>Medetera jugalis</i>	Dolichopodidae	Nationally Scarce
<i>Vanoyia tenuicornis</i>	Stratiomyidae	Nationally Scarce

The Nature Conservancy Council funded aquatic invertebrate surveys of coastal grazing marshes in Suffolk in the late 1980s and this included two surveys on the Sizewell Belts (Drake 1989a,b). One Red Data Book and seven Nationally Scarce species were recorded during these surveys and details of these have been summarised in Table 3.3.

Table 3.3 Red Data Book and Nationally Scarce invertebrates recorded from the Nature Conservancy Council funded surveys of Sizewell Belts

Species	Family	Status
<i>Odontomyia argentata</i>	Stratiomyidae	RDB2
<i>Enochrus melanocephalus</i>	Hydrophilidae	Nationally Scarce
<i>Halipilus heydeni</i>	Haliplidae	Nationally Scarce
<i>Ochthebius nanus</i>	Hydrophilidae	Nationally Scarce
<i>Rhantus grapii</i>	Dytiscidae	Nationally Scarce
<i>Dixella attica</i>	Dixidae	Nationally Scarce
<i>Odontomyia tigrina</i>	Stratiomyidae	Nationally Scarce
<i>Stratiomys potamida</i>	Stratiomyidae	Nationally Scarce

The ant-lion was rediscovered in Britain in 1994 (Mendel, 1996; Plant, 1999) from the Minsmere area of Suffolk. The rediscovery is remarkable because this insect is large and distinctive and is clearly breeding in the Suffolk Sandlings. The rediscovery prompted English Nature and the RSPB to fund surveys for this species (Plant 1998, 1999) which were mainly centred on Minsmere. In 2003, however, ant-lions were found at Walk Barn on the edge of Dunwich Forest-Goose Hill, Sizewell and they have been monitored since by Suffolk Wildlife Trust (SWT/ADAS, 2003-2004). The number of larval pits has fluctuated from over 900 in

2004 to 199 in 2006. The ant-lion is a Suffolk BAP species and Plant (1999) has suggested Red Data Book 2 (Vulnerable) status for this species.

Some of the species of high nature conservation value recorded at Sizewell have also been recorded at Minsmere including ant-lion, Norfolk hawker, small red-eyed damselfly (*Erythromma viridulum*), white admiral butterfly (*Limenitis camilla*) and the plume-moth *Pima boisduvaliella*. Out of a total of 754 moths recorded for the reserve in 2006, ten were Red Data Book and 44 Nationally Scarce species.

No specific surveys of the protected Norfolk hawker appear to have been undertaken at Sizewell or at Minsmere where it is thought to breed. Surprisingly, very few specific studies of this species appear to have been undertaken anywhere throughout its very limited range (Leyshon and Moore, 1993; Southwood *et al.*, 2005) but the former reference covers marshes on the River Waveney near Lowestoft and may be of some relevance. Norfolk hawker has, however, been recorded at Sizewell and has been present in most recent years according to the Sizewell Land Management Annual Reviews. This species is thought to breed at Minsmere (based on the RSPB invertebrate records) and may well be breeding in the Sizewell Marshes.

One Suffolk BAP species the ant-lion (or Suffolk ant-lion) (*Euroleon nostras*) has a significant population on the estate. Red Data Book 2 status has been suggested for this recently re-discovered species. A second Suffolk BAP species, the silver-studded blue (*Plebejus argus*) may occur at Sizewell, but confirmed records have not been seen by the author, and this seems dubious.

Ten Red Data Book species appear to have been previously recorded on the Sizewell Estate, including three macro-moths (the white-mantled wainscot *Archanara neurica*, marbled clover *Heliolithis viriplaca* and shaded fan-foot *Herminia tarsicrinilis*), three pyralid moths *Melissoblastes zelleri*, *Nyctegris lineana* and *Pediasia fascelinina* and one plume moth *Pima boisduvaliella*, two soldierflies (*Odontomyia argentata* and *O. ornata*) and a spider (*Clubiona frisia*). The white-mantled wainscot is associated with reedbeds and reed-fringed ditches near the coast and the larva feeds on *Phragmites*. It is currently confined in Britain to a 15km stretch of coastal Suffolk from Thorpeness to Southwold, including Sizewell and Minsmere. The marbled clover (*Heliolithis viriplaca*) occurs mainly in open Breckland, flowery chalk downland, sand or shingle beaches etc and the larvae feed on a wide variety of unrelated low plants whilst the shaded fan-foot (*Herminia tarsicrinilis*) occurs in bramble (*Rubus fruticosus* agg.) thickets and dense bramble ground cover amongst oaks and birches in ancient woodland and in more shrubby areas and the larvae probably feed in leaf litter below bramble.

Of the pyralid moths, *Melissoblastes zelleri* occurs in sandhills and the larvae feed on the moss *Brachythecium albicans*; *Nyctegris lineana* is very local on flat sandy ground behind coastal sandhills and on sandy shingle in south-east England and the larva may feed on clover (*Trifolium* spp.) and other plants; whilst *Pediasia fascelinella* is extremely local on the sandhills on the coasts of Lincolnshire, Norfolk, Suffolk, Essex and south Devon (and the larva feed on dune grasses). The plume moth *Pima boisduvaliella* is a very local species found on coastal sandhills from Kent to Norfolk and in Lancashire where the larva feed on kidney vetch (*Anthyllis vulneraria*), bird's-foot trefoil (*Lotus corniculatus*), restharrow (*Ononis spinosa*) and other low plants. The two soldierflies (*Odontomyia argentata* and *O. ornata*) are rare species typically associated with coastal grazing marshes. The spider *Clubiona frisia* occurs in marram tussocks on sand dunes and appears to be restricted in Britain to Norfolk and Suffolk (there are older records for other counties). The bee-wolf (*Philanthus triangulum*) still has Red Data

Book status but this is no longer appropriate since this species has dramatically increased in frequency and spread in range.

A total of forty-five Nationally Scarce (= Notable) species have been previously recorded from the Sizewell Estate (Tables 3.1-3.3). Seventeen of these are moths, fourteen are beetles (all but one of which are aquatic) and ten are true-flies with single Nationally Scarce spider, dragonfly, bush-cricket and native cockroach species. These figures simply reflect the greater effort on moth recording followed by water-beetles and then aquatic soldierflies in Sizewell Belts.

The desk study records clearly emphasise the importance of the coastal habitats, especially the sand-dunes and coastal shingle and the Sizewell Marshes. Only one rare species is actually clearly associated with the important Suffolk Sandlings heath (excluding the duneland species) and this is the ant-lion. Some important species and assemblages from groups such as the terrestrial beetles and the bees, wasps and ants are likely to be present on the areas of heath and in associated woodland, but very few records were available for these (with the possible exception of the weevil *Apion affine* which has been recorded on Leiston Common) to inform this report. The silver-studded blue butterfly (*Plebejus argus*) which has partial protection under the Wildlife and Countryside Act (1981) and is a Suffolk BAP species, is a characteristic heathland species and is found at Minsmere, but there are no confirmed records for Sizewell. It is highly likely that the local county recorders for groups such as beetles and aculeate Hymenoptera will have records for Sizewell, but they have not been contacted to date.

Other invertebrate records for Sizewell obtained by AMEC include ant-lion on the section of coast between Sizewell Hall and Thorpeness Cliffs and another labelled Sizewell with an incorrect grid reference (TM478619⁵). Other significant records include: the centipede *Lithobius lapidicola*; the micromoths *Melissoblastes zelleri* (pRDB3) and *Ancylis upupana*; four macro-moths (the square-spotted clay (*Xestia rhomboidea*), lunar yellow underwing (*Noctua orbona*), marbled clover (*Heliolithis viriplaca*) and shaded fan-foot (*Herminia tarsicrinalis*); two soldier-flies (*Odontomyia argentata* and *O.ornata*); and the bee-wolf (*Philanthus triangulum*). The latter (a powerfully-built solitary wasp which predates other wasps and bees) has spread dramatically in Britain in the last twenty years or so and can no longer be considered of Red Data Book status.

The silver-studded blue (*Plebejus argus*) was mentioned to the surveyor by a local person as occurring on Sizewell Beach by Sizewell A but this species is not mentioned in the Sizewell Land Management Annual Reviews or other published sources consulted, and this record is therefore doubtful. Silver-studded blue is a Suffolk BAP species, and monitoring for this species occurs at Minsmere. Two other rare butterflies have been recorded at Minsmere, swallowtail (*Papilio machaon britannicus*) and the Queen of Spain fritillary (*Issoria lathoni*) but these are very unlikely to occur at Sizewell. The (local) white-letter hairstreak (*Satyrrium w-album*), however, occurs on the Sizewell Estate (Carl Powell, Suffolk Wildlife Trust, pers comm.).

Table 3.4 summarises some of the results from previous aquatic invertebrate surveys at Sizewell undertaken by Drake.

⁵ This grid reference puts this record in the sea off Sizewell Hall!

Table 3.4 Summary of Results from Various Aquatic Invertebrate Surveys Conducted on Sizewell Belts

	No. species	No. sample sites	No. RDB spp	No. NS spp
Drake (1989a)	121	5	0	4
Drake (1989b)	147	13	1	9
Drake (in prep.)	159	9	5	15

RDB = Red Data Book, NS = Nationally Scarce

The records of rare and uncommon species from the five samples taken by Drake on behalf of the NCC in 1988 show only four Nationally Scarce (= Notable) species being recorded. This was the view taken by the surveyor who assessed Sizewell as being species-rich in aquatic invertebrates but poor in rare species (Drake, 1989a).

The NCC survey in 1989 involved more sample sites (13) and resulted in 147 species altogether including one Red Data Book and nine Nationally Scarce species. The RDB species recorded was the soldierfly *Odontomyia argentata* which has aquatic larvae and is confined to a few major wetland areas. The number of rare species was found to be similar to numbers found within ditches at Minsmere which was highly rated in terms of rare and uncommon or species rich assemblages of aquatic invertebrates by the surveyor (i.e. Drake). The best ditches were unshaded and predominantly well-vegetated. Species-poor ditches were generally the more heavily shaded sites including woodland ditches (Drake, 1989b).

The species recorded by Drake on behalf of Buglife in April 2009 are provided in Annex 2 Appendix B. Here nine samples yielded 159 aquatic invertebrate species in total from nine sites including potentially five Red Data Book and fifteen Nationally Scarce species. The location of these sample sites is shown in Figure 3.1. The RDB species recorded from this survey were the RDB2 valve snail *Valvata macrostoma* (provisional identification), the RDB2 ram's-horn snail *Anisus vorticulus* (provisional identification), the RDB3 diving beetle *Graphocerus cinereus*, the pRDB3 diving beetle *Hydaticus transversalis* and the soldierfly *Odontomyia ornata*. The two RDB2 snails recorded in April 2009 had been submitted to a national expert for confirmation because of the difficulty in identifying these species.

During the initial desk study the presence of the white admiral within the area was determined from the Millennium Atlas of Suffolk Butterflies. White admiral has a localised distribution in Suffolk, despite the fact that the larval food plant, honeysuckle, is widespread⁶. Kenton Hills has been described as one of the best sites in Suffolk (with public access) for seeing this species (Stewart, 2001).

Rob Parker, the Suffolk Butterfly Recorder, supplied extracts from the annual reports for the county, compiled by the Butterfly Conservation Trust as well as a number of distribution maps (see Annex 4 Appendix A) of tetrads within which white admirals have been recorded. Up to 2006, white admirals had been recorded in 91 of 1,088 tetrads in Suffolk. In 2005, they were recorded in 32 tetrads, including 6 new sites, and a partial second brood was noted. In 2006 the

⁶ This is likely to be a result of the fact that honeysuckle is widespread in hedgerows and gardens while white admiral tends to breed on honeysuckle in woodland habitats.

species had a good year being recorded in 39 tetrads, with recorders at 4 sites noting a partial second brood. In 2007, the species was recorded within 23 tetrads, 2 of which comprised additions to the cumulative tetrad total⁷.

Robin Harvey (RSPB) supplied the results of transect surveys carried out at Minsmere in 2007. These surveys are not specifically aimed at white admirals, but do survey suitable habitat for this species. A total of 3 individuals were recorded during the formal butterfly surveys at Minsmere, and a further 2 casual observations were made during the year. In 2006, 8 white admirals were recorded on the walked transects with a further 7 casual records. Both the county recorder and the RSPB at Minsmere considered 2007 to be a poor year for white admirals due to long periods of wet weather (particularly in June).

At a local level, white admiral seems to be consistently recorded in the vicinity even in years in which the species is recorded in few tetrads. This can be seen from the distribution maps in Annex 4 Appendix A. In 2007, of the 23 tetrads in which white admiral was recorded, 10 were clustered to the north of the EDF Estate at Sizewell.

At a national level, white admiral is thought to have suffered a slight decline over the past 20 years (UK Butterfly Monitoring Scheme, <http://www.ukbms.org>). Of the 116 sites where white admiral is known to occur / have occurred and for which more than 5 years of data are available, the species is thought to be: extinct at 10; a recent coloniser at 8; stable at 68; declining at 17; and increasing at 13.

3.2 Field Surveys

3.2.1 2007 Invertebrate Survey

Summaries of the notable invertebrate species recorded are provided in Tables 3.5-3.7.

Table 3.5 Invertebrate Species of High Nature Conservation Value Recorded from the Sample Sites within the proposed Preliminary Works Area 2007

Species	A	B	C	D	C/D
<i>Sympetrum flaveolum</i>	+				
<i>Rhantus suturalis</i>			+		
<i>Crypticus quisquilius</i>	+	+	+	+	
<i>Polydrusus formosus</i>				+	
<i>Glocianus punctiger</i>		+			
<i>Dolichopus acuticornis</i>					+

⁷ It should be noted that these records do not mean that this species is actually breeding on all these sites.

Species	A	B	C	D	C/D
<i>Lispe uliginosa</i>					+
<i>Pseudisobrachium subcyaneum</i>		+			
<i>Dolichovespula media</i>					+
<i>Nysson dimidiatus</i>		+			
Total	2	4	2	2	3

No rare or uncommon species were recorded from Sample Site I.

Table 3.6 Invertebrate Species of High Nature Conservation Value Recorded from the Dunes and Shingle on Sizewell Beach in 2007

Species	La	Lb	Lc	Ld	Le	Lf	Lg	Lh	Li	Lj
<i>Ectobius panzeri</i>					+	+	+		+	+
<i>Drymus latus</i>					+					
<i>Aphanisticus pusillus</i>										+
<i>Clanoptilus marginellus</i>	+									
<i>Melanophthalma curticolis</i>		+								
<i>Mantura chrysanthemii</i>									+	
<i>Apion rubiginosum</i>						+			+	
<i>Stilpon sublunata</i>										+
<i>Platypalpus niveisetus</i>		+		+						
<i>Medetera petrophila</i>			+							
<i>Geomyza subnigra</i>										+
<i>Opomyza punctella</i>		+								
<i>Anagnota bicolor</i>		+								
<i>Elachiptera pubescens</i>										+
<i>Trachysiphonella scutellata</i>			+							

Species	La	Lb	Lc	Ld	Le	Lf	Lg	Lh	Li	Lj
<i>Tricimba brachyptera</i>							+		+	+
<i>Trixoscelis marginella</i>									+	+
Total	1	4	2	1	2	2	2	0	5	7

Table 3.7 Invertebrates of High Nature Conservation Value Found in Kenton Hills and Goose Hill in 2007.

Species	H	G	F	E	Other area
<i>Euroleon nostras</i>					Walk Barn
<i>Aeshna isosceles</i>			+		
<i>Aphanus rolandri</i>		+			
<i>Rhantus suturalis</i>		+			
<i>Catopidius depressus</i>			+		
<i>Scymnus limbatus</i>	+				
<i>Molophilus bihamatus</i>		+			
<i>Hybomitra ciureai</i>			+		
<i>Sciapus contristans</i>				+	
<i>Neoscia geniculata</i>		+			
<i>Lasiambia palposa</i>			+		
<i>Trachysiphonella scutellata</i>			+		
<i>Chyromya britannica</i>			+		
<i>Meonura neglecta</i>				+	
Total	1	4	6	2	1

Sample Sites are arranged how they are encountered from west to east along the track from the car-park at Kenton Hills

Araneae (Spiders)

The spiders identified from the vacuum samples from Sizewell coastal (or shore) habitats (Sample Sites La-Lj) are listed in Annex 1 Appendix A. No Red Data Book or Nationally Scarce species were recorded. The absence of the RDB3 *Clubiona frisia* which has already recorded on the Sizewell dunes may be due to the speed with which this species can elude capture and the fact that it is not easily sampled with a portable vacuum. In total, only twelve spider species were recorded from the fifteen samples which would appear to represent low species richness. It is possible that larger spider species were missed by the vacuum and that there was bias on the part of the surveyor in taking spiders because when collected in pooters they will predate insects in the same sample and are therefore often best sampled separately.

Spiders were not identified from the pitfall trap material because the flooding and heavy rain in June and July meant that soft-bodied invertebrates would have decomposed first and the contents suggested this.

Smaller Insect Orders

Selected taxa from the smaller invertebrate groups identified from the coastal habitats (La-j) by vacuum sampling are listed in Annex 1, Appendix E. These include the Mollusca (snails), Isopoda (woodlice), Opiliones (harvestmen), Blattoidea (cockroaches) and Orthoptera (grasshoppers and crickets). Thirteen taxa were identified and these included the Nationally Scarce lesser cockroach (*Ectobius panzeri*) as well as the local lesser marsh grasshopper (*Chorthippus albomarginatus*) which has expanded its range considerably in the last two decades or so.

The Odonata were recorded by direct observation and from individuals caught in the water traps. The latter are listed in Appendices 6 and 7 and include the yellow-veined darter (*Sympetrum flaveolum*), which until recently was a vagrant species in Britain but which has now started breeding and spreading here. The local lesser marsh grasshopper mentioned above was also recorded in some of the water traps in August (Annex 1, Appendix G).

Some incidental records of species belonging to the smaller invertebrate groups are also listed in Annex 1, Appendix I. These include the ant-lion (*Euroleon nostras*) and the Norfolk hawkler (*Aeshna isosceles*). The latter was frequent at times near Sample Site F where the rides intersect in Goose Hill.

Further details of the Red Data Book and Nationally Scarce species recorded are provided in Annex 1, Appendix J.

Hemiptera (Auchenorrhyncha and Heteroptera)

The Auchenorrhyncha (leafhoppers) and Heteroptera (true-bugs) identified from the vacuum from the Sizewell coastal habitats (Sample Sites La-j) are listed in Annex 1, Appendix A. No Red Data Book or Nationally Scarce leafhoppers were recorded and only one Nationally Scarce bug (*Drymus latus*). The bug has unclear habitat requirements but has been found in grassland, in derelict arable land on chalk, in dense moss on chalk, at the base of cliff, on waste ground and in woods (Kirby 1992). In total, twenty-four Auchenorrhyncha and twenty-two Heteroptera were recorded from the fifteen vacuum samples. The results for these groups suggest that the habitats are relatively species-rich but appear to support few rare or uncommon species. Further details of the Red Data Book and Nationally Scarce species recorded are provided in Annex 1, Appendix J.

Coleoptera (Beetles)

The beetles identified from the pitfall traps are listed in Annex 1, Appendix B. One hundred and fifty-six species were recorded from these including five Nationally Scarce species. The number of Nationally Scarce species would appear to be low and may reflect the relative unimportance of the preliminary works area and the conifer plantations along the proposed access route and construction area for Coleoptera. Prior to the survey, rare or uncommon species, might have been expected on the Suffolk Sandlings heathland and woodland habitats. It is possible that the poor weather and/or absence of survey earlier in the season may also have contributed to the poorer than expected results.

The beetles identified from the vacuum samples from the coastal habitats at Sizewell (Sample Sites La-Lj) are listed in Annex 1, Appendix C. Two Red Data Book and three Nationally Scarce species were recorded. The two Red Data Book species are the lathridiid *Melanophthalma curticollis* and the weevil *Apion rubiginosum*. The former appears to have been found at the roots of plants and under vegetable debris on light soils, both inland and on coastal sand dunes whilst the latter occurs on disturbed ground, grassland and coastal shingle where it feeds on sheep's sorrel (*Rumex acetosella*) (Hyman and Parsons (1994a, 1994b).

The beetles identified from the water trap samples collected from Sizewell in July 2007 are listed in Annex 1, Appendix D. The water traps were mainly used to sample Diptera, aculeate Hymenoptera and other flying insects and consequently the Coleoptera were not a target group for this method. However, 67 species were recorded in one month which provided a better than expected result. Three Nationally Scarce species were recorded.

Several common to local and one Nationally Scarce beetle (*Silus ruficollis*) were recorded in the Malaise trap in the *Phragmites* fen (Sample Site J).

Further details of the Red Data Book and Nationally Scarce species recorded are provided in Annex 1, Appendix J.

Lepidoptera (Moths and Butterflies)

Butterflies and moths were recorded in the field or from the water traps and Malaise traps and they are listed in the appropriate appendices (Appendices 5-8). The grayling (*Hipparchia semele*) which is a localised butterfly in Britain was reasonably frequent.

Lepidoptera identified from the Malaise trap in the *Phragmites* fen to the east of the preliminary works area are listed in Annex 1, Appendix H. The Red Data Book 3 white-mantled wainscot (*Archanara neurica*) was recorded in one sample (Annex 1, Appendix H).

Diptera (True-flies)

Selected Diptera identified from the coastal habitats (La-j) by vacuum sampling are listed in Annex 1, Appendix E. A total of 90 Diptera taxa have been identified and these include two Red Data Book and eight Nationally Scarce species. The Red Data Book species are two grass-feeding species, *Opomyza punctella* and *Tricimba brachyptera*. The former has been recorded in grassland mostly in northern England and Scotland and the larvae probably develop in grasses. The latter also probably develops in grasses and is mainly known from the sandy breck grassland in Suffolk although it has been found more recently on ericaceous heathlands in Nottinghamshire by the surveyor. The Diptera results would seem to suggest that the dunes and coastal shingle are more important for this group than for Araneae, Hemiptera or Coleoptera.

Selected Diptera identified from the water traps emptied in July 2007 are listed in Annex 1, Appendix F. One hundred and twenty-two species have been identified and these include two Red Data Book species (the horsefly *Hybomitra ciureai* and the minute and obscure *Meonura neglecta*), five Nationally Scarce species and another species only described as new to science in 2007 (*Chyromya britannica*). The horsefly *Hybomitra ciureai* is a rare south-eastern species found on and near the coast, mostly in marshes, although its precise habitat is far from known. *Meonura neglecta* is only known from six British localities (according to Falk and Ismay in prep.) but three of these are in Suffolk. The adult habitat is unknown but is probably heathland or associated broadleaved woodland.

Selected Diptera identified from the water traps emptied in August 2007 are listed in Annex 1, Appendix G. A total of 335 records are given in Annex 1, Appendix G including two Nationally Scarce species (*Dolichopus acuticornis* and *Lispe uliginosa*).

Selected Diptera identified from the Malaise trap in the *Phragmites* fen to the east of the preliminary works area are listed in Annex 1, Appendix H. Two large samples have been worked through and these have produced some outstanding records. These include six Red Data Book species (*Prionocera subserricornis*, *Odontomyia ornata*, *Rhagio strigosus*, *Hybomitra ciureai*, *Antichaeta brevipennis* and *Stenomicroa delicatula*), thirteen Nationally Scarce species and one species (*Chyromya britannica*) only described as new to science in 2007. An additional rare species (added to the British list in 2006 and only known from one other locality) needs to be confirmed.

Details of the ecology, status and distribution of these species are provided in Annex 1, Appendix J.

Aculeate Hymenoptera (Bees, wasps and ants)

Few aculeate Hymenoptera were taken from the coastal habitats (La-j) by vacuum sampling. The seven species recorded are listed in Annex 1, Appendix E. No Red Data Book or Nationally Scarce species were recorded.

The aculeate Hymenoptera identified from the water traps emptied in July 2007 are listed in Annex 1, Appendix F. A total of 43 species have been identified including only one Nationally Scarce species. The paucity of rare and uncommon species is perhaps surprising for a sandy area with a good mosaic of habitats ranging from heathland, dry and wet woodlands, plantations and marsh.

Selected Diptera identified from the water traps emptied in August 2007 are listed in Annex 1, Appendix G. The very rare bethylid *Pseudisobrachium subcyaneum* was recorded along with the Nationally Scarce *Dolichovespula media*. The Bethyridae have not been given Red Data Book, Nationally Scarce or other statuses unlike most other aculeate Hymenoptera. *Pseudisobrachium subcyaneum* has only been recorded from four UK sites and it is associated with certain ant species (Perkins 1976).

Hymenoptera identified from the Malaise trap in the *Phragmites* fen to the east of the preliminary works area are listed in Annex 1, Appendix H. One parasitic wasp (*Trigonalis hahni*) was recorded in one of the samples which is regarded as very rare (Gauld and Bolton 1996). These are parasitoids of Hymenoptera or Diptera larvae.

Further details of the Red Data Book and Nationally Scarce species recorded are provided in Annex 1, Appendix J.

3.2.2 2009 Invertebrate Survey

Table 3.8 summarises the results of the 2009 survey, along with some of the results from previous aquatic invertebrate surveys at Sizewell undertaken by Drake.

Table 3.8 Summary of Results from 2009 Aquatic Invertebrate Survey of Sizewell Belts, With Results of Previous Surveys for Comparison

	No. species	No. sample sites	No. RDB spp	No. NS spp
Drake (1989a)	121	5	0	4
Drake (1989b)	147	13	1	9
Drake (in prep.)	159	9	5	15
AMEC 2009 survey	261	33	7	22

RDB = Red Data Book, NS = Nationally Scarce

The NCC survey in 1989 involved more sample sites (13) and resulted in 147 species altogether including one Red Data Book and nine Nationally Scarce species. The RDB species recorded was the soldierfly *Odontomyia argentata* which has aquatic larvae and is confined to a few major wetland areas. The number of rare species was found to be similar to numbers found within ditches at Minsmere which was highly rated in terms of rare and uncommon or species rich assemblages of aquatic invertebrates by the surveyor (i.e. Dr Drake). The best ditches were unshaded and predominantly well-vegetated. Species-poor ditches were generally the more heavily shaded sites including woodland ditches (Drake 1989b).

3.2.3 2010 Invertebrate Survey

The prevailing weather conditions experienced during the survey work are summarised in Table 3.9.

Table 3.9 Prevailing Weather Conditions

Survey Date	Weather Conditions
2 June 2010	Sunny, warm, no cloud cover. No significant wind.
3 June 2010	Sunny, no cloud cover No significant wind.
4 June 2010	Bright and sunny, no cloud cover, cool breeze
23 June 2010	Hot and sunny, no cloud cover, slight breeze

Details of the taxa recorded are provided in Annex 3, Appendix A. Species of high nature conservation value (species protected under the Wildlife and Countryside Act 1981, UK BAP, Red Data Book and Nationally Scarce species) have been emboldened in Annex 3, Appendix A

and details of the ecology, status and distribution of these species are provided in Annex 3, Appendix B.

A total of 239 terrestrial invertebrate taxa were recorded in June 2010. These include one species protected under the Wildlife and Countryside Act (1981), three UK BAP species, seven Red Data Book (RDB) species and 12 Nationally Scarce species.

The protected, UK BAP, RDB and Nationally Scarce species recorded are summarised in Table 3.10 along with the sample sites from which they were recorded.

Table 3.10 Distribution of the Protected, Red Data Book and Nationally Scarce Invertebrate Species Recorded from Sizewell Belts in June 2010

Protected (Wildlife and Countryside Act 1981)	Where recorded (see Figure 2.3)
<i>Aeshna isosceles</i>	Malaise trap
UK Biodiversity Action Plan	
<i>Aeshna isosceles</i>	Malaise trap
<i>Chiasmia clathrata</i>	E,J
<i>Tyria jacobaeae</i>	H,I
Red Data Book 1	
<i>Aeshna isosceles</i>	Malaise trap
Red Data Book 2	
<i>Antichaeta brevipennis</i>	G
<i>Odontomyia ornata</i>	A,E,J, Malaise trap
<i>Parhelophilus consimilis</i>	G
<i>Psacadina zernyi</i>	D,I
Red Data Book 3	
<i>Hybomitra ciureai</i>	I
<i>Subclytia rotundiventris</i>	Malaise trap
Nationally Scarce	
<i>Anagnota bicolor</i>	J
<i>Brachytron pratense</i>	C,E,F,G,J,L
<i>Crossocerus binotatus</i>	Malaise trap
<i>Demetrius imperialis</i>	I

Protected (Wildlife and Countryside Act 1981)	Where recorded (see Figure 2.3)
<i>Lipara rufitarsis</i>	Malaise trap
<i>Odontomyia tigrina</i>	A,B,D,E,F,G,J
<i>Psacadina verbekei</i>	J
<i>Spanochaeta dorsalis</i>	D,E,J
<i>Tetanocera punctifrons</i>	E
<i>Thereva plebeia</i>	I
<i>Vanoyia tenuicornis</i>	A,E,F,G,I
<i>Zophomyia tenella</i>	A,B,D,E,F,G,J
Rare (according to Ferrière and Kerrich, 1958)	
<i>Chalcis sispes</i>	A

A single specimen of the Norfolk hawkier was recorded in the first erected Malaise trap (location indicated in Figure 2.3) which was emptied on 23 June 2010 (see Annex 3 Appendix C for further records). Further individuals were observed in June 2010 on grazing marsh on Sizewell Belts immediately west of Sizewell B power station and immediately northwest of the (then) proposed site of Sizewell C. The locations of this species known to the surveyor are summarised in Table 3.10.

Two UK BAP moths were recorded from the ditch margins in June 2010. These are the latticed heath (*Chiasmia clathrata*) and cinnabar moth (*Tyria jacobaeae*). Both are active during the day and are common and widespread species. They were given UK BAP status at the suggestion of Butterfly Conservation because there is evidence that they are declining. Neither is particularly associated with grazing marshes or wetlands in general and they are usually found in drier, open habitats.

Four Red Data Book insects were swept from the grazing marshes. *Antichaeta brevipennis* is a snail-killing fly found in lush vegetation beside water-bodies. It has previously been recorded from ditches in unimproved grazing marsh in Suffolk (Falk, 1991). Another snail-killing fly, *Psacadina zernyi*, was recorded and this is associated with fens in particular. Most of the British records of this very rare species are from Norfolk. The soldier-fly *Odontomyia ornata* was frequently recorded as larvae in the aquatic macro-invertebrate survey undertaken on the Sizewell Belts in September 2009 (Entec, 2010). The adult records are useful for confirming the provisional larval determinations. The larvae of this species can be locally common in ditches on grazing levels despite its RDB2 status. The hoverfly *Parhelophilus consimilis* is normally associated with eutrophic bogs but has been found in fens in eastern England. The other two *Parhelophilus* species which are local and associated with wetlands were also recorded from the survey.

Two RDB3 insects were recorded from the survey. The horsefly *Hybomitra ciureai* appears to be associated with brackish coastal marshes or grazing levels. The larvae probably develop in damp soil and in the marginal zones of ponds and ditches. Most of the records of this species are from Essex but it has been recorded from Suffolk, from Walberswick National Nature Reserve. The distinctive tachinid *Subclytia rotundiventris* is normally associated with broadleaved woodland including birch scrub in areas of wet heath and fen, heaths and

calcareous grassland. The larvae are parasitoids of several species of shield bug. One individual was taken in the Malaise trap in the increasingly scrubbed-over reedbeds.

Twelve Nationally Scarce (formerly Notable) invertebrates were recorded during the survey. The hairy dragonfly (*Brachytron pratense*) was frequent in the ditches on the grazing marshes in June and shared the habitat with the Norfolk hawk. The hairy dragonfly is a well known inhabitant of coastal levels and grazing marshes. The ground beetle *Demetrius imperialis* has been recorded from *Phragmites* and *Typha* beds as well as a variety of other wetland habitats. It appears to have increased its range in recent years. The soldier fly *Odontomyia tigrina* is found in wetlands in southern England including ditches on coastal levels. Another soldier fly, *Vanoyia tenuicornis*, was found in five samples on the grazing marsh and larvae of this species were frequently encountered in the ditches during the September 2009 ditch survey. The stiletto-fly *Thereva plebeia* is usually associated with dry habitats and may have been blown onto the grazing marsh from the nearby sandhills or Sandlings habitat. Two Nationally Scarce snail-killing flies were recorded from the grazing marsh ditches, namely *Psacadina verbekei* and *Tetanocera punctifrons*. Both are found in wetlands and have larvae that either predate or parasitise aquatic molluscs. *Lipara rufitarsis* produces distinctive galls on *Phragmites* and is consequently particularly associated with *Phragmites* beds. Based on the surveyor's experience, the minute *Anagnota bicolor* is usually found in grass and sedge tussocks in wetlands, although another source suggests it is associated with reedbeds. The muscid *Spanochaeta dorsalis* is found in marshes and marshy woods and it has been found on *Phragmites* by the surveyor previously. *Zophomyia tenella* is a tachinid that has been recorded from a variety of habitats including woodland, calcareous grassland and coastal dunes. The larval stages are unknown. The solitary wasp *Crossocerus binotatus* has been found sparingly throughout England where it is associated with deadwood and timber in a variety of situations including woodland margins, open woodland, farmland, parkland and wetland margins.

3.2.4 2007 White Admiral Survey

The transect surveys on site conducted as part of this survey confirmed the continued presence of white admiral on site in 2007. Table 3.11 summarises the number of sightings for each transect and the grid reference of each sighting and Figure 3.2 plots the location of the sightings from the walked transects as well as the incidental records and numbers of individuals recorded at each location.

Table 3.11 White Admiral Transect Results 2007

Date	Number of sightings	OS Grid references
07/07/07	3	TM 4593 6406, TM 4590 6402, TM 4590 6402
08/07/07	6	TM 46082 64085, TM 46308 64113, TM 46435 64215, TM 46376 64542, TM 46733 64841, TM 46344 64150,
10/07/07	2	-TM 46011 64230, TM 46980 64475
04/08/07	0	-
05/08/07	0	-
10/08/07	0	-

Incidental observations were also made during other protected species surveys and outside of the formal transect walks. These are summarised in Table 3.12, together with the grid reference for each sighting.

Table 3.12 White Admiral Incidental Records from the Sizewell Estate in 2007

Date	Number of sightings	Grid references
08/07/07	1	TM 46011 64230
08/07/07	1	TM 46980 64475
04/08/07	1	TM 4632 6452

Habitat Associations

The transect route and the white admiral records were situated within and around the margins of the habitat defined as Dry Woodland 31 community by the National Vegetation Classification survey undertaken in 2007 (reported in full in Entec doc reference number 19801cr145). The woodland canopy is dominated by Corsican pine (*Pinus nigra* ssp. *laricio*) and the field layer is dominated by bracken (*Pteridium aquilinum*) and bramble (*Rubus fruticosus* agg.), with Yorkshire fog (*Holcus lanatus*). The ground layer includes climbing corydalis (*Ceratocarpus claviculata*) with mosses often forming a dense carpet. Collectively, these species are indicative of dry, mildly acid soil conditions.

There are two variants within this community. The first, community 31a, is found throughout Kenton Hills and is characterised by a sparse sub-canopy layer consisting almost entirely of scattered silver birch (*Betula pendula*) saplings and a field layer that includes a suite of acidophile herbs and mosses. This woodland is characterised by much more open woodland, with wider rides, more ground flora and under storey and wide areas of recently felled vegetation, which results in more flowering species available for the adult white admirals. Honeysuckle was not recorded during the NVC vegetation survey of this woodland, but it is present. The second sub community, 31b which is found throughout Goose Hills, is a honeysuckle (*Lonicera periclymenum*) and male fern (*Dryopteris filix-mas*) community. Corsican pine dominates the canopy, though pedunculate oak (*Quercus robur*) and silver birch are occasionally found above shrubs including elder (*Sambucus nigra*) and hazel (*Corylus avellana*), and saplings of silver birch and sycamore (*Acer pseudoplatanus*). Honeysuckle, male fern and the moss *Brachythecium rutabulum* are common. The canopy cover is more diverse but is also denser with fewer gaps.

Associated with these woodland stands are many rides of varying width. In total, six differing communities of rides were identified during the NVC survey, with some areas being characterised by bracken and many others having moss, grass and sedge communities.

The majority of white admiral sightings were from the first variant of the dry woodland, located in the southern section of the Kenton Hills. Only two sightings were from Goose Hills, with one of these being an incidental record.

3.2.5 2009 White Admiral Larval Survey

A summary of the results of the 2009 survey work is presented in Table 3.13.

Table 3.13 Summary of 2009 White Admiral Larval Survey Results

Search Area	Larvae Recorded	Incidences of Larval Damage	Description of Vegetation
1	0	0	Food plant occurring within 10 metres of ride-edge in pine plantation up to a height of approximately 8 metres, with bracken (<i>Pteridium aquilinum</i>) predominant in the ground flora.
2	0	0	Food plant occurring on an isolated patch of mid-plantation Pinus to a height of approximately 5 metres, in a shaded area well away from any clearings or rides. Little food plant present elsewhere in the vicinity. Bracken predominant in ground flora.
3	0	0	Food plant occurring within 5 metres of ride-edge, principally growing in hawthorn (<i>Crataegus monogyna</i>) and the lower branches of sweet chestnut (<i>Castanea sativa</i>) to a height of approximately 4 metres. Little food plant present in the pine plantation in this area.
4	1	1	Food plant occurring as a single clump growing up one Pinus tree (to right of photograph), but in greater amounts trailing up adjacent small silver birch (<i>Betula pendula</i>) trees to a height of approximately 5 metres. Situated at junction of rides and within 5 metres of ride-edge. Bracken predominant in ground flora.
5	0	1	Food plant largely occurring on pine trunks, but with some present in the silver birch, sycamore (<i>Acer pseudoplatanus</i>) and Rhododendron (<i>Rhododendron ponticum</i>) understorey. Site adjacent to ride junction and within 12 metres of ride-edge, with mainly bracken ground cover.
6	0	0	Food plant occurring in a shaded area on pine trunks and within English elm (<i>Ulmus procera</i>) and sycamore understorey. Site adjacent to but laid back from ride junction, with the search area between 5 and 25 metres from the ride-edge.
7	0	3	Food plant occurring in a rather shaded area in damp silver birch and alder (<i>Alnus glutinosa</i>) woodland to a height of approximately 6 metres, but also as low-level ground coverage. Search area outside but adjacent to the main perimeter ride, and within 4 metres of ride-edge
8	1	2	Food plant occurring principally on pine trunks, but also within sycamore understorey, to a height of approximately 7 metres. Search area up to 15 metres from the ride-edge, with bracken the predominant ground cover in this area.
9	0	2	Food plant occurring principally in young silver birch scrub, adjacent to a pine plantation, to a height of approximately 4 metres. Search area along ride-edge and no further than 3 metres from the ride-edge, with bracken the predominant ground cover.
10	1	3	Food plant occurring within ride-edge mixed scrub woodland, principally on rowan (<i>Sorbus aucuparia</i>), hornbeam (<i>Carpinus betulus</i>), wild cherry (<i>Prunus avium</i>) and silver birch. Search area within 5 metres of ride-edge, with bracken the predominant ground cover.
11	0	0	Food plant occurring in a shaded area of mainly damp silver

Search Area	Larvae Recorded	Incidences of Larval Damage	Description of Vegetation
			birch and alder woodland, growing up trunks and in lower branches and scrubby growth, to a height of approximately 5 metres. Search area outside main perimeter ride, between 3 and 8 metres from the ride-edge. Ground flora chiefly composed of Bracken and grasses.
12	2	5	Food plant growing up through bracken ground cover onto lower trunks of <i>Pinus</i> trees to a height of approximately 10 metres. Search area adjacent to junction in rides and no further than 8 metres from the ride-edge.
13	0	1	Food plant (including a variant with variegated leaves) growing up through Bracken ground cover onto lower trunks of pines and sycamore, Silver birch and rhododendron understorey to a height of approximately 7 metres. Search area adjacent to junction in rides and extending from ride-edge to about 35 metres into the plantation.
14	2	4	Food plant growing up through bracken ground cover onto lower trunks of pines and silver birch understorey to a height of approximately 10 metres. Search area laid back from ride, generally between 15 and 50 metres from ride-edge.
15	1	6	Food plant growing up through largely bracken ground cover onto lower trunks of pine trees and silver birch understorey to a height of approximately 10 metres. Search area within 20 metres of ride-edge.
16	1	3	Food plant growing up through bracken ground cover onto lower trunks of pine trees to a height of approximately 10 metres. Search area within 12 metres of ride-edge.
17	0	0	Food plant growing up through bracken and foxglove (<i>Digitalis purpurea</i>) ground cover onto lower trunks of pine trees to a height of approximately 8 metres. Search area mainly between 10 and 25 metres of ride-edge, though small amounts of food plant searched up to the ride-edge.
18	0	0	Food plant occurring in a shaded area, largely growing through the lower branches of hawthorn, oak (<i>Quercus robur</i>) and rhododendron, to a height of approximately 6 metres. Ground cover chiefly composed of bracken, bramble (<i>Rubus fruticosus</i> agg.) and stinging nettle (<i>Urtica dioica</i>).
19	0	2	Food plant growing up through bramble ground cover onto lower trunks of pine trees and into elder (<i>Sambucus nigra</i>) bushes, to a height of approximately 8 metres. Search area within 15 metres of ride-edge.
20	0	0	Food plant occurring in damp, shady, deciduous woodland by the boardwalk at the start of the 'Sizewell Belts Trail'. Growing mainly in English elm scrub but extending to a height of approximately 14 metres into dead elm branches above. Alder and ash (<i>Fraxinus excelsior</i>) trees also frequent in this area holding smaller amounts of honeysuckle. Search area mainly adjacent to ride-edge and not extending more than 5 metres from it. Ground vegetation dominated by stinging nettle.

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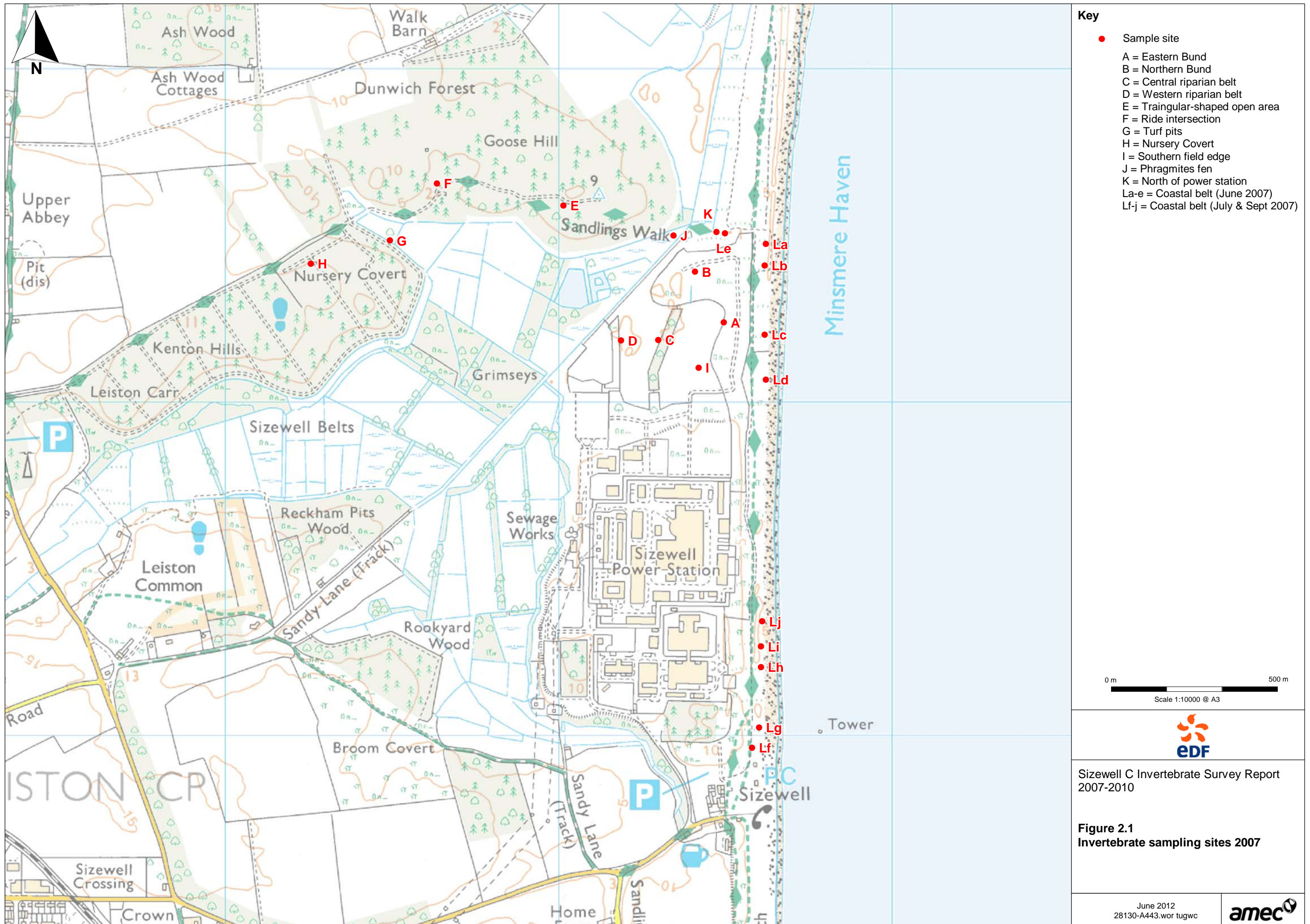
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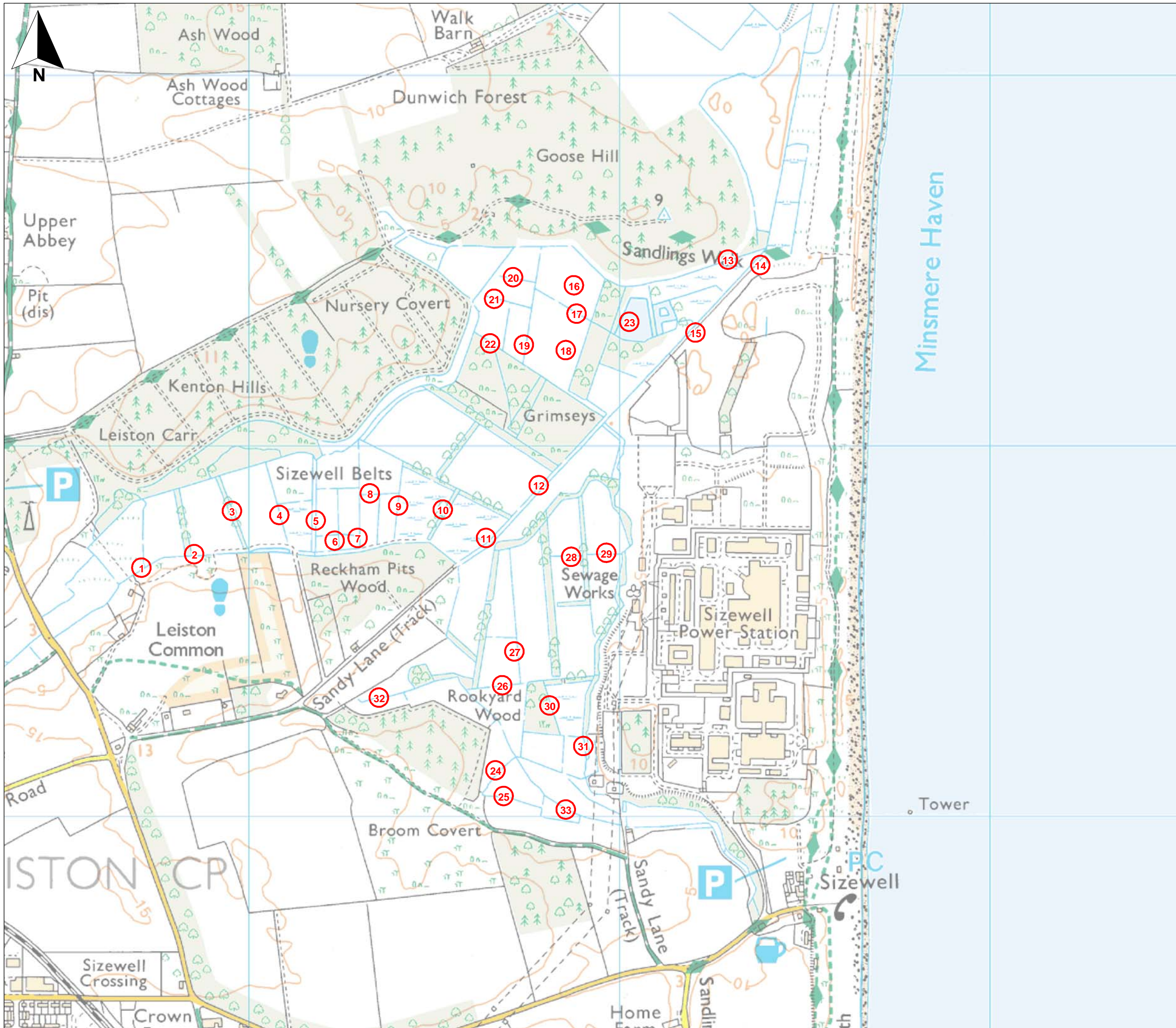
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Figures





Key

- ① Sample site

0 m 500 m
 Scale 1:10000 @ A3



Sizewell C Invertebrate Survey Report
 2007-2010

Figure 2.2
 Invertebrate sampling sites 2009

June 2012
 28130-A444.wor tugwc



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Key

A - M ditches surveyed for terrestrial invertebrates: June 2010

Malaise traps in reed beds = x1 or x2

0 m 500 m
Scale 1:10000 @ A3

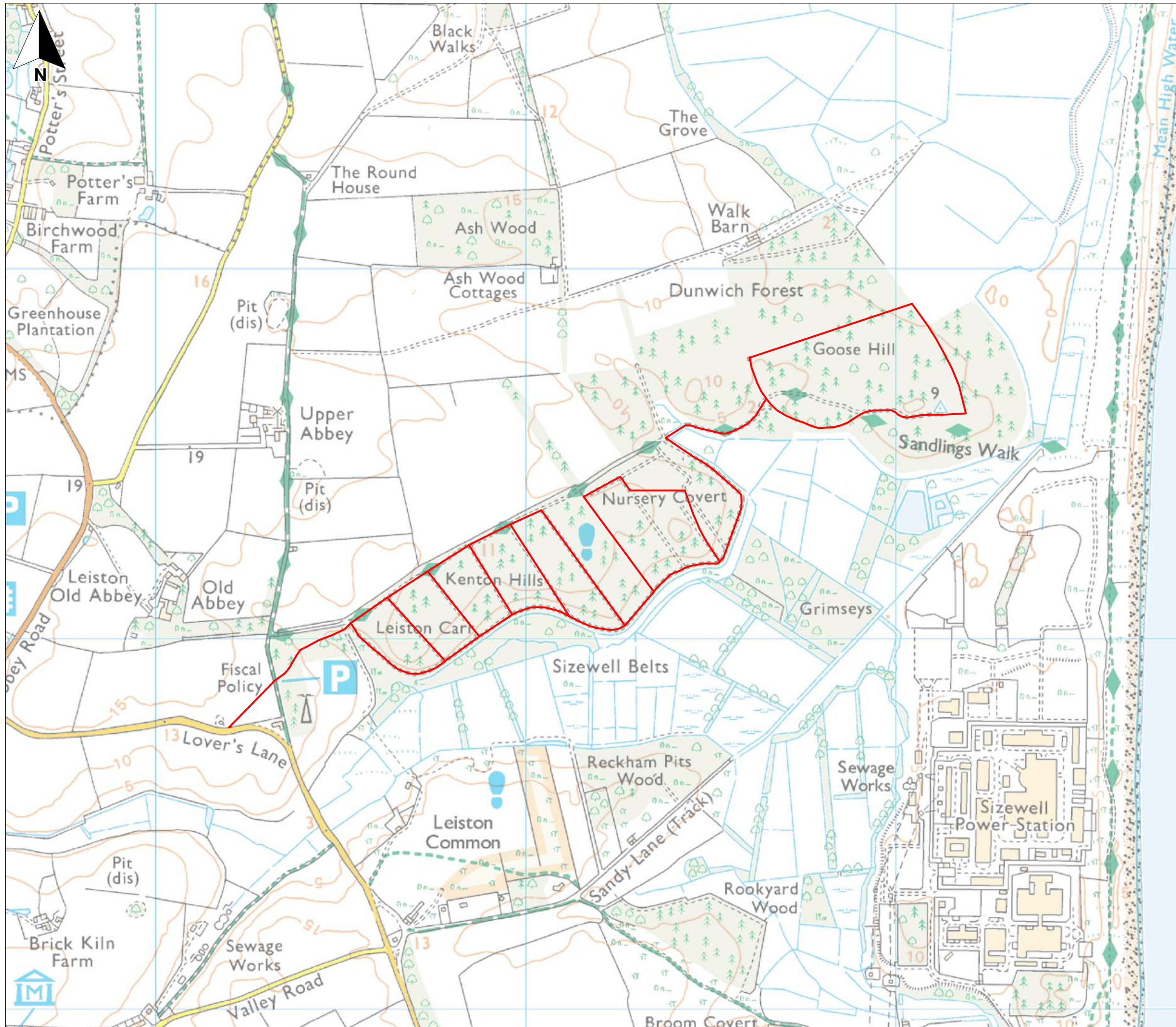


Sizewell C Invertebrate Survey Report 2007-2010


Figure 2.3
Invertebrate sampling sites 2010

June 2012
28130-A445.wor tugwc






Key

 Transect route

0 m 500 m


Scale 1:10000 @ A3

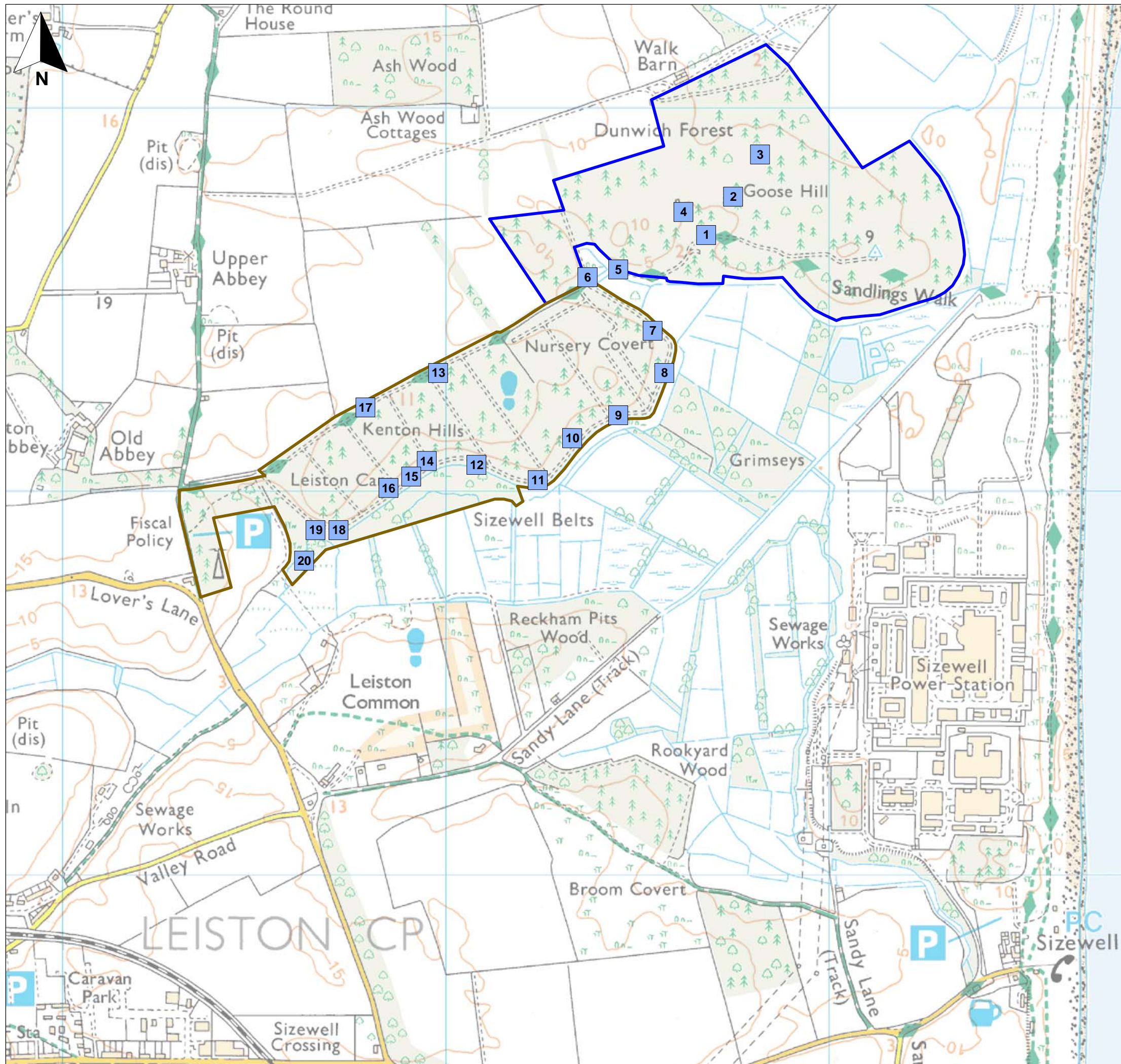

EDF

Sizewell C Invertebrate Survey Report
2007-2010

Figure 2.4
Transect route used for the 2007 white
admiral survey

June 2012
28130-A446.wor tugwc





Key

- Goose Hill
- Kenton Hills

0 m 500 m
 Scale 1:10000 @ A3



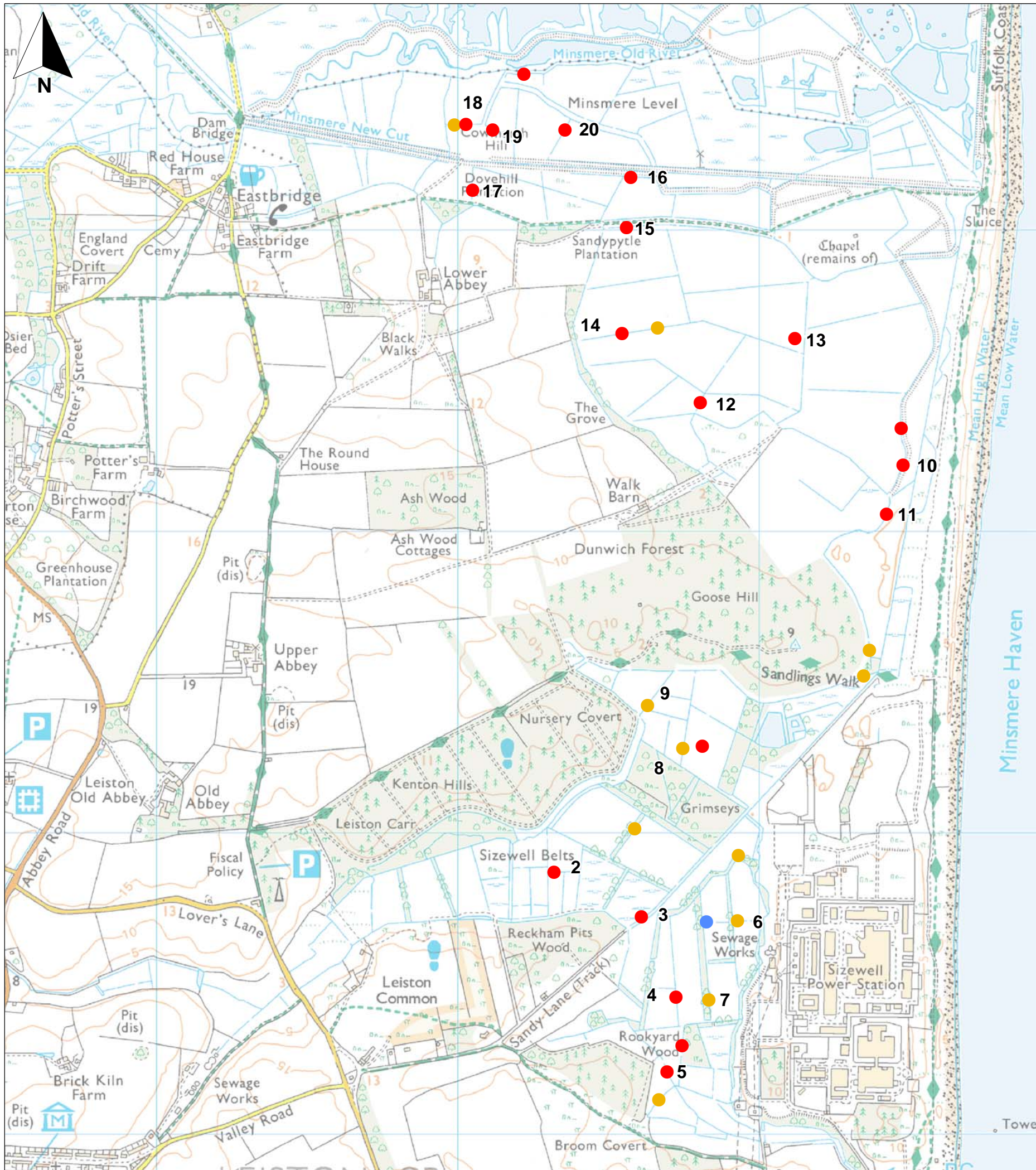
Sizewell C Invertebrate Survey Report
 2007-2010

Figure 2.5
 White admiral larval search areas

June 2012
 28130-A447.wor tugwc

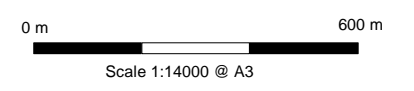


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Key

- 1989a sample sites
- 1989a quick sample sites
- 1989b sample sites



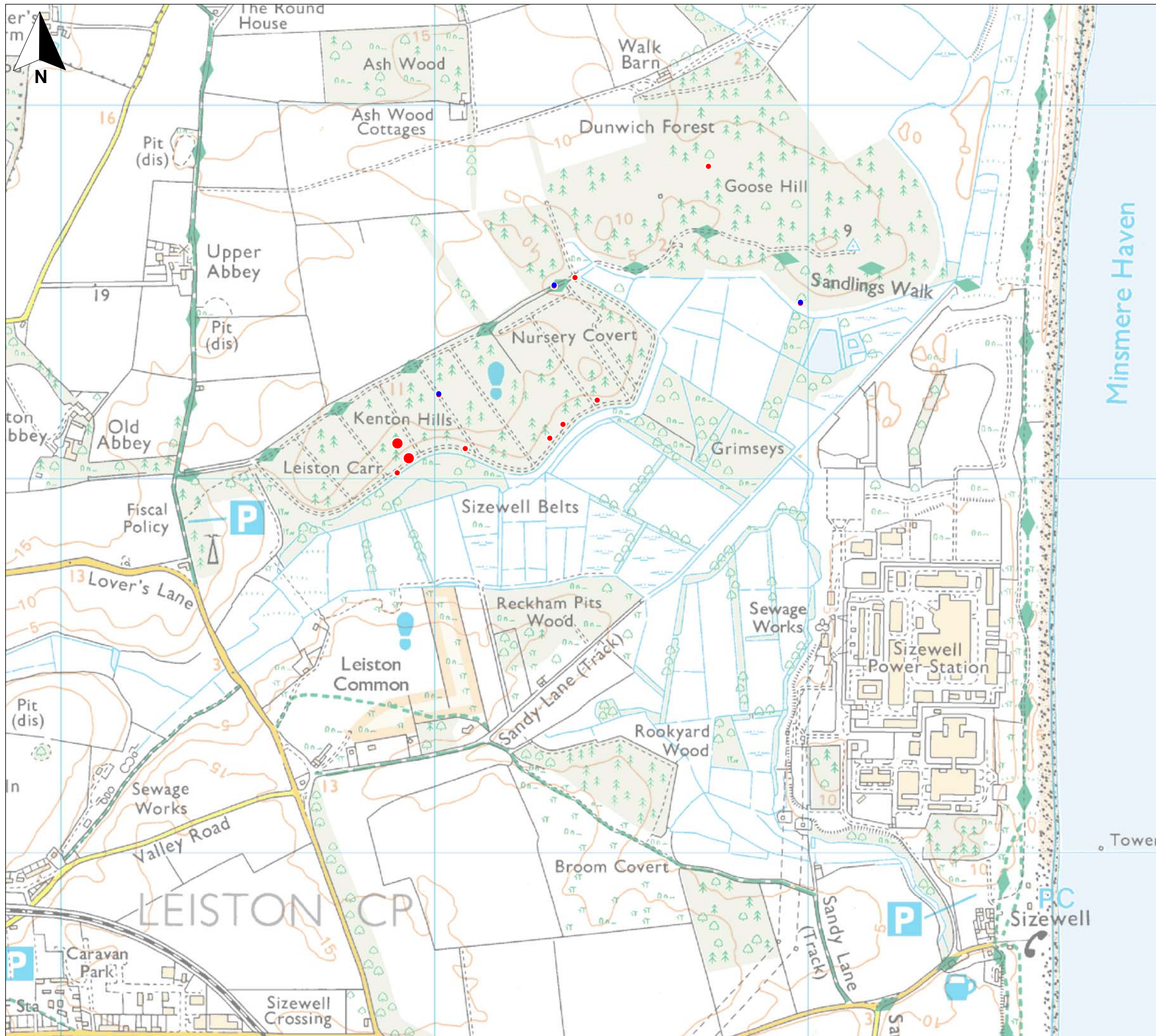
Sizewell C Invertebrate Survey Report
2007-2010

Figure 3.1
Survey locations (Drake on behalf of Buglife, 2009)

June 2012
28130-A448.wor tugwc



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Key

Number of individuals per sighting

- 1
- 2

• Incidental Records

0 m 500 m
Scale 1:10000 @ A3

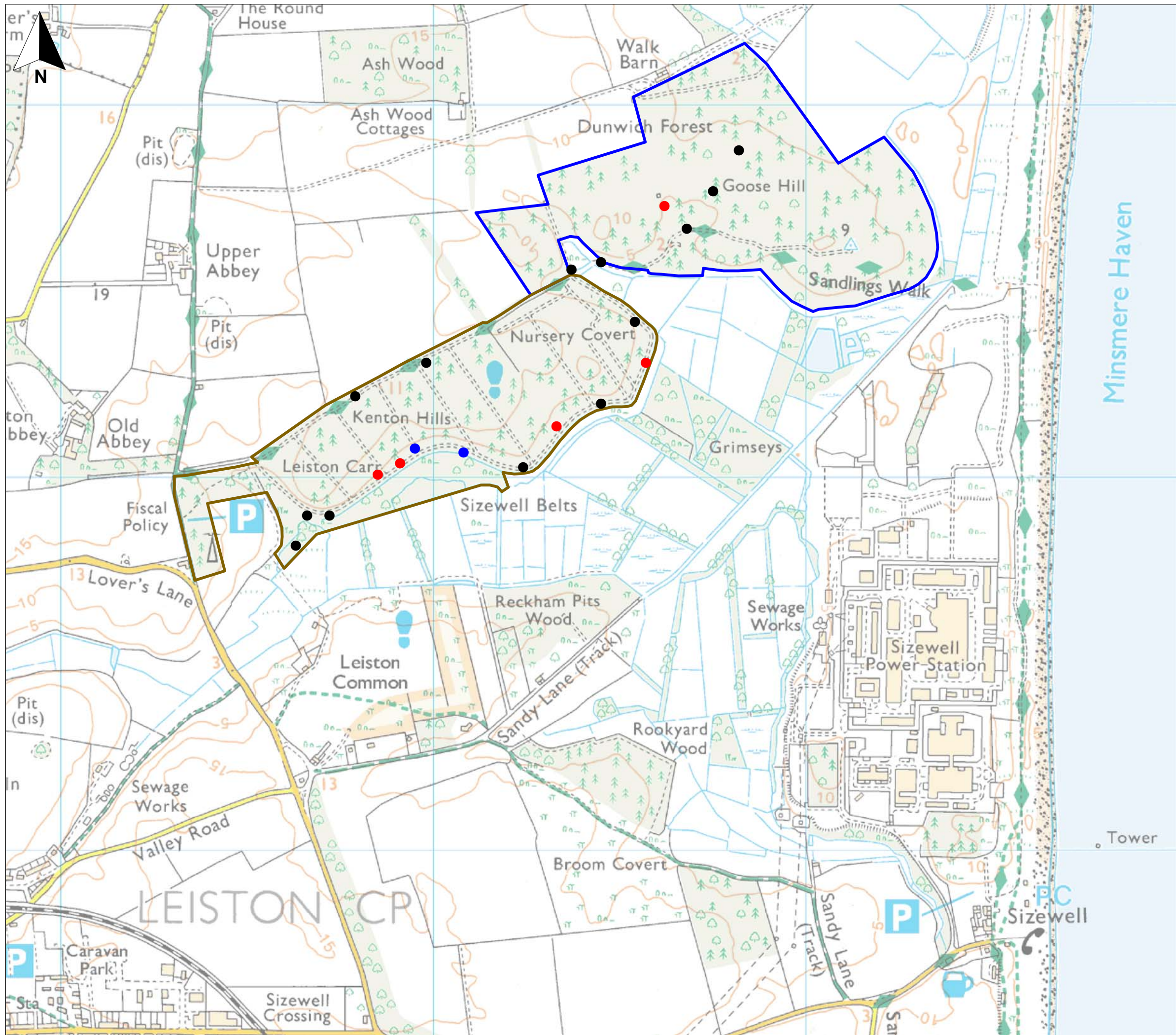


Sizewell C Invertebrate Survey Report
2007-2010

Figure 3.2
Location and number of Individuals
of each white admiral sighting

June 2012
28130-A449.wor tugwc





Key

Goose Hill
 Kenton Hills

Larvae Recorded

● = 0
● = 1
● = 2

0 m 500 m
 Scale 1:10000 @ A3



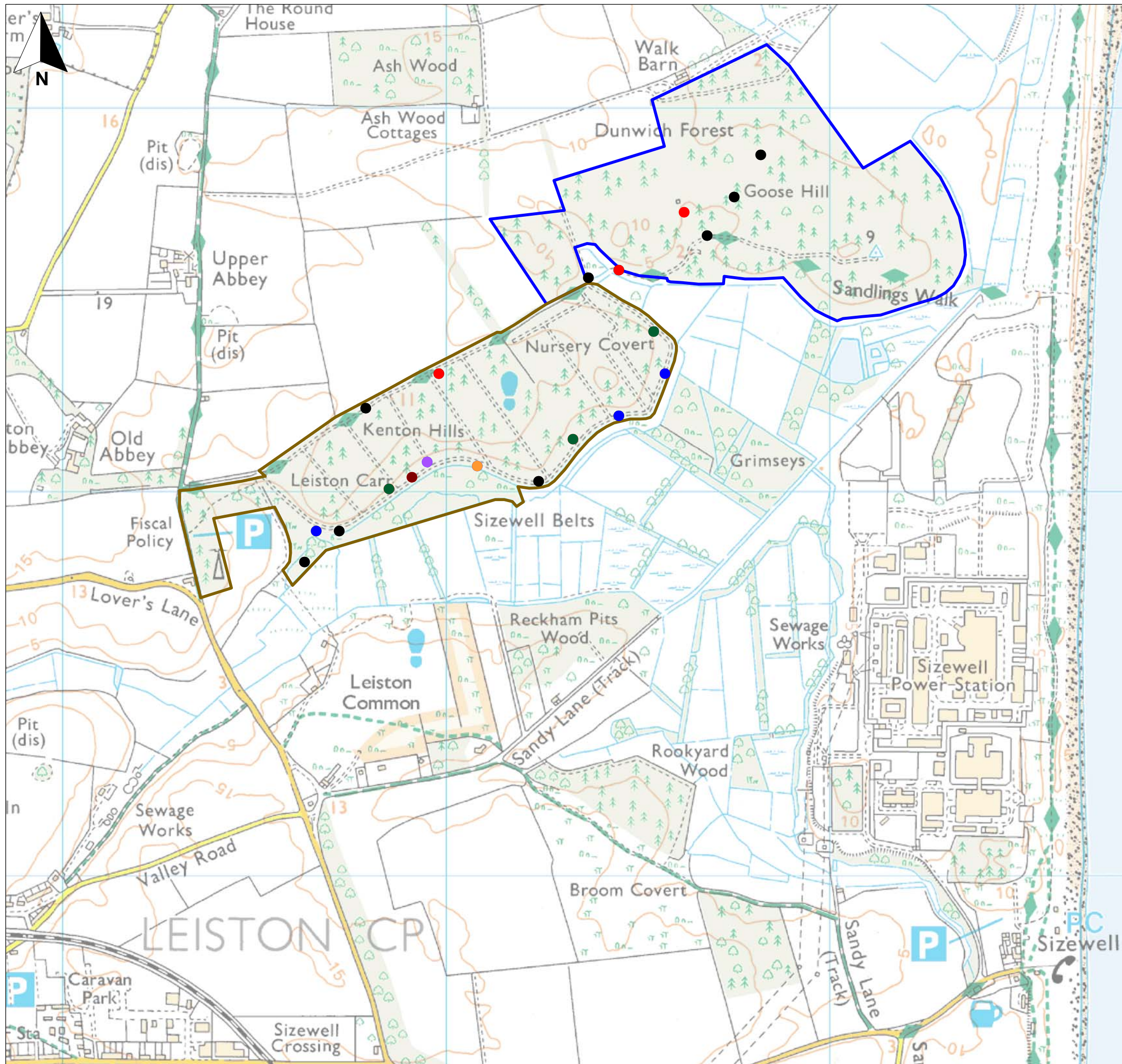
Sizewell C Invertebrate Survey Report
 2007-2010

Figure 3.3
 Distribution of white admiral larvae

June 2012
 28130-A450.wor tugwc



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Key

Goose Hill
Kenton Hills

Incidences of Larval Feeding Damage Recorded

- = 0
- = 1
- = 2
- = 3
- = 4
- = 5
- = 6

0 m 500 m
Scale 1:10000 @ A3



Sizewell C Invertebrate Survey Report
2007-2010

Figure 3.4
Incidence of larval damage

June 2012
28130-A451.wor tugwc



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Annex 1

Invertebrate Survey Report 2007 Appendices

APPENDIX C: COLEOPTERA RECORDED FROM VACUUM SAMPLES TAKEN FROM SIZEWELL COASTAL HABITATS IN 2007

	S	Site 1			Site 2			Site 3			Site 4			Site 5		
		Jun	Jul	Sep	Jun	Jul	Sep	Jun	Jul	Sep	Jun	Jul	Sep	Jun	Jul	Sep
Carabidae																
<i>Calathus melanocephalus</i> (Linnaeus,1758)	C		5								2					
<i>Demetrius atricapillus</i> (Linnaeus,1758)	C		2	5				1		1				2	1	
<i>Paradromius linearis</i> (Olivier,1795)	C		1	2							1			1		
<i>Philorhizus melanocephalus</i> (Dejean,1825)	C			9	5	1		4		19	4			3	1	
<i>Syntomus foveatus</i> (Geoffroy in Fourcroy,1785)	C													3		
Staphylinidae																
<i>Stenus aceris</i> Stephens,1833	C		14	3	1	4				1	3			16		
<i>Stenus clavicornis</i> (Scopoli,1763)	C		1		1											
<i>Stenus nitidiusculus</i> Stephens,1833	C									1					1	
<i>Sepedophilus nigripennis</i> (Stephens,1832)	C		1		1						1					
<i>Cypha longicornis</i> (Paykull,1800)	C				1						1					
<i>Amischa analis</i> (Gravenhorst,1802)	C										1					
<i>Mocyta fungi</i> (Gravenhorst,1806)	C		1	1	2	2		2			3	5		1	9	
Buprestidae																
<i>Aphanisticus pusillus</i> (Olivier,1790)	N(b)														1	
Cantharidae																
<i>Rhagonycha fulva</i> (Scopoli,1763)	C		1													
Melyridae																
<i>Clanoptilus marginellus</i> Olivier,1790	N(b)	1														
<i>Cordylepherus viridis</i> (Fabricius,1787)	L										1			2		
Nitidulidae																
<i>Meligethes aeneus</i> (Fabricius,1775)	C	6			4			4	2		3					
<i>Meligethes nigrescens</i> Stephens,1830	C													1		
Cryptophagidae																
<i>Micrambe vini</i> (Panzer,1797)	C				6	1		7			3	1		1		
<i>Atomaria fuscata</i> (Schonherr,1808)	C											2				
<i>Atomaria testacea</i> Stephens,1830	C													1		
Phalacridae																
<i>Olibrus affinis</i> (Sturm,1807)	L				2											
<i>Stilbus testaceus</i> (Panzer,1796)	C		12	1	3	11	1			2	1	9		2	12	3
Corylophidae																
<i>Corylophus cassidoides</i> (Marsham,1802)	L				15											
Coccinellidae																
<i>Subcoccinella vigintiquatuorpuntata</i> (Linnaeus,1758)	C		1	2												
<i>Rhyzobius litura</i> (Fabricius,1787)	C				7	1	1	1						3	1	
<i>Tytthaspis sedecimpunctata</i> (Linnaeus,1758)	L					2	1	1								
<i>Coccinella undecimpunctata</i> Linnaeus,1758	L				1						1					

APPENDIX C: COLEOPTERA RECORDED FROM VACUUM SAMPLES TAKEN FROM SIZEWELL COASTAL HABITATS IN 2007

	S	Site 1			Site 2			Site 3			Site 4			Site 5		
		Jun	Jul	Sep	Jun	Jul	Sep	Jun	Jul	Sep	Jun	Jul	Sep	Jun	Jul	Sep
Latridiidae																
<i>Corticaria punctulata</i> Marsham,1802	C										1					
<i>Corticaria umbilicata</i> (Beck,1817)	L														1	
<i>Corticarina fuscata</i> (Gyllenhal,1827)	C									1						
<i>Corticaria gibbosa</i> (Herbst,1793)	C	1				2					1					
<i>Melanophthalma curticolis</i> (Mannerheim,1844)	pRDBK				1											
Tenebrionidae																
<i>Lagria hirta</i> (Linnaeus,1758)	C		1									2				3
Oedemeridae																
<i>Oedemera lurida</i> (Marsham,1802)	L															3
Anthicidae																
<i>Notoxus monoceros</i> (Linnaeus,1761)	L	4			2	1		1			9					
<i>Cyclodinus constrictus</i> (Curtis,1838)	L					1										
Cerambycidae																
<i>Pseudovadonia livida</i> (Fabricius,1776)	L										1			1		
Chrysomelidae																
<i>Cryptocephalus pusillus</i> Fabricius,1777	L		1			1			1							1
<i>Sermylassa halensis</i> (Linnaeus,1767)	L															1
<i>Phyllotreta diademata</i> Foudras,1860	L							2								
<i>Phyllotreta nemorum</i> (Linnaeus,1758)	C							1								
<i>Aphthona euphorbiae</i> (Schrank,1781)	L										1					
<i>Longitarsus atricillus</i> (Linnaeus,1761)	C				2											
<i>Longitarsus flavicornis</i> (Stephens,1831)	C					1	1									2
<i>Neocrepidodera ferruginea</i> (Scopoli,1763)	C		1			5										1
<i>Mantura chrysanthemi</i> (Koch,1803)	Na											1				
Apionidae																
<i>Perapion curtirostre</i> (Germar,1817)	C			2												
<i>Perapion marchicum</i> (Herbst,1797)	L		2	1		2				1		2			7	
<i>Apion haematodes</i> Kirby,1808	C		2			2						29			3	1
<i>Apion rubiginosum</i> Grill,1893	pRDB3			1								1				1
<i>Holotrichapion ononis</i> (Kirby,1808)	L	2			1	1	4	1	4	2	1		1			1
Curculionidae																
<i>Sitona lepidus</i> Gyllenhal,1834	C					1										
<i>Sitona lineatus</i> (Linnaeus,1758)	C	1		1		3	4		7	1		4	2			6
<i>Mecinus pascuorum</i> (Gyllenhal,1813)	C				1							2				2

APPENDIXD: COLEOPTERA RECORDED FROM WATER TRAPS AT SIZEWELL IN 2007

All samples during July 2007

	S	Site A	Site B	Site C	Site D	Site E	Site F	Site G	Site H	Site I
Carabidae										
<i>Pterostichus nigrata</i> (Paykull,1790)	C							1		
<i>Amara tibialis</i> (Paykull,1798)	L							1		
Hydrophilidae										
<i>Sphaeridium scarabaeoides</i> (Linnaeus,1758)	C		1							
Histeridae										
<i>Saprinus aeneus</i> (Fabricius,1775)	C						1			
Hydraenidae										
<i>Ochthebius minimus</i> (Fabricius,1792)	C		1	1						
Leiodidae										
<i>Leiodes calcaratus</i> (Erichson,1845)	L		1							
<i>Anisotoma orbicularis</i> (Herbst,1792)	L					1				
<i>Sciodrepoides watsoni</i> (Spence,1813)	C						8			
<i>Catops nigrata</i> Erichson,1837	C						1			
<i>Catopidius depressus</i> (Murray,1856)	N(b)						1			
Silphidae										
<i>Nicrophorus vespilloides</i> Herbst,1783	L						15			
<i>Oiceoptoma thoracicum</i> (Linnaeus,1758)	L						2			
<i>Silpha atrata</i> Linnaeus,1758	C									2
<i>Silpha tristis</i> Illiger,1798	L			1			1			1
Scaphidiidae										
<i>Scaphidium quadrimaculatum</i> Olivier,1790	L					1				
<i>Scaphisoma agaricinum</i> (Linnaeus,1758)	L							1	1	
Staphylinidae										
<i>Anotylus tetracarinus</i> (Block,1799)	C						2			
<i>Oxyporus rufus</i> (Linnaeus,1758)	L		2							
<i>Stenus picipes</i> Stephens,1833	C							1		
<i>Philonthus politus</i> (Linnaeus,1758)	C						1			
<i>Tachyporus hypnorum</i> (Fabricius,1775)	C						1			
<i>Gyrophaena minima</i> Erichson,1837	U					5	44	2		
<i>Aloconota gregaria</i> (Erichson,1839)	C						1			
<i>Mocyta fungi</i> (Gravenhorst,1806)	C		1		6		8			
<i>Acrotona pygmaea</i> (Gravenhorst,1802)	L				1					
<i>Atheta aeneicollis</i> (Sharp,1869)	U						1			
<i>Atheta britanniae</i> (Bernhauer & Scheerpeltz,1926)	U						1			
Scirtidae										
<i>Cyphon coarctatus</i> Paykull,1799	C							3		

APPENDIXD: COLEOPTERA RECORDED FROM WATER TRAPS AT SIZEWELL IN 2007

All samples during July 2007

	S	Site A	Site B	Site C	Site D	Site E	Site F	Site G	Site H	Site I
Elateridae										
<i>Athous haemorrhoidalis</i> (Fabricius,1801)	C					1				
<i>Melanotus villosus</i> (Geoffroy in Fourcroy,1785)	C						1			
Throscidae										
<i>Trixagus dermestoides</i> (Linnaeus,1767)	L						2			
Anobiidae										
<i>Ernobius pini</i> (Sturm,1837)	Nat						1			
Nitidulidae										
<i>Meligethes aeneus</i> (Fabricius,1775)	C					2	97	25	1	
<i>Meligethes nigrescens</i> Stephens,1830	C					2	3			
<i>Epuraea unicolor</i> (Olivier,1790)	C		1							
Cryptophagidae										
<i>Antherophagus nigricornis</i> (Fabricius,1787)	L						2	1		
<i>Atomaria testacea</i> Stephens,1830	C					1				
Byturidae										
<i>Byturus tomentosus</i> (De Geer,1774)	C						5			
Cerylonidae										
<i>Cerylon ferrugineum</i> Stephens,1830	L					1				
Coccinellidae										
<i>Scymnus limbatus</i> Stephens,1832	N(b)								1	
<i>Tytthaspis sedecimpunctata</i> (Linnaeus,1758)	L		1							
<i>Coccinella septempunctata</i> Linnaeus,1758	C				2					
<i>Halyzia sedecimguttata</i> (Linnaeus,1758)	L							1		
Latridiidae										
<i>Cartodere nodifer</i> (Westwood,1839)	C						1			
Tenebrionidae										
<i>Lagria hirta</i> (Linnaeus,1758)	C				4					
Scraptiidae										
<i>Anaspis frontalis</i> (Linnaeus,1758)	C					1				
Oedemeridae										
<i>Oedemera lurida</i> (Marsham,1802)	L		14							
<i>Oedemera nobilis</i> (Scopoli,1763)	C		17			52	7			
Anthicidae										
<i>Notoxus monoceros</i> (Linnaeus,1761)	L		4		1		1			
Cerambycidae										
<i>Pseudovadonia livida</i> (Fabricius,1776)	L		1			1				
<i>Rutpela maculata</i> (Poda,1761)	C						1			

APPENDIXD: COLEOPTERA RECORDED FROM WATER TRAPS AT SIZEWELL IN 2007

All samples during July 2007

	S	Site A	Site B	Site C	Site D	Site E	Site F	Site G	Site H	Site I
Chrysomelidae										
<i>Cryptocephalus pusillus</i> Fabricius,1777	L					1				
<i>Aphthona euphorbiae</i> (Schrank,1781)	L								2	
<i>Aphthona nonstriata</i> (Goeze,1777)	L							6		
<i>Altica lythri</i> Aube,1843	C						1			
<i>Chaetocnema hortensis</i> (Fourcroy,1785)	C					2				
<i>Psylliodes dulcamarae</i> (Koch,1803)	L							1		
Attelabidae										
<i>Neocoenorrhinus germanicus</i> (Herbst,1797)	L						1			
Apionidae										
<i>Exapion ulicis</i> (Forster,1771)	C						1			
<i>Protapion fulvipes</i> (Fourcroy,1785)	C				1					
Curculionidae										
<i>Otiorhynchus ovatus</i> (Linnaeus,1758)	L	1								
<i>Otiorhynchus singularis</i> (Linnaeus,1767)	C						1			
<i>Phyllobius viridiaeris</i> (Laicharting,1781)	L				1					
<i>Polydrusus formosus</i> (Mayer,1779)	Na				4					
<i>Euophryum confine</i> (Broun,1881)	Nat							1		
<i>Ceutorhynchus pallidactylus</i> (Marsham,1802)	C						1			
<i>Rhinoncus castor</i> (Fabricius,1792)	L					1				

APPENDIX E: DIPTERA AND INVERTEBRATES RECORDED FROM VACUUM SAMPLES FROM COASTAL HABITATS AT SIZEWELL IN 2007

SAMPLE SITE	La	Lb	Lc	Ld	Le	Lf	Lg	Lh	Li	Lj	Lg	Lh	Lj
SURVEY DATE	20/06/07	20/06/07	20/06/07	20/06/07	20/06/07	23/07/07	23/07/07	23/07/07	23/07/07	23/07/07	19/09/07	19/09/07	19/09/07
Coremacera marginata									1				
Pherbellia cinerella			1				1		1				
Chamaemyia aridella		2	1	2	1		2		1	1			
Chamaemyia flavipalpis			6	4			5		3	2			
Chamaemyia herbarum	3			15	4		1		2	1			
Geomyza balachowskyi/hackmani						2				4			
Geomyza subnigra													1
Geomyza tripunctata		2				1	4		21	7			
Opomyza punctella		1											
Sepsis cynipsea	1			1									
Sepsis thoracica	1		3										
Themira pusilla	1												
Cerodontha denticornis		1					1			1			
Aphanotrigonum trilineatum									1				
Anagnota bicolor		1											
Anthomyza gracilis							1						
Stiphrosoma sabulosum		7	1	2	2	1				2			
Camarota curvipennis													5
Conioscinella mimula	1	1	1										
Dicraeus vagans		1	2										
Elachiptera pubescens										1			3
Lasiosina intermedia						10							
Meromyza nigriventris										1			
Meromyza pratorum						1	3			3			
Meromyza variegata					1								
Meromyza sp			1				2		2	1			
Oscinella frit	33	43	13	3	17		7			3			
Oscinella pusilla	2	2	1										
Oscinella vastator	1												
Oscinimorpha minutissima		1			1				1	3			
Thaumatomyia glabra			1				1		1	2			
Thaumatomyia hallandica				1					2	1			
Thaumatomyia trifasciata									1				
Trachysiphonella scutellata			1										
Tricimba brachyptera							1		1	2			
Trioxscelis frontalis		2	2										
Trioxscelis marginella									1	1			
Trioxscelis obscurella		1	1										
Drosophila andalusiaca			1										
Scaptomyza flava	14	3	6	5			1						
Scaptomyza pallida	5	7	8	3			2	3		2			8
Discomyza incurva		1					1						
Hyadina guttata			1		1		1						
Hydrellia griseola	14	2	4										
Limnellia quadrata									1				
Nostima picta													5
Philygria flavipes								2	1				
Philygria vitripennis							1		3	1			5
Psilopa nitidula										1			
Scatella tenuicosta	26	6	3	1		1	1						5
Coenosia infantula	1												
Coenosia pumilla													1
Coenosia tigrina										1			
Schoenomyza litorella													1
Anthomyia imbrida										1			
Delia platura	1												
Subhylemyia longula				1									
HYMENOPTERA (BEES, WASPS, ANTS AND ALLIES)													
Bethylus cephalotes									1	1			
Bethylus fuscicornis							1			1			
Gonatopus clavipes						1							
Formica fusca													1
Lasius psammophilus	4	3	3	5	1	4	21		1	5			
Myrmica sabuleti					1	2							
Bombus lapidarius									1				

APPENDIX F: DIPTERA, ACULEATE HYMENOPTERA AND OTHER INVERTEBRATES RECORDED FROM WATER TRAPS AT SIZEWELL EMPTIED IN JULY 200

SAMPLE SITE	A	B	C	D	E	F	G	H	I
SURVEY DATE	21/07/07	21/07/07	21/07/07	21/07/07	23/07/07	23/07/07	23/07/07	23/07/07	21/07/07
MOLLUSCA (SNAILS)									
Arianta arbustorum	1								
Cepaea hortensis	1								
Cepaea nemoralis									1
Ceruella virgata				1					
Punctum pygmaeum									1
CRUSTACEA (WOODLICE)									
Armadillium vulgare			1	20					1
Philoscia muscorum			1	35		2	9		
Porcellio scaber	1			150	3	244	60		
OPILIONES (HARVESTMEN)									
Lacinius ephippiatus				8		1	5		
Leiobunum blackwallii					1	1	8		
Leiobunum rotundum				1					
Phalangium opilio	1	30			4				1
Platybunus triangularis				2					
DERMAPTERA (EARWIGS AND ANT-LION)									
Forficula auricularia					2	5	5		
ORTHOPTERA (GRASSHOPPERS AND CRICKETS)									
Meconemma thalassinum								1	
Leptophyes punctatissima						1		1	
Myrmeleotettix maculatus			1						
Chorthippus parallelus					1				
Acrididae (nymphs)		1			5	1			
NEUROPTERA (LACEWINGS)									
Hemerobius stigma		1							
Coenagrion puella					1	2			
Sympetrum flaveolum	1								
Sympetrum striolatum						1			
HEMIPTERA (TRUE-BUGS)									
Neophilaenus lineatus			1	1					
Aelia acuminata	1								
Aphanus rolandr							1		
Capsus ater			1	1					
Ischnodemus sabuleti				1					1
Podops inuncta				1					
COLEOPTERA (BEETLES)									
Coccinella 7-punctata				2					
Lagria hirta				3					
Oedemera nobilis		4	1		10				
Scaphidium quadrimaculatum									
Strangalia maculata						1			
LEPIDOPTERA (MOTHS AND BUTTERFLIES)									
Maniola jurtina		1							

APPENDIX F: DIPTERA, ACULEATE HYMENOPTERA AND OTHER INVERTEBRATES RECORDED FROM WATER TRAPS AT SIZEWELL EMPTIED IN JULY 200

SAMPLE SITE	A	B	C	D	E	F	G	H	I
SURVEY DATE	21/07/07	21/07/07	21/07/07	21/07/07	23/07/07	23/07/07	23/07/07	23/07/07	21/07/07
DIPTERA (TRUE-FLIES)									
Epiphragma ocellare							1		
Erioptera lutea						3	27		
Gonomyia lateralis							1		
Ilisia maculata							1		
Molophilus bihamatus							6		
Molophilus obscurus							1		
Neolimnomyia nemoralis					1		1		
Phylidorea fulvonervosa							1		
Colobostema nigripenne				1					
Colobostema triste						19			
Swammerdamella acuta					1				
Sylvicola cinctus						32			
Sylvicola punctatus							1		
Beris vallata			2						
Chloromyia formosa		3							
Chorisops tibialis				1					
Nemotelus pantherinus					3	3			
Oplodonta viridula					1				
Pachygaster leachii		1							
Chrysopilus cristatus				2		2	9		
Rhagio lineola				2					
Thereva sp (poor)			1						
Dysmachus trigonus		11				6			1
Machimus atricapillus					2	2			
Hybomitra bimaculata						1			
Hybomitra ciureai						1			
Tabanus maculicornis						1			
Crossopalpus nigrifella					114	8			
Elaphropeza ephippiata						3	1		
Tachydromia aemula				4					
Phyllodromia melanocephala						8	1		
Platypalpus longiseta							1		
Platypalpus pallidiventris		1		11		1	2	1	
Empis aestiva					1				
Hilara litorea						1	4		
Chrysotimus molliculus			1	6					
Chrysotus gramineus			4	2	2	21	1		
Chrysotus neglectus		1			4	4			
Dolichopus griseipennis							1		
Dolichopus longitarsus							1		
Dolichopus unguulatus				2	2	1	4		
Dolichopus urbanus							4		

APPENDIX F: DIPTERA, ACULEATE HYMENOPTERA AND OTHER INVERTEBRATES RECORDED FROM WATER TRAPS AT SIZEWELL EMPTIED IN JULY 200

SAMPLE SITE	A	B	C	D	E	F	G	H	I
SURVEY DATE	21/07/07	21/07/07	21/07/07	21/07/07	23/07/07	23/07/07	23/07/07	23/07/07	21/07/07
Hercostomus metallicus							3		
Hercostomus nigripennis					2	12			
Medetera dendrobaena						1			
Medetera muralis					7				
Medetera truncorum		1			2		1		
Sciapus contristans					3				
Sciapus platypterus						4		1	
Lonchoptera furcata					1				
Lonchoptera lutea						1			
Opetia nigra						2			
Chalarus basalis								1	
Eristalis interruptus					1	4		3	
Eristalis intricarius						1			
Eristalis pertinax						2	1		
Eristalis tenax						1			
Eumerus strigatus						1	1		
Eupeodes corollae							1		
Helophilus hybridus					1				
Helophilus pendulus					3	6			
Melanostoma mellinum			1				3		
Melanostoma scalare						1			
Neoscia geniculata							1		
Orthonevra splendens					1				
Parasyrphus annulatus						1			
Parasyrphus punctulatus							1		
Platycheirus albimanus								1	
Scaeva selenitica							1		
Syrphus rectus/vitripennis								1	
Xylota segnis							6		
Volucella bombylans						4		1	
Sicus ferrugineus						6			
Tephritis vespertina					1				
Camilla atrimana					1				
Camilla flavicauda					1				
Meiosimyza platycephala						1			
Pseudolycia pallidiventris							1		
Limnia unguicornis							1		
Nemopoda nitidula						1			
Sepsis flavimana					1				
Geomyza nartshukae				3					
Opomyza florum						2			
Conioscinella frontella					100	50			
Conioscinella mimula		1						1	
Elachiptera diastema				1			1		

APPENDIX F: DIPTERA, ACULEATE HYMENOPTERA AND OTHER INVERTEBRATES RECORDED FROM WATER TRAPS AT SIZEWELL EMPTIED IN JULY 200

SAMPLE SITE	A	B	C	D	E	F	G	H	I
SURVEY DATE	21/07/07	21/07/07	21/07/07	21/07/07	23/07/07	23/07/07	23/07/07	23/07/07	21/07/07
Fiebrigella palposa						1			
Incertella antennata				2					
Oscinella frit						2			
Oscinomorpha minutissima		1							
Thaumatomyia hallandica		2							
Thaumatomyia notata			3	1	5				
Trachysiphonella scutellata						18			
Tricimba cincta						85	1		
Chyromya britannica						2			
Meonura flavifacies						1			
Meonura neglecta					2				
Neuroctena anilis						2			
Oecothea fenestralis						1			
Suillia affinis		2			4	1	4		
Suillia atricornis					1				
Suillia variegata					5	1			
Tephrochlamys rufiventris						1			
Trixoscelis frontalis					4				
Trixoscelis similis					2				
Drosophila andalusiaca				1	2	1			
Drosophila buscki						1			
Scaptomyza pallida				2	29	168	23	1	
Hydrellia griseola						23			
Hydrellia maura							1		
Psilopa nitidula						1			
Scatella tenuicosta						1			
Bellardia viarum								1	
Melanomyia nana							1		
Melanophora ruralis					1				
Frauenfeldia rubricosa					1	3			
Rhinophora lepida					4	10	1	1	
Coenosia tigrina			1						
Delia florilega								1	
Phasia hemiptera						1			
Tachina fera					1	5	1		
HYMENOPTERA (BEES, WASPS, ANTS AND ALLIED INSECTS)									
Formica fusca		2				9			
Lasius alienus		2			2				
Lasius niger				1					2
Myrmica ruginodis									
Myrmica sabuleti		1		2		13			
Chrysis rutiliventris		1							
Chrysis viridula						1			
Hedychridium ardens					1				

APPENDIX F: DIPTERA, ACULEATE HYMENOPTERA AND OTHER INVERTEBRATES RECORDED FROM WATER TRAPS AT SIZEWELL EMPTIED IN JULY 200

SAMPLE SITE	A	B	C	D	E	F	G	H	I
SURVEY DATE	21/07/07	21/07/07	21/07/07	21/07/07	23/07/07	23/07/07	23/07/07	23/07/07	21/07/07
Agenioideus cinctellus					8				
Anoplius nigerrimus					1				
Anoplius viaticus		3			22	52			
Dipogon subintermedius					3	3			
Episyron rufipes					8				
Priocnemis cordivalvata						3			
Ancistrocerus trifasciatus						2	2		
Ancistrocerus sp								1	
Ammophila sabulosa	1				9				
Astata boops						1			
Crabro cribrarius			1						
Nysson dimidiatus		1							
Nysson spinosus								1	
Pemphredon sp		1							
Spilomena differens						1			
Tachysphex pompiliformis		3			2				
Trypoxylon attenuatum						1			
Vespula rufa							1		
Andrena sp		1						1	
Hylaeus communis						1			
Hylaeus confusus						1			
Megachile ligniseca									2
Megachile sp (poor)									
Nomada striata						4			
Sphecodes monilicornis						1			
Sphecodes sp (poor)									1
Bombus hortorum								2	
Bombus jonellus					2	6		1	
Bombus lapidarius		4			3	1			4
Bombus lucorum		1			28	24		1	
Bombus pascuorum	1				1	11			
Bombus pratorum		1			6	3		1	
Bombus terrestris					1	1			
Psithyrus bohemicus					1				
Psithyrus sylvestris					1				
Psithyrus vestalis					2	5			

**APPENDIX G: DIPTERA AND OTHER INVERTEBRATES IDENTIFIED FROM WATER TRAPS AT SIZEWELL
EMPTIED IN AUGUST 2007**

TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
Rhagonycha fulva	Cantharidae	A	E.bund	1	1	Coleoptera
Adelocera murina	Elateridae	A	E.bund	4	4	Coleoptera
Oedemera lurida	Oedemeridae	A	E.bund	3	3	Coleoptera
Forficula auricularia	Forficulidae	A	E.bund	2f	2	Dermaptera
Sylvicola cincta	Anisopodidae	A	E.bund	1m4f	5	Diptera
Delia platura	Anthomyiidae	A	E.bund	2m	2	Diptera
Hylemyia variata	Anthomyiidae	A	E.bund	1m1f	2	Diptera
Dilophus febrilis	Bibionidae	A	E.bund	1f	1	Diptera
Pollenia angustigena	Calliphoridae	A	E.bund	6m9f	15	Diptera
Chrysotus femoratus	Dolichopodidae	A	E.bund	3f	3	Diptera
Medetera truncorum	Dolichopodidae	A	E.bund	2m5f	7	Diptera
Poecilobothrus nobilitatus	Dolichopodidae	A	E.bund	1f	1	Diptera
Discomyza incurva	Ephydriidae	A	E.bund	1f	1	Diptera
Suillia affinis	Heleomyzidae	A	E.bund	6m6f	12	Diptera
Suillia variegata	Heleomyzidae	A	E.bund	3f	3	Diptera
Metalimnobia quadrinotata	Limoniidae	A	E.bund	1m	1	Diptera
Lonchoptera lutea	Lonchopteridae	A	E.bund	1f	1	Diptera
Coenosia tigrina	Muscidae	A	E.bund	1m	1	Diptera
Helina confinis	Muscidae	A	E.bund	1f	1	Diptera
Helina depuncta	Muscidae	A	E.bund	1m	1	Diptera
Helina evecta	Muscidae	A	E.bund	1m	1	Diptera
Helina obscurata	Muscidae	A	E.bund	1m12f	13	Diptera
Muscina prolapsa	Muscidae	A	E.bund	1f	1	Diptera
Neomyia cornicina	Muscidae	A	E.bund	1m	1	Diptera
Rhinophora lepida	Rhinophoridae	A	E.bund	42m10f	52	Diptera
Metopia campestris	Sarcophagidae	A	E.bund	1m3f	4	Diptera
Sarcophaga aratrix	Sarcophagidae	A	E.bund	4m	4	Diptera
Sarcophaga carnaria	Sarcophagidae	A	E.bund	2m	2	Diptera
Sarcophaga crassimargo	Sarcophagidae	A	E.bund	1m	1	Diptera
Sarcophaga haemorrhoea	Sarcophagidae	A	E.bund	11m3f	14	Diptera
Sarcophaga incisilobata	Sarcophagidae	A	E.bund	15m	15	Diptera
Sarcophaga melanura	Sarcophagidae	A	E.bund	2m	2	Diptera
Sarcophaga nigriventris	Sarcophagidae	A	E.bund	16m1f	17	Diptera
Sarcophaga spp.	Sarcophagidae	A	E.bund	21f	21	Diptera
Sarcophaga subvicina	Sarcophagidae	A	E.bund	1m	1	Diptera
Sarcophaga variegata	Sarcophagidae	A	E.bund	1m	1	Diptera
Cordilurina albipes	Scathophagidae	A	E.bund	1f	1	Diptera
Chloromyia formosa	Stratiomyiidae	A	E.bund	1m	1	Diptera
Eristalis arbustorum	Syrphidae	A	E.bund	1f	1	Diptera
Helophilus pendulus	Syrphidae	A	E.bund	1m2f	3	Diptera
Melanostoma mellinum	Syrphidae	A	E.bund	1f	1	Diptera
Phryxe vulgaris	Tachinidae	A	E.bund	2f	2	Diptera
Thelaira solivaga	Tachinidae	A	E.bund	1m1f	2	Diptera
Terellia serratulae	Tephritidae	A	E.bund	1f	1	Diptera
Bombus lapidarius	Apidae	A	E.bund	1m	1	Hymenoptera
Bombus lucorum	Apidae	A	E.bund	1m	1	Hymenoptera
Armadillidium vulgare	Armadillidae	A	E.bund	1	1	Isopoda
Oniscus asellus	Oniscidae	A	E.bund	2	2	Isopoda
Eulithis mellinella	Geometridae	A	E.bund	1f	1	Lepidoptera
Pararge aegeria	Nymphalidae	A	E.bund	1	1	Lepidoptera
Pyronia tithonus	Nymphalidae	A	E.bund	2m2f	4	Lepidoptera
Chorthippus brunneus	Acrididae	A	E.bund	3m1n	4	Orthoptera
Omocestus viridulus	Acrididae	A	E.bund	2m1f	3	Orthoptera
Graphopsocus cruciatus	Graphopsocidae	A	E.bund	1	1	Psocoptera
Notoxus monoceros	Anthicidae	B	N.bund	1	1	Coleoptera
Calathus fuscipes	Carabidae	B	N.bund	4f	4	Coleoptera
Hypera troilus	Curculionidae	B	N.bund	1	1	Coleoptera
Oedemera lurida	Oedemeridae	B	N.bund	3	3	Coleoptera

**APPENDIX G: DIPTERA AND OTHER INVERTEBRATES IDENTIFIED FROM WATER TRAPS AT SIZEWELL
EMPTIED IN AUGUST 2007**

TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
Sylvicola cincta	Anisopodidae	B	N.bund	1f	1	Diptera
Delia platura	Anthomyiidae	B	N.bund	11m	11	Diptera
Dysmachus trigonus	Asilidae	B	N.bund	1m	1	Diptera
Philonichus albiceps	Asilidae	B	N.bund	1f	1	Diptera
Bellardia viarum	Calliphoridae	B	N.bund	2m	2	Diptera
Pollenia angustigena	Calliphoridae	B	N.bund	25m41f	66	Diptera
Chrysotus femoratus	Dolichopodidae	B	N.bund	1f	1	Diptera
Dolichopus unguatus	Dolichopodidae	B	N.bund	1f		Diptera
Medetera truncorum	Dolichopodidae	B	N.bund	6m24f	30	Diptera
Discomyza incurva	Ephyridae	B	N.bund	1m	1	Diptera
Suillia affinis	Heleomyzidae	B	N.bund	11m7f	18	Diptera
Coenosia tigrina	Muscidae	B	N.bund	10m1f	11	Diptera
Helina evecta	Muscidae	B	N.bund	1m	1	Diptera
Helina reversio	Muscidae	B	N.bund	9m2f	11	Diptera
Muscina levida	Muscidae	B	N.bund	1f	1	Diptera
Mydaea ancilla	Muscidae	B	N.bund	1f	1	Diptera
Rhinophora lepida	Rhinophoridae	B	N.bund	16m2f	18	Diptera
Metopia leucocephala	Sarcophagidae	B	N.bund	4m1f	5	Diptera
Sarcophaga aratrix	Sarcophagidae	B	N.bund	6m	6	Diptera
Sarcophaga carnaria	Sarcophagidae	B	N.bund	9m	9	Diptera
Sarcophaga haemorrhoea	Sarcophagidae	B	N.bund	5m2f	7	Diptera
Sarcophaga incisilobata	Sarcophagidae	B	N.bund	16m	16	Diptera
Sarcophaga melanura	Sarcophagidae	B	N.bund	1m	1	Diptera
Sarcophaga nigriventris	Sarcophagidae	B	N.bund	30m	30	Diptera
Sarcophaga spp.	Sarcophagidae	B	N.bund	27f	27	Diptera
Sarcophaga subvicina	Sarcophagidae	B	N.bund	1m	1	Diptera
Sarcophaga teretirostris	Sarcophagidae	B	N.bund	4m.	4	Diptera
Sarcophaga variegata	Sarcophagidae	B	N.bund	3m	3	Diptera
Pherbellia cinerella	Sciomyzidae	B	N.bund	1f	1	Diptera
Helophilus pendulus	Syrphidae	B	N.bund	4f	4	Diptera
Pseudisobranchium subcyaneum	Bethylidae	B	N.bund	2m	2	Hymenoptera
Crabro cribrarius	Sphecidae	B	N.bund	2f	2	Hymenoptera
Vespula rufa	Vespidae	B	N.bund	1m2f	3	Hymenoptera
Hipparchia semele	Nymphalidae	B	N.bund	1m2f	3	Lepidoptera
Maniola jurtina	Nymphalidae	B	N.bund	1m	1	Lepidoptera
Pyronia tithonus	Nymphalidae	B	N.bund	7m1f	8	Lepidoptera
Chorthippus albomarginatus	Acridiidae	B	N.bund	1f	1	Orthoptera
Chorthippus brunneus	Acridiidae	B	N.bund	1m1f	2	Orthoptera
Adalia bipunctata	Coccinellidae	C/D	woodl.strip	1	1	Coleoptera
Harmonia axyridis	Coccinellidae	C/D	woodl.strip	1	1	Coleoptera
Psyllobora 16-punctata	Coccinellidae	C/D	woodl.strip	4	4	Coleoptera
Megasternum boletophagum	Hydrophilidae	C/D	woodl.strip	1	1	Coleoptera
Delia platura	Anthomyiidae	C/D	woodl.strip	85m1f	86	Diptera
Zaphne divisa	Anthomyiidae	C/D	woodl.strip	2m19f	21	Diptera
Calliphora vicina	Calliphoridae	C/D	woodl.strip	1m2f	3	Diptera
Lucilia caesar	Calliphoridae	C/D	woodl.strip	1m2f	3	Diptera
Melinda viridicyanea	Calliphoridae	C/D	woodl.strip	1m1f	2	Diptera
Pollenia angustigena	Calliphoridae	C/D	woodl.strip	18m15f	33	Diptera
Campsicnemus picticornis	Dolichopodidae	C/D	woodl.strip	1m	1	Diptera
Chrysotus gramineus	Dolichopodidae	C/D	woodl.strip	1m12f	13	Diptera
Dolichopus acuticornis	Dolichopodidae	C/D	woodl.strip	1m	1	Diptera
Dolichopus brevipennis	Dolichopodidae	C/D	woodl.strip	2m1f	3	Diptera
Dolichopus plumipes	Dolichopodidae	C/D	woodl.strip	1m	1	Diptera
Dolichopus unguatus	Dolichopodidae	C/D	woodl.strip	35m26f	61	Diptera
Hercostomus chrysozygos	Dolichopodidae	C/D	woodl.strip	3m	3	Diptera
Hercostomus gracilis	Dolichopodidae	C/D	woodl.strip	2m2f	4	Diptera
Medetera truncorum	Dolichopodidae	C/D	woodl.strip	3m6f	9	Diptera

**APPENDIX G: DIPTERA AND OTHER INVERTEBRATES IDENTIFIED FROM WATER TRAPS AT SIZEWELL
EMPTIED IN AUGUST 2007**

TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
Poecilobothrus nobilitatus	Dolichopodidae	C/D	woodl.strip	1m12f	13	Diptera
Suillia variegata	Heleomyzidae	C/D	woodl.strip	1f	1	Diptera
Platypalpus palliventris	Hybotidae	C/D	woodl.strip	2f	2	Diptera
Coenosia pumila	Muscidae	C/D	woodl.strip	15m11f	26	Diptera
Coenosia testacea	Muscidae	C/D	woodl.strip	1m1f	2	Diptera
Coenosia tigrina	Muscidae	C/D	woodl.strip	7m6f	13	Diptera
Graphomyia maculata	Muscidae	C/D	woodl.strip	2f	2	Diptera
Lispe pygmaea	Muscidae	C/D	woodl.strip	7m4f	11	Diptera
Lispe tentaculata	Muscidae	C/D	woodl.strip	1m5f	6	Diptera
Lispe uliginosa	Muscidae	C/D	woodl.strip	1f	1	Diptera
Muscina levida	Muscidae	C/D	woodl.strip	3m4f	7	Diptera
Muscina prolapsa	Muscidae	C/D	woodl.strip	1f	1	Diptera
Phaonia tuguriorum	Muscidae	C/D	woodl.strip	1f	1	Diptera
Sarcophaga aratrix	Sarcophagidae	C/D	woodl.strip	13m	13	Diptera
Sarcophaga carnaria	Sarcophagidae	C/D	woodl.strip	10m	10	Diptera
Sarcophaga crassimargo	Sarcophagidae	C/D	woodl.strip	1m	1	Diptera
Sarcophaga frenata	Sarcophagidae	C/D	woodl.strip	8m	8	Diptera
Sarcophaga haemorrhoea	Sarcophagidae	C/D	woodl.strip	4m	4	Diptera
Sarcophaga incisilobata	Sarcophagidae	C/D	woodl.strip	3m	3	Diptera
Sarcophaga melanura	Sarcophagidae	C/D	woodl.strip	18m	18	Diptera
Sarcophaga nigriventris	Sarcophagidae	C/D	woodl.strip	4m	4	Diptera
Sarcophaga spp.	Sarcophagidae	C/D	woodl.strip	15f	15	Diptera
Sarcophaga teretirostris	Sarcophagidae	C/D	woodl.strip	2m	2	Diptera
Pherbellia griseola	Sciomyzidae	C/D	woodl.strip	1m1f	2	Diptera
Eristalis nemorum	Syrphidae	C/D	woodl.strip	1m	1	Diptera
Helophilus hybridus	Syrphidae	C/D	woodl.strip	8m2f	10	Diptera
Hybomitra bimaculata	Tabanidae	C/D	woodl.strip	1m	1	Diptera
Lydella stabulans	Tachinidae	C/D	woodl.strip	1f	1	Diptera
Pales pavida	Tachinidae	C/D	woodl.strip	1m1f	2	Diptera
Philaenus lineatus	Cercopidae	C/D	woodl.strip	1f	1	Hemiptera
Aphrodes makarovi	Cicadellidae	C/D	woodl.strip	3f	3	Hemiptera
Cicadella viridis	Cicadellidae	C/D	woodl.strip	4f	4	Hemiptera
Delphax pulchellus	Delphacidae	C/D	woodl.strip	1m	1	Hemiptera
Dicranotropis hamata	Delphacidae	C/D	woodl.strip	5m	5	Hemiptera
Euidella speciosa	Delphacidae	C/D	woodl.strip	4m3f	7	Hemiptera
Kelisia ribauti sabulicola	Delphacidae	C/D	woodl.strip	2f	2	Hemiptera
Dolichovespula media	Vespidae	C/D	woodl.strip	1m	1	Hymenoptera
Vespula germanica	Vespidae	C/D	woodl.strip	1w	1	Hymenoptera
Vespula vulgaris	Vespidae	C/D	woodl.strip	5w	5	Hymenoptera
Armadillidium vulgare	Armadillidae	C/D	woodl.strip	2	2	Isopoda
Sylvicola cincta	Anisopodidae	F	Ride intersection	4f	4	Diptera
Delia platura	Anthomyiidae	F	Ride intersection	16m	16	Diptera
Machimus atricapillus	Asilidae	F	Ride intersection	4m1f	5	Diptera
Bellardia viarum	Calliphoridae	F	Ride intersection	5m9f	14	Diptera
Calliphora vomitoria	Calliphoridae	F	Ride intersection	1m	1	Diptera
Lucilia caesar	Calliphoridae	F	Ride intersection	1m3f	4	Diptera
Pollenia angustigena	Calliphoridae	F	Ride intersection	26m4f	30	Diptera
Chrysotus gramineus	Dolichopodidae	F	Ride intersection	4f	4	Diptera
Hercostomus nigripennis	Dolichopodidae	F	Ride intersection	4m14f	18	Diptera
Sciapus platypterus	Dolichopodidae	F	Ride intersection	1f	1	Diptera
Suillia affinis	Heleomyzidae	F	Ride intersection	3m3f	6	Diptera
Suillia variegata	Heleomyzidae	F	Ride intersection	1f	1	Diptera
Minettia rivosia	Lauxaniidae	F	Ride intersection	1f	1	Diptera
Azelia macquarti	Muscidae	F	Ride intersection	1f	1	Diptera
Coenosia tigrina	Muscidae	F	Ride intersection	1m	1	Diptera
Graphomyia maculata	Muscidae	F	Ride intersection	2f	2	Diptera
Helina evecta	Muscidae	F	Ride intersection	1m	1	Diptera

**APPENDIX G: DIPTERA AND OTHER INVERTEBRATES IDENTIFIED FROM WATER TRAPS AT SIZEWELL
EMPTIED IN AUGUST 2007**

TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
<i>Helina impuncta</i>	Muscidae	F	Ride intersection	1f	1	Diptera
<i>Mesembrina meridiana</i>	Muscidae	F	Ride intersection	1f	1	Diptera
<i>Muscina levida</i>	Muscidae	F	Ride intersection	2m2f	4	Diptera
<i>Neomyia cornicina</i>	Muscidae	F	Ride intersection	1f	1	Diptera
<i>Opetia nigra</i>	Opetiidae	F	Ride intersection	1m	1	Diptera
<i>Frauenfeldia rubricosa</i>	Rhinophoridae	F	Ride intersection	1m1f	2	Diptera
<i>Melanophora ruralis</i>	Rhinophoridae	F	Ride intersection	1m	1	Diptera
<i>Paykullia maculata</i>	Rhinophoridae	F	Ride intersection	1f	1	Diptera
<i>Rhinophora lepida</i>	Rhinophoridae	F	Ride intersection	367m159f	526	Diptera
<i>Nyctia halterata</i>	Sarcophagidae	F	Ride intersection	2m	2	Diptera
<i>Ptychoneura cylindrica</i>	Sarcophagidae	F	Ride intersection	1m	1	Diptera
<i>Sarcophaga aratrix</i>	Sarcophagidae	F	Ride intersection	1m	1	Diptera
<i>Sarcophaga carnaria</i>	Sarcophagidae	F	Ride intersection	7m1f	8	Diptera
<i>Sarcophaga haemorrhhoa</i>	Sarcophagidae	F	Ride intersection	1m	1	Diptera
<i>Sarcophaga incisilobata</i>	Sarcophagidae	F	Ride intersection	8m	8	Diptera
<i>Sarcophaga melanura</i>	Sarcophagidae	F	Ride intersection	4m2f	6	Diptera
<i>Sarcophaga scoparia</i>	Sarcophagidae	F	Ride intersection	1m	1	Diptera
<i>Sarcophaga subvicina</i>	Sarcophagidae	F	Ride intersection	2m	2	Diptera
<i>Sarcophaga vagans</i>	Sarcophagidae	F	Ride intersection	6m7f	13	Diptera
<i>Sarcophaga variegata</i>	Sarcophagidae	F	Ride intersection	2m	2	Diptera
<i>Trypetoptera punctulata</i>	Sciomyzidae	F	Ride intersection	1f	1	Diptera
<i>Chalcosyrphus nemorum</i>	Syrphidae	F	Ride intersection	3m	3	Diptera
<i>Eristalis nemorum</i>	Syrphidae	F	Ride intersection	1m1f	2	Diptera
<i>Eumerus strigatus</i>	Syrphidae	F	Ride intersection	1f	1	Diptera
<i>Helophilus pendulus</i>	Syrphidae	F	Ride intersection	10m19f	29	Diptera
<i>Helophilus trivittatus</i>	Syrphidae	F	Ride intersection	1m	1	Diptera
<i>Melanostoma mellinum</i>	Syrphidae	F	Ride intersection	1m	1	Diptera
<i>Sphaerophoria sp.</i>	Syrphidae	F	Ride intersection	1f	1	Diptera
<i>Hybomitra bimaculata</i>	Tabanidae	F	Ride intersection	1m	1	Diptera
<i>Dinera ?grisea</i>	Tachinidae	F	Ride intersection	2m6f		Diptera
<i>Meigenia mutabilis</i>	Tachinidae	F	Ride intersection	1m	1	Diptera
<i>Phasia pusilla</i>	Tachinidae	F	Ride intersection	1m	1	Diptera
<i>Phryxe vulgaris</i>	Tachinidae	F	Ride intersection	1	1	Diptera
<i>Siphona boreata</i>	Tachinidae	F	Ride intersection	1m	1	Diptera
<i>Tephritis vespertina</i>	Tephritidae	F	Ride intersection	1f	1	Diptera
<i>Aphrodes makarovi</i>	Cicadellidae	F	Ride intersection	1m	1	Hemiptera
<i>Recilia coronifera</i>	Cicadellidae	F	Ride intersection	2m	2	Hemiptera
<i>Plagiognathus arbustorum</i>	Miridae	F	Ride intersection	1f	1	Hemiptera
<i>Bombus lucorum</i>	Apidae	F	Ride intersection	13m10w	23	Hymenoptera
<i>Bombus pascuorum</i>	Apidae	F	Ride intersection	1m	1	Hymenoptera
<i>Formica ?fusca</i>	Formicidae	F	Ride intersection	2m	2	Hymenoptera
<i>Proctotrupes gravidator</i>	Proctotrupidae	F	Ride intersection	1f	1	Hymenoptera
<i>Cerceris arenaria</i>	Sphecidae	F	Ride intersection	4f	4	Hymenoptera
<i>Crabro cribrarius</i>	Sphecidae	F	Ride intersection	1m	1	Hymenoptera
<i>Vespa rufa</i>	Vespidae	F	Ride intersection	1m1w	2	Hymenoptera
<i>Oniscus asellus</i>	Oniscidae	F	Ride intersection	53		Isopoda
<i>Pyronia tithonus</i>	Nymphalidae	F	Ride intersection	1m	1	Lepidoptera
<i>Sympetrum striolatum</i>	Libellulidae	F	Ride intersection	3f	3	Odonata
<i>Meligethes aeneus</i>	Nitidulidae	G	Turf Pits	1	1	Coleoptera
<i>Aphodius zenkeri</i>	Scarabaeidae	G	Turf Pits	1	1	Coleoptera
<i>Silpha tristis</i>	Silphidae	G	Turf Pits	1	1	Coleoptera
<i>Philonthus marginatus</i>	Staphylinidae	G	Turf Pits	1f	1	Coleoptera
<i>Forficula auricularia</i>	Forficulidae	G	Turf Pits	1f	1	Dermaptera
<i>Sylvicola cincta</i>	Anisopodidae	G	Turf Pits	6f	6	Diptera
<i>Bellardia viarum</i>	Calliphoridae	G	Turf Pits	1m5f	6	Diptera
<i>Aphrodes makarovi</i>	Cicadellidae	G	Turf Pits	4m3f	7	Diptera
<i>Chrysotus gramineus</i>	Dolichopodidae	G	Turf Pits	2f	2	Diptera

**APPENDIX G: DIPTERA AND OTHER INVERTEBRATES IDENTIFIED FROM WATER TRAPS AT SIZEWELL
EMPTIED IN AUGUST 2007**

TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
<i>Dolichopus urbanus</i>	Dolichopodidae	G	Turf Pits	1f	1	Diptera
<i>Hercostomus aerosus</i>	Dolichopodidae	G	Turf Pits	5f	5	Diptera
<i>Hercostomus nigripennis</i>	Dolichopodidae	G	Turf Pits	1f	1	Diptera
<i>Suillia variegata</i>	Heleomyzidae	G	Turf Pits	1f		Diptera
<i>Erioptera lutea</i>	Limoniidae	G	Turf Pits	54m23f	77	Diptera
<i>Helius flavus</i>	Limoniidae	G	Turf Pits	1m1f	2	Diptera
<i>Limonia nubeculosa</i>	Limoniidae	G	Turf Pits	1f	1	Diptera
<i>Molophilus medius</i>	Limoniidae	G	Turf Pits	1m3f	3	Diptera
<i>Ormosia ?depilata</i>	Limoniidae	G	Turf Pits	1f	1	Diptera
<i>Phylidorea ferruginea</i>	Limoniidae	G	Turf Pits	2f	2	Diptera
<i>Eudasyphora cyanella</i>	Muscidae	G	Turf Pits	1m	1	Diptera
<i>Phaonia rufiventris</i>	Muscidae	G	Turf Pits	1f	1	Diptera
<i>Chrysopilus cristatus</i>	Rhagionidae	G	Turf Pits	1f	1	Diptera
<i>Paykullia maculata</i>	Rhinophoridae	G	turf pits	1m1f	2	Diptera
<i>Rhinophora lepida</i>	Rhinophoridae	G	Turf Pits	11m3f	14	Diptera
<i>Renocera pallida</i>	Sciomyzidae	G	turf pits	1m	1	Diptera
<i>Helophilus pendulus</i>	Syrphidae	G	Turf Pits	5m6f	11	Diptera
<i>Chalcosyrphus nemorum</i>	Syrphidae	G	Turf Pits	2m	2	Diptera
<i>Platycheirus albimanus</i>	Syrphidae	G	Turf Pits	1m	1	Diptera
<i>Bombus lucorum</i>	Apidae	G	Turf Pits	1m	1	Hymenoptera
<i>Vespa rufa</i>	Vespidae	G	Turf Pits	1w	1	Hymenoptera
<i>Oniscus asellus</i>	Oniscidae	G	Turf Pits	11	11	Isopoda
<i>Philoscia muscorum</i>	Philosciidae	G	Turf Pits	1	1	Isopoda
<i>Agrotis puta</i>	Noctuidae	G	Turf Pits	1f	1	Lepidoptera
<i>Meconema thalassinum</i>	Tettigoniidae	G	Turf Pits	1f	1	Orthoptera
<i>Hylurgops palliatus</i>	Scolytidae	H	Nursery Covert	2	2	Coleoptera
<i>Delia platura</i>	Anthomyiidae	H	Nursery Covert	1m	1	Diptera
<i>Hylemyia vagans</i>	Anthomyiidae	H	Nursery Covert	5f	5	Diptera
<i>Neotamus cyanurus</i>	Asilidae	H	Nursery Covert	1f	1	Diptera
<i>Dilophus febrilis</i>	Bibionidae	H	Nursery Covert	1f	1	Diptera
<i>Bellardia viarum</i>	Calliphoridae	H	Nursery Covert	1m	1	Diptera
<i>Melanomyia nana</i>	Calliphoridae	H	Nursery Covert	1m1f	2	Diptera
<i>Chrysotus gramineus</i>	Dolichopodidae	H	Nursery Covert	1m2f	3	Diptera
<i>Hercostomus nigripennis</i>	Dolichopodidae	H	Nursery Covert	7f	7	Diptera
<i>Sciapus platypterus</i>	Dolichopodidae	H	Nursery Covert	4f	4	Diptera
<i>Suillia affinis</i>	Heleomyzidae	H	Nursery Covert	1m	1	Diptera
<i>Coenosia tigrina</i>	Muscidae	H	Nursery Covert	1m1f	2	Diptera
<i>Muscina levida</i>	Muscidae	H	Nursery Covert	1m1f	2	Diptera
<i>Phaonia tuguriorum</i>	Muscidae	H	Nursery Covert	1m	1	Diptera
<i>Paykullia maculata</i>	Rhinophoridae	H	Nursery Covert	1m1f	2	Diptera
<i>Rhinophora lepida</i>	Rhinophoridae	H	Nursery Covert	4m3f	7	Diptera
<i>Sarcophaga carnaria</i>	Sarcophagidae	H	Nursery Covert	1m	1	Diptera
<i>Sarcophaga melanura</i>	Sarcophagidae	H	Nursery Covert	1f	1	Diptera
<i>Stratioborborus nitidus</i>	Sphaeroceridae	H	Nursery Covert	1m	1	Diptera
<i>Pachygaster leachi</i>	Stratiomyiidae	H	Nursery Covert	1f	1	Diptera
<i>Helophilus pendulus</i>	Syrphidae	H	Nursery Covert	7m4f	11	Diptera
<i>Melanostoma scalare</i>	Syrphidae	H	Nursery Covert	1f	1	Diptera
<i>Platycheirus albimanus</i>	Syrphidae	H	Nursery Covert	1f	1	Diptera
<i>Sericomyia silentis</i>	Syrphidae	H	Nursery Covert	1m	1	Diptera
<i>Syrphus ribesii</i>	Syrphidae	H	Nursery Covert	1m	1	Diptera
<i>Loewia foeda</i>	Tachinidae	H	Nursery Covert	3f	3	Diptera
<i>Aphrodes makarovi</i>	Cicadellidae	H	Nursery Covert	1f	1	Hemiptera
<i>Diprion ?pini</i>	Diprionidae	H	Nursery Covert	1m	1	Hymenoptera
<i>Porcellio scaber</i>	Porcellidae	H	Nursery Covert	11	11	Isopoda
<i>Calathus fuscipes</i>	Carabidae	I	nr.power sta.	3	3	Coleoptera
<i>Sitona lineatus</i>	Curculionidae	I	nr.power sta.	2	2	Coleoptera
<i>Oedemera lurida</i>	Oedemeridae	I	nr.power sta.	7	7	Coleoptera

**APPENDIX G: DIPTERA AND OTHER INVERTEBRATES IDENTIFIED FROM WATER TRAPS AT SIZEWELL
EMPTIED IN AUGUST 2007**

TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
Oedemera nobilis	Oedemeridae		nr.power sta.	1f	1	Coleoptera
Delia platura	Anthomyiidae		nr.power sta.	21m9f	30	Diptera
Machimus atricapillus	Asilidae		nr.power sta.	1m	1	Diptera
Philonicus albiceps	Asilidae		Phragmites fen	4m	4	Diptera
Bellardia viarum	Calliphoridae		nr.power sta.	2m	2	Diptera
Melinda gentilis	Calliphoridae		nr.power sta.	2m	2	Diptera
Pollenia angustigena	Calliphoridae		nr.power sta.	410m85f	495	Diptera
Dolichopus unguatus	Dolichopodidae		nr.power sta.	1m	1	Diptera
Medetera truncorum	Dolichopodidae		nr.power sta.	11m25f	36	Diptera
Suillia affinis	Heleomyzidae		nr.power sta.	1f	1	Diptera
Minettia rivos	Lauxaniidae		nr.power sta.	2m2f	4	Diptera
Coenosia rufipalpis	Muscidae		nr.power sta.	1f	1	Diptera
Coenosia testacea	Muscidae		nr.power sta.	1m	1	Diptera
Coenosia tigrina	Muscidae		nr.power sta.	1m2f	3	Diptera
Helina confinis	Muscidae		nr.power sta.	1m2f	3	Diptera
Helina evecta	Muscidae		nr.power sta.	79m5f	84	Diptera
Helina reversio	Muscidae		nr.power sta.	7m	7	Diptera
Helina trivittata	Muscidae		nr.power sta.	3f	3	Diptera
Muscina levida	Muscidae		nr.power sta.	1f	1	Diptera
Phaonia tuguriorum	Muscidae		nr.power sta.	3m2f	5	Diptera
Phaonia viarum	Muscidae		nr.power sta.	1m	1	Diptera
Schoenomyza litorella	Muscidae		nr.power sta.	2f	2	Diptera
Rhinophora lepida	Rhinophoridae		nr.power sta.	22m14f	36	Diptera
Metopia campestris	Sarcophagidae		nr.power sta.	1f	1	Diptera
Sarcophaga aratrix	Sarcophagidae		nr.power sta.	8m	8	Diptera
Sarcophaga carnaria	Sarcophagidae		nr.power sta.	1m	1	Diptera
Sarcophaga crassimargo	Sarcophagidae		nr.power sta.	4m	4	Diptera
Sarcophaga frenata	Sarcophagidae		nr.power sta.	10m1f	11	Diptera
Sarcophaga haemorrhoea	Sarcophagidae		nr.power sta.	1m	1	Diptera
Sarcophaga incisilobata	Sarcophagidae		nr.power sta.	7m	7	Diptera
Sarcophaga nigriventris	Sarcophagidae		nr.power sta.	1m	1	Diptera
Sarcophaga spp.	Sarcophagidae		nr.power sta.	10f	10	Diptera
Sarcophaga variegata	Sarcophagidae		nr.power sta.	2m	2	Diptera
Eristalinus sepulchralis	Syrphidae		nr.power sta.	1f	1	Diptera
Eristalis nemorum	Syrphidae		nr.power sta.	2m1f	3	Diptera
Helophilus pendulus	Syrphidae		nr.power sta.	3m1f	4	Diptera
Melanostoma mellinum	Syrphidae		nr.power sta.	1m2f	3	Diptera
Haematopota pluvialis	Tabanidae		nr.power sta.	1f	1	Diptera
Lydella grisescens	Tachinidae		nr.power sta.	1f	1	Diptera
Pales pavid	Tachinidae		nr.power sta.	1m	1	Diptera
Phryxe vulgaris	Tachinidae		nr.power sta.	1	1	Diptera
Thelaira solivaga	Tachinidae		nr.power sta.	4m3f	7	Diptera
Gampsocoris punctipes	Berytinidae		nr.power sta.	1	1	Hemiptera
Tiphia femorata	Tiphiidae		nr.power sta.	1f	1	Hymenoptera
Thymelicus sylvestris	Hesperiidae		nr.power sta.	1m	1	Lepidoptera
Sympetrum danae	Libellulidae		nr.power sta.	1f	1	Odonata
Chorthippus albomarginatus	Acridiidae		nr.power sta.	1m1f	2	Orthoptera
Chorthippus brunneus	Acridiidae		nr.power sta.	2m	2	Orthoptera

**APPENDIX H: INVERTEBRATES IDENTIFIED FROM MALAISE TRAP IN *PHRAGMITES* FEN (SAMPLE SITE J) AT
SIZEWELL IN 2007**

Ja = July 2007, Jb = August 2007

TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
Cantharis pallida	Cantharidae	Ja	Phragmites fen	1f	1	Coleoptera
Cantharis thoracica	Cantharidae	Ja	Phragmites fen	64	64	Coleoptera
Silis ruficollis	Cantharidae	Ja	Phragmites fen	38	38	Coleoptera
Anthocomus rufus	Melyridae	Ja	Phragmites fen	1	1	Coleoptera
Ocypus olens	Staphylinidae	Ja	Phragmites fen	1	1	Coleoptera
Sylvicola cincta	Anisopodidae	Ja	Phragmites fen	1m3f	4	Diptera
Sylvicola punctata	Anisopodidae	Ja	Phragmites fen	1f	1	Diptera
Delia platura	Anthomyiidae	Ja	Phragmites fen	9m3f	12	Diptera
Hydrophoria ruralis	Anthomyiidae	Ja	Phragmites fen	1f	1	Diptera
Hylemyia vagans	Anthomyiidae	Ja	Phragmites fen	2f	2	Diptera
Pegomyia bicolor	Anthomyiidae	Ja	Phragmites fen	1m		Diptera
Zaphne caudata	Anthomyiidae	Ja	Phragmites fen	1m	1	Diptera
Machimus atricapillus	Asilidae	Ja	Phragmites fen	1m	1	Diptera
Asteia amoena	Asteiidae	Ja	Phragmites fen	1f	1	Diptera
Bellardia viarum	Calliphoridae	Ja	Phragmites fen	2m	2	Diptera
Calliphora vicina	Calliphoridae	Ja	Phragmites fen	1m	1	Diptera
Lucilia caesar	Calliphoridae	Ja	Phragmites fen	1f	1	Diptera
Melanomyia nana	Calliphoridae	Ja	Phragmites fen	1f	1	Diptera
Melinda viridicyanea	Calliphoridae	Ja	Phragmites fen	1m1f	2	Diptera
Pollenia angustigena	Calliphoridae	Ja	Phragmites fen	2m5f	7	Diptera
Protocalliphora sordida	Calliphoridae	Ja	Phragmites fen	1m	1	Diptera
Campichoeta punctum	Campichoetidae	Ja	Phragmites fen	1f	1	Diptera
Chaoborus pallidus	Chaoboridae	Ja	Phragmites fen	17	17	Diptera
Calamoncosis minima	Chloropidae	Ja	Phragmites fen	1f	1	Diptera
Cryptonevra flavitarsis	Chloropidae	Ja	Phragmites fen	5f	5	Diptera
Lipara lucens	Chloropidae	Ja	Phragmites fen	8m1f	9	Diptera
Lipara rufitarsis	Chloropidae	Ja	Phragmites fen	3f	2	Diptera
Chyromyia brittanica	Chyromyiidae	Ja	Phragmites fen	2m	2	Diptera
Propylea 14-guttata	Coccinellidae	Ja	Phragmites fen	1	1	Diptera
Diastata adusta	Diastatidae	Ja	Phragmites fen	3m2f	5	Diptera
Achalcus flavicollis gp.	Dolichopodidae	Ja	Phragmites fen	1m	1	Diptera
Anepsiomyia flaviventris	Dolichopodidae	Ja	Phragmites fen	1m1f	1	Diptera
Argyra diaphana	Dolichopodidae	Ja	Phragmites fen	3m1f	4	Diptera
Argyra perplexa	Dolichopodidae	Ja	Phragmites fen	4m4f	8	Diptera
Argyra vestita	Dolichopodidae	Ja	Phragmites fen	1m	1	Diptera
Bathycranium bicolorellum	Dolichopodidae	Ja	Phragmites fen	3m	3	Diptera
Campsicnemus curvipes	Dolichopodidae	Ja	Phragmites fen	8m3f	7	Diptera
Campsicnemus scambus	Dolichopodidae	Ja	Phragmites fen	5m	5	Diptera
Chrysotimus molliculus	Dolichopodidae	Ja	Phragmites fen	3m1f	4	Diptera
Chrysotus cilipes	Dolichopodidae	Ja	Phragmites fen	2f	2	Diptera
Chrysotus gramineus	Dolichopodidae	Ja	Phragmites fen	10m18f	28	Diptera
Chrysotus neglectus	Dolichopodidae	Ja	Phragmites fen	1m1f	2	Diptera
Dolichopus exiguus	Dolichopodidae	Ja	Phragmites fen	1m	1	Diptera
Dolichopus latelimbatus	Dolichopodidae	Ja	Phragmites fen	4m	4	Diptera
Dolichopus lepidus	Dolichopodidae	Ja	Phragmites fen	1f	1	Diptera
Dolichopus linearis	Dolichopodidae	Ja	Phragmites fen	4m	4	Diptera
Dolichopus longitarsis	Dolichopodidae	Ja	Phragmites fen	1m	1	Diptera
Dolichopus nubilus	Dolichopodidae	Ja	Phragmites fen	1m4f	5	Diptera
Dolichopus pennatus	Dolichopodidae	Ja	Phragmites fen	1m	1	Diptera
Dolichopus picipes	Dolichopodidae	Ja	Phragmites fen	1m	1	Diptera
Dolichopus popularis	Dolichopodidae	Ja	Phragmites fen	1m	1	Diptera
Dolichopus rupestris	Dolichopodidae	Ja	Phragmites fen	1f	1	Diptera
Dolichopus unguatus	Dolichopodidae	Ja	Phragmites fen	127m51f	178	Diptera
Dolichopus urbanus	Dolichopodidae	Ja	Phragmites fen	1m	1	Diptera
Dolichopus wahlbergi	Dolichopodidae	Ja	Phragmites fen	3m2f	5	Diptera
Drapetis ephippiata	Dolichopodidae	Ja	Phragmites fen	5f	5	Diptera
Hercostomus aerosus	Dolichopodidae	Ja	Phragmites fen	191m73f	264	Diptera
Hercostomus assimilis	Dolichopodidae	Ja	Phragmites fen	57m16f	73	Diptera
Hercostomus chalybeus	Dolichopodidae	Ja	Phragmites fen	16m1f	17	Diptera

**APPENDIX H: INVERTEBRATES IDENTIFIED FROM MALAISE TRAP IN *PHRAGMITES* FEN (SAMPLE SITE J) AT
SIZEWELL IN 2007**

Ja = July 2007, Jb = August 2007

TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
Hercostomus chrysozygos	Dolichopodidae	Ja	Phragmites fen	1f	1	Diptera
Hercostomus cupreus	Dolichopodidae	Ja	Phragmites fen	5m8f	13	Diptera
Hercostomus germanus	Dolichopodidae	Ja	Phragmites fen	1m	1	Diptera
Hercostomus nanus	Dolichopodidae	Ja	Phragmites fen	1m	1	Diptera
Lamprochromus elegans	Dolichopodidae	Ja	Phragmites fen	1m1f	2	Diptera
Medetera truncorum	Dolichopodidae	Ja	Phragmites fen	33m4f	37	Diptera
Poecilobothrus nobilitatus	Dolichopodidae	Ja	Phragmites fen	2m1f	2	Diptera
Rhaphium caliginosum	Dolichopodidae	Ja	Phragmites fen	17m5f	22	Diptera
Rhaphium monotrichum	Dolichopodidae	Ja	Phragmites fen	1m	1	Diptera
Sciapus platypterus	Dolichopodidae	Ja	Phragmites fen	13m8f	21	Diptera
Sympycnus desoutteri	Dolichopodidae	Ja	Phragmites fen	1m	1	Diptera
Syntormon denticulatus	Dolichopodidae	Ja	Phragmites fen	3m1f	3	Diptera
Teuchophorus spinigerellus	Dolichopodidae	Ja	Phragmites fen	4m4f	8	Diptera
Thrypticus nigricauda	Dolichopodidae	Ja	Phragmites fen	1f	1	Diptera
Xanthochlorus tenellus	Dolichopodidae	Ja	Phragmites fen	1m6f	7	Diptera
Empis livida	Empididae	Ja	Phragmites fen	2m	2	Diptera
Fannia canicularis	Fanniidae	Ja	Phragmites fen	4f	4	Diptera
Fannia lustrator	Fanniidae	Ja	Phragmites fen	1m	1	Diptera
Heteromyza commixta	Heleomyzidae	Ja	Phragmites fen	3f	3	Diptera
Tephrochlamys rufiventris	Heleomyzidae	Ja	Phragmites fen	2m3f	5	Diptera
Drapetis ehippiata	Hybotidae	Ja	Phragmites fen	3f	3	Diptera
Leptopeza flavipes	Hybotidae	Ja	Phragmites fen	1m12f	17	Diptera
Macrorrhyncha flava	Keroplastidae	Ja	Phragmites fen	2m	2	Diptera
Meiosimyza ?decipiens	Lauxaniidae	Ja	Phragmites fen	2m3f	5	Diptera
Minettia longipennis	Lauxaniidae	Ja	Phragmites fen	1m	1	Diptera
Minettia rivosa	Lauxaniidae	Ja	Phragmites fen	2m1f	3	Diptera
Toxoneura muliebris	Lauxaniidae	Ja	Phragmites fen	2f	2	Diptera
Austrolimnophila ochracea	Limoniidae	Ja	Phragmites fen	1f	1	Diptera
Brachylimnophila nemoralis	Limoniidae	Ja	Phragmites fen	6m15f	21	Diptera
Dicranomyia autumnalis	Limoniidae	Ja	Phragmites fen	4m10f	14	Diptera
Dicranomyia chorea	Limoniidae	Ja	Phragmites fen	1f	1	Diptera
Dicranomyia lucida	Limoniidae	Ja	Phragmites fen	1m2f	3	Diptera
Dicranomyia modesta	Limoniidae	Ja	Phragmites fen	3m6f	9	Diptera
Erioptera fuscipennis	Limoniidae	Ja	Phragmites fen	32m28f	60	Diptera
Erioptera fusculentata	Limoniidae	Ja	Phragmites fen	1m	1	Diptera
Erioptera lutea	Limoniidae	Ja	Phragmites fen	9m6f	15	Diptera
Gonomyia ?dentata	Limoniidae	Ja	Phragmites fen	3f	3	Diptera
Ilisia maculata	Limoniidae	Ja	Phragmites fen	6f	6	Diptera
Limonia nubeculosa	Limoniidae	Ja	Phragmites fen	2m1f	3	Diptera
Metalimnobia quadrinotata	Limoniidae	Ja	Phragmites fen	1m1f	2	Diptera
Molophilus medius	Limoniidae	Ja	Phragmites fen	2m15f	17	Diptera
Molophilus pleuralis	Limoniidae	Ja	Phragmites fen	1m	1	Diptera
Ormosia nodulosa	Limoniidae	Ja	Phragmites fen	3m	2	Diptera
Phylidorea ferruginea	Limoniidae	Ja	Phragmites fen	39m11f	50	Diptera
Phylidorea fulvonervosa	Limoniidae	Ja	Phragmites fen	3m3f	6	Diptera
Pilaria discicollis	Limoniidae	Ja	Phragmites fen	8f	2	Diptera
Cheilotrichia cinerascens	Limoniidae	Ja	Phragmites fen	1f	1	Diptera
Pseudolimnophila lucorum	Limoniidae	Ja	Phragmites fen	4f	4	Diptera
Pseudolimnophila sepium	Limoniidae	Ja	Phragmites fen	4f	4	Diptera
Rhipidia maculata	Limoniidae	Ja	Phragmites fen	3f	3	Diptera
Symplecta stictica	Limoniidae	Ja	Phragmites fen	2m5f	7	Diptera
Lonchoptera lutea	Lonchopteridae	Ja	Phragmites fen	1m13f	14	Diptera
Calobata cibaria	Micropezidae	Ja	Phragmites fen	8f	8	Diptera
Azelia cilipes	Muscidae	Ja	Phragmites fen	2m	2	Diptera
Azelia macquarti	Muscidae	Ja	Phragmites fen	4m5f	9	Diptera
Azelia zetterstedti	Muscidae	Ja	Phragmites fen	2m	2	Diptera
Brontaea humilis	Muscidae	Ja	Phragmites fen	1m	1	Diptera
Coenosia infantula	Muscidae	Ja	Phragmites fen	1f	1	Diptera
Coenosia mollicula	Muscidae	Ja	Phragmites fen	11m3f	14	Diptera
Coenosia pumila	Muscidae	Ja	Phragmites fen	1m2f	3	Diptera

**APPENDIX H: INVERTEBRATES IDENTIFIED FROM MALAISE TRAP IN *PHRAGMITES* FEN (SAMPLE SITE J) AT
SIZEWELL IN 2007**

Ja = July 2007, Jb = August 2007

TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
Coenosia rufipalpis	Muscidae	Ja	Phragmites fen	5f	5	Diptera
Coenosia testacea	Muscidae	Ja	Phragmites fen	29m6f	35	Diptera
Graphomyia maculata	Muscidae	Ja	Phragmites fen	2m2f	4	Diptera
Haematobosca stimulans	Muscidae	Ja	Phragmites fen	1m	1	Diptera
Hebecnema nigra	Muscidae	Ja	Phragmites fen	9m19f	28	Diptera
Hebecnema umbratica	Muscidae	Ja	Phragmites fen	1m	1	Diptera
Hebecnema vespertina	Muscidae	Ja	Phragmites fen	9m12f	21	Diptera
Helina reversio	Muscidae	Ja	Phragmites fen	1m	1	Diptera
Hydrotaea irritans	Muscidae	Ja	Phragmites fen	33m76f	110	Diptera
Hydrotaea militaris	Muscidae	Ja	Phragmites fen	1f	1	Diptera
Lispe pygmaea	Muscidae	Ja	Phragmites fen	1m1f	2	Diptera
Lispocephala alma	Muscidae	Ja	Phragmites fen	1m1f	2	Diptera
Lispocephala erythrocerata	Muscidae	Ja	Phragmites fen	5m3f	8	Diptera
Mesembrina meridiana	Muscidae	Ja	Phragmites fen	4m	4	Diptera
Morellia simplex	Muscidae	Ja	Phragmites fen	14m22f	36	Diptera
Musca autumnalis	Muscidae	Ja	Phragmites fen	2f	2	Diptera
Muscina levida	Muscidae	Ja	Phragmites fen	7f	6	Diptera
Muscina prolapsa	Muscidae	Ja	Phragmites fen	1f	1	Diptera
Mydaea urbana	Muscidae	Ja	Phragmites fen	5f	5	Diptera
Phaonia atriceps	Muscidae	Ja	Phragmites fen	7m	7	Diptera
Phaonia errans	Muscidae	Ja	Phragmites fen	1m1f	2	Diptera
Phaonia falleni	Muscidae	Ja	Phragmites fen	1f	1	Diptera
Phaonia fuscata	Muscidae	Ja	Phragmites fen	1m	1	Diptera
Phaonia halterata	Muscidae	Ja	Phragmites fen	2m5f	7	Diptera
Phaonia tuguriorum	Muscidae	Ja	Phragmites fen	2m1f	3	Diptera
Polietes domitor	Muscidae	Ja	Phragmites fen	2m1f	3	Diptera
Polietes lardaria	Muscidae	Ja	Phragmites fen	1f	1	Diptera
Schoenomyza litorella	Muscidae	Ja	Phragmites fen	1f	1	Diptera
Spanochaeta dorsalis	Muscidae	Ja	Phragmites fen	17m11f	28	Diptera
Geomyza tripunctata	Opomyzidae	Ja	Phragmites fen	2m5f	4	Diptera
Opomyza petrei	Opomyzidae	Ja	Phragmites fen	1m	1	Diptera
Paloptera saltuum	Palopteridae	Ja	Phragmites fen	3f	3	Diptera
Toxoneura muliebris	Palopteridae	Ja	Phragmites fen	1f	1	Diptera
Psila fimetaria	Psilidae	Ja	Phragmites fen	1f	1	Diptera
Ptychoptera albimana	Ptychopteridae	Ja	Phragmites fen	1m	1	Diptera
Ptychoptera contaminata	Ptychopteridae	Ja	Phragmites fen	2m1f	3	Diptera
Ptychoptera minuta	Ptychopteridae	Ja	Phragmites fen	15m2f	17	Diptera
Chrysopilus cristatus	Rhagionidae	Ja	Phragmites fen	1m7f	8	Diptera
Rhagio lineola	Rhagionidae	Ja	Phragmites fen	1m2f	3	Diptera
Rhagio strigosus	Rhagionidae	Ja	Phragmites fen	1f	1	Diptera
Sarcophaga carnaria	Sarcophagidae	Ja	Phragmites fen	1m1f	2	Diptera
Sarcophaga melanura	Sarcophagidae	Ja	Phragmites fen	4f	4	Diptera
Sarcophaga spp.	Sarcophagidae	Ja	Phragmites fen	6f	6	Diptera
Chaetosa punctipes	Scathophagidae	Ja	Phragmites fen	1f	1	Diptera
Cleigastra apicalis	Scathophagidae	Ja	Phragmites fen	6m9f	15	Diptera
Cordilurina albipes	Scathophagidae	Ja	Phragmites fen	1m2f	3	Diptera
Megaphthalma pallidum	Scathophagidae	Ja	Phragmites fen	2m	2	Diptera
Norellisoma spinimanum	Scathophagidae	Ja	Phragmites fen	3m3f	6	Diptera
Scathophaga furcata	Scathophagidae	Ja	Phragmites fen	3m5f	8	Diptera
Scathophaga inquinata	Scathophagidae	Ja	Phragmites fen	41m6f	46	Diptera
Scathophaga suilla	Scathophagidae	Ja	Phragmites fen	37m9f	26	Diptera
Trichopalpus fraternus	Scathophagidae	Ja	Phragmites fen	1f	1	Diptera
Antichaeta brevipennis	Sciomyzidae	Ja	Phragmites fen	2m2f	4	Diptera
Elgiva cucularia	Sciomyzidae	Ja	Phragmites fen	2m	2	Diptera
Elgiva rufa	Sciomyzidae	Ja	Phragmites fen	1f	1	Diptera
Hydromyia dorsalis	Sciomyzidae	Ja	Phragmites fen	1m	1	Diptera
Limnia unguicornis.	Sciomyzidae	Ja	Phragmites fen	9m6f	15	Diptera
Pherbellia dorsata	Sciomyzidae	Ja	Phragmites fen	1f	1	Diptera
Pherbellia griseola	Sciomyzidae	Ja	Phragmites fen	1m	1	Diptera

**APPENDIX H: INVERTEBRATES IDENTIFIED FROM MALAISE TRAP IN *PHRAGMITES* FEN (SAMPLE SITE J) AT
SIZEWELL IN 2007**

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TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
Pherbellia pallidiventris	Sciomyzidae	Ja	Phragmites fen	1f	1	Diptera
Pherbellia schoenherri	Sciomyzidae	Ja	Phragmites fen	2f	2	Diptera
Pherbellia ventralis	Sciomyzidae	Ja	Phragmites fen	1m2f	3	Diptera
Pteromicra angustipennis	Sciomyzidae	Ja	Phragmites fen	3m	3	Diptera
Renocera pallida	Sciomyzidae	Ja	Phragmites fen	1m	1	Diptera
Tetanocera arrogans	Sciomyzidae	Ja	Phragmites fen	1m1f	2	Diptera
Sepsis punctum	Sepsidae	Ja	Phragmites fen	2m1f	3	Diptera
Coproica ferruginosa	Sphaeroceridae	Ja	Phragmites fen	1m	1	Diptera
Lotophila atra	Sphaeroceridae	Ja	Phragmites fen	1m2f	3	Diptera
Beris vallata	Stratiomyiidae	Ja	Phragmites fen	2m7f	9	Diptera
Chloromyia formosa	Stratiomyiidae	Ja	Phragmites fen	1f	1	Diptera
Microchrysa flavicornis	Stratiomyiidae	Ja	Phragmites fen	4f	4	Diptera
Odontomyia ornata	Stratiomyiidae	Ja	Phragmites fen	4m	4	Diptera
Oplodontha viridula	Stratiomyiidae	Ja	Phragmites fen	2f	2	Diptera
Sargus iridatus	Stratiomyiidae	Ja	Phragmites fen	1m1f	2	Diptera
Chalcosyrphus nemorum	Syrphidae	Ja	Phragmites fen	1f	1	Diptera
Cheilosia fraterna	Syrphidae	Ja	Phragmites fen	1f	1	Diptera
Episyrphus balteatus	Syrphidae	Ja	Phragmites fen	32m32f	64	Diptera
Eristalis intricarius	Syrphidae	Ja	Phragmites fen	1m1f	2	Diptera
Eristalis pertinax	Syrphidae	Ja	Phragmites fen	1f	1	Diptera
Eupeodes luniger	Syrphidae	Ja	Phragmites fen	1f	1	Diptera
Helophilus pendulus	Syrphidae	Ja	Phragmites fen	5f	5	Diptera
Melanostoma mellinum	Syrphidae	Ja	Phragmites fen	8m9f	17	Diptera
Melanostoma scalare	Syrphidae	Ja	Phragmites fen	1m10f	11	Diptera
Meliscaeva auricollis	Syrphidae	Ja	Phragmites fen	23m10f	33	Diptera
Neoascia podagrica	Syrphidae	Ja	Phragmites fen	1f	1	Diptera
Neoascia tenur	Syrphidae	Ja	Phragmites fen	4m5f	9	Diptera
Platycheirus albimanus	Syrphidae	Ja	Phragmites fen	4m45	8	Diptera
Platycheirus clypeatus	Syrphidae	Ja	Phragmites fen	1f	1	Diptera
Platycheirus fulviventris	Syrphidae	Ja	Phragmites fen	5m9f	14	Diptera
Platycheirus scutatus	Syrphidae	Ja	Phragmites fen	1f	1	Diptera
Scaeva selenitica	Syrphidae	Ja	Phragmites fen	1m	1	Diptera
Sericomyia silentis	Syrphidae	Ja	Phragmites fen	2m1f	3	Diptera
Syrphus ribesii	Syrphidae	Ja	Phragmites fen	3m10f	13	Diptera
Syrphus vitripennis	Syrphidae	Ja	Phragmites fen	1f	1	Diptera
Tropidia scita	Syrphidae	Ja	Phragmites fen	1m5f	6	Diptera
Xylota sylvarum	Syrphidae	Ja	Phragmites fen	4f	4	Diptera
Chrysops caecutiens	Tabanidae	Ja	Phragmites fen	2m	2	Diptera
Chrysops relictus	Tabanidae	Ja	Phragmites fen	3m	3	Diptera
Haematopota pluvialis	Tabanidae	Ja	Phragmites fen	1m13f	14	Diptera
Hybomitra bimaculata	Tabanidae	Ja	Phragmites fen	5m3f	8	Diptera
Hybomitra ciureai	Tabanidae	Ja	Phragmites fen	4m	4	Diptera
Tabanus maculicornis	Tabanidae	Ja	Phragmites fen	3f	3	Diptera
Blepharomyia pagana	Tachinidae	Ja	Phragmites fen	2f	2	Diptera
Epicampocera succincta	Tachinidae	Ja	Phragmites fen	2f	2	Diptera
Macquartia grisea	Tachinidae	Ja	Phragmites fen	3f	3	Diptera
Meigenia mutabilis	Tachinidae	Ja	Phragmites fen	1m	1	Diptera
Phryxe nemea	Tachinidae	Ja	Phragmites fen	2f	2	Diptera
Phryxe vulgaris	Tachinidae	Ja	Phragmites fen	1f	1	Diptera
Phytomyptera nigrina	Tachinidae	Ja	Phragmites fen	1f	1	Diptera
Siphona cristata	Tachinidae	Ja	Phragmites fen	353	353	Diptera
Myioleia caesio	Tephritidae	Ja	Phragmites fen	3f	3	Diptera
Nephrotoma scurra	Tipulidae	Ja	Phragmites fen	2f	2	Diptera
Tipula meigeni	Tipulidae	Ja	Phragmites fen	1m1f	2	Diptera
Tipula nigra	Tipulidae	Ja	Phragmites fen	46m	46	Diptera
Tipula oleracea	Tipulidae	Ja	Phragmites fen	2f	2	Diptera
Tipula unca	Tipulidae	Ja	Phragmites fen	1m	1	Diptera
Ceroxys urticae	Ulidiidae	Ja	Phragmites fen	1f	1	Diptera
Melieria omissa	Ulidiidae	Ja	Phragmites fen	1f	1	Diptera
Elasmucha grisea	Acanthosomatidae	Ja	Phragmites fen	1	1	Hemiptera

**APPENDIX H: INVERTEBRATES IDENTIFIED FROM MALAISE TRAP IN *PHRAGMITES* FEN (SAMPLE SITE J) AT
SIZEWELL IN 2007**

Ja = July 2007, Jb = August 2007

TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
Evacanthus interrogationis	Cicadellidae	Ja	Phragmites fen	1f	1	Hemiptera
Paramesius phragmitis	Cicadellidae	Ja	Phragmites fen	3f	3	Hemiptera
Stenodema calcaratum	Miridae	Ja	Phragmites fen	2m	2	Hemiptera
Bombus hortorum	Apidae	Ja	Phragmites fen	2w	2	Hymenoptera
Bombus lucorum	Apidae	Ja	Phragmites fen	2w	2	Hymenoptera
Bombus pascuorum	Apidae	Ja	Phragmites fen	7w	6	Hymenoptera
Polemocyrtus liparae	Braconidae	Ja	Phragmites fen	12f	12	Hymenoptera
Amblyjoppa proteus	Ichneumonidae	Ja	Phragmites fen	1f	1	Hymenoptera
Enicospilus ramidulus	Ichneumonidae	Ja	Phragmites fen	1f	1	Hymenoptera
Stenomalina liparae	Pteromalidae	Ja	Phragmites fen	1f	1	Hymenoptera
Argogorytes mystaceus	Sphecidae	Ja	Phragmites fen	1f	1	Hymenoptera
Vespa rufa	Vespidae	Ja	Phragmites fen	30w	30	Hymenoptera
Spilosoma lutea	Arctiidae	Ja	Phragmites fen	1f	1	Lepidoptera
Odonestis potatoria	Lasiocampidae	Ja	Phragmites fen	5m1f	6	Lepidoptera
Archana dissoluta	Noctuidae	Ja	Phragmites fen	21	21	Lepidoptera
Autographa gamma	Noctuidae	Ja	Phragmites fen	1	1	Lepidoptera
Axylia putris	Noctuidae	Ja	Phragmites fen	1	1	Lepidoptera
Dipterygia scabriuscula	Noctuidae	Ja	Phragmites fen	1f	1	Lepidoptera
Hypena proboscidalis	Noctuidae	Ja	Phragmites fen	2	2	Lepidoptera
Lacanobia oleracea	Noctuidae	Ja	Phragmites fen	4	4	Lepidoptera
Mythimna impura	Noctuidae	Ja	Phragmites fen	1f	1	Lepidoptera
Mythimna straminea	Noctuidae	Ja	Phragmites fen	1m6f	7	Lepidoptera
Noctua pronuba	Noctuidae	Ja	Phragmites fen	5f	5	Lepidoptera
Oligia strigilis	Noctuidae	Ja	Phragmites fen	1	1	Lepidoptera
Xylophasia lithoxylea	Noctuidae	Ja	Phragmites fen	1	1	Lepidoptera
Xylophasia monoglypha	Noctuidae	Ja	Phragmites fen	4	4	Lepidoptera
Aphantopus hyperanthus	Nymphalidae	Ja	Phragmites fen	1f	1	Lepidoptera
Inachis io	Nymphalidae	Ja	Phragmites fen	1 lv.	1	Lepidoptera
Pieris napi	Pieridae	Ja	Phragmites fen	1m7f	8	Lepidoptera
Chilo phragmitella	Pyralidae	Ja	Phragmites fen	12	12	Lepidoptera
Eurrhyncha urticata	Pyralidae	Ja	Phragmites fen	1f	1	Lepidoptera
Conocephalus dorsalis	Tettigoniidae	Ja	Phragmites fen	1n	1	Orthoptera
Caecilius atricornis	Caeciliidae	Ja	Phragmites fen	1	1	Psocoptera
Glyphotaelius pellucidus	Limnephilidae	Ja	Phragmites fen	1f	1	Trichoptera
Cantharis thoracica	Cantharidae	Jb	Phragmites fen	2f	2	Coleoptera
Rhagonycha fulva	Cantharidae	Jb	Phragmites fen	2	2	Coleoptera
Coccinella 7-punctata	Coccinellidae	Jb	Phragmites fen	1	1	Coleoptera
Harmonia axyridis	Coccinellidae	Jb	Phragmites fen	2	2	Coleoptera
Anthocomus rufus	Melyridae	Jb	Phragmites fen	11	11	Coleoptera
Platydracus stercorarius	Staphylinidae	Jb	Phragmites fen	1m	1	Coleoptera
Forficula auricularia	Forficulidae	Jb	Phragmites fen	1m	1	Dermaptera
Sylvicola cincta	Anisopodidae	Jb	Phragmites fen	3f	3	Diptera
Sylvicola punctata	Anisopodidae	Jb	Phragmites fen	2f	1	Diptera
Anthomyia ?liturata	Anthomyiidae	Jb	Phragmites fen	1f	1	Diptera
Hydrophoria ruralis	Anthomyiidae	Jb	Phragmites fen	1m	1	Diptera
Hylemyia vagans	Anthomyiidae	Jb	Phragmites fen	2m	1	Diptera
Zaphne caudata	Anthomyiidae	Jb	Phragmites fen	1f	1	Diptera
Anagnota bicolor	Anthomyzidae	Jb	Phragmites fen	1m	1	Diptera
Anthomyza paraneglecta	Anthomyzidae	Jb	Phragmites fen	1m	1	Diptera
Machimus atricapillus	Asilidae	Jb	Phragmites fen	1f	1	Diptera
Asteia amoena	Asteiidae	Jb	Phragmites fen	1f	1	Diptera
Bellardia viarum	Calliphoridae	Jb	Phragmites fen	1m	1	Diptera
Melinda gentilis	Calliphoridae	Jb	Phragmites fen	2f	2	Diptera
Melinda viridicyanea	Calliphoridae	Jb	Phragmites fen	1f	1	Diptera
Pollenia angustigena	Calliphoridae	Jb	Phragmites fen	1m	1	Diptera
Campichoeta obscuripennis	Campichoetidae	Jb	Phragmites fen	2m	2	Diptera
Campichoeta punctum	Campichoetidae	Jb	Phragmites fen	3f	3	Diptera
Chaoborus flavicans	Chaoboridae	Jb	Phragmites fen	1m	1	Diptera
Chaoborus pallidus	Chaoboridae	Jb	Phragmites fen	2m5f	7	Diptera

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TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
Platycephala planifrons	Chaoboridae	Jb	Phragmites fen	1f	1	Diptera
Elachiptera uniseta	Chloropidae	Jb	Phragmites fen	1f	1	Diptera
Clusia flava	Clusiidae	Jb	Phragmites fen	3f	3	Diptera
Diogma glabrata	Cylindrotomidae	Jb	Phragmites fen	18m	18	Diptera
Achalcus flavicollis gp.	Dolichopodidae	Jb	Phragmites fen	1f	1	Diptera
Argyra perplexa	Dolichopodidae	Jb	Phragmites fen	3f	3	Diptera
Bathycranium bicolorellum	Dolichopodidae	Jb	Phragmites fen	1m1f	2	Diptera
Campsicnemus curvipes	Dolichopodidae	Jb	Phragmites fen	2m	2	Diptera
Chrysotimus molliculus	Dolichopodidae	Jb	Phragmites fen	26m17f	43	Diptera
Chrysotus gramineus	Dolichopodidae	Jb	Phragmites fen	17m45f	62	Diptera
Dolichopus latelimbatus	Dolichopodidae	Jb	Phragmites fen	3m3f	6	Diptera
Dolichopus nubilus	Dolichopodidae	Jb	Phragmites fen	1m1f	2	Diptera
Dolichopus unguatus	Dolichopodidae	Jb	Phragmites fen	19m7f	26	Diptera
Dolichopus urbanus	Dolichopodidae	Jb	Phragmites fen	1m	1	Diptera
Dolichopus wahlbergi	Dolichopodidae	Jb	Phragmites fen	3m3f	6	Diptera
Hercostomus aerosus	Dolichopodidae	Jb	Phragmites fen	27m15f	42	Diptera
Hercostomus chrysozygos	Dolichopodidae	Jb	Phragmites fen	1m	1	Diptera
Hercostomus gracilis	Dolichopodidae	Jb	Phragmites fen	2f	2	Diptera
Hercostomus metallicus	Dolichopodidae	Jb	Phragmites fen	8m	8	Diptera
Hercostomus nanus	Dolichopodidae	Jb	Phragmites fen	4m	4	Diptera
Poecilobothrus nobilitatus	Dolichopodidae	Jb	Phragmites fen	1f	1	Diptera
Rhaphium caliginosum	Dolichopodidae	Jb	Phragmites fen	33m6f	39	Diptera
Rhaphium monotrichum	Dolichopodidae	Jb	Phragmites fen	53m20f	73	Diptera
Sciapus platypterus	Dolichopodidae	Jb	Phragmites fen	5f	5	Diptera
Syntormon denticulatus	Dolichopodidae	Jb	Phragmites fen	1f	1	Diptera
Teuchophorus spinigerellus	Dolichopodidae	Jb	Phragmites fen	3m2f	5	Diptera
Thereva nobilitata	Dolichopodidae	Jb	Phragmites fen	1f	1	Diptera
Xanthochlorus ?ornatus	Dolichopodidae	Jb	Phragmites fen	2f	2	Diptera
Neuroctena anilis	Dryomyzidae	Jb	Phragmites fen	3m3f	6	Diptera
Empis livida	Empididae	Jb	Phragmites fen	1m	1	Diptera
Phyllodromia melanocephala	Empididae	Jb	Phragmites fen	2m	2	Diptera
Fannia canicularis	Fanniidae	Jb	Phragmites fen	1f	1	Diptera
Piezura graminicola	Fanniidae	Jb	Phragmites fen	1f	1	Diptera
Heteromyza commixta	Heleomyzidae	Jb	Phragmites fen	2f	2	Diptera
Suillia variegata	Heleomyzidae	Jb	Phragmites fen	1f	1	Diptera
Leptozepe flavipes	Hybotidae	Jb	Phragmites fen	4f	4	Diptera
Meiosimyza ?decipiens	Lauxaniidae	Jb	Phragmites fen	5f	5	Diptera
Minettia longipennis	Lauxaniidae	Jb	Phragmites fen	1f	1	Diptera
Dicranomyia modesta	Limoniidae	Jb	Phragmites fen	3m1f	2	Diptera
Erioconopa trivialis	Limoniidae	Jb	Phragmites fen	2m1f	3	Diptera
Erioptera fuscipennis	Limoniidae	Jb	Phragmites fen	48m74f	122	Diptera
Erioptera griseipennis	Limoniidae	Jb	Phragmites fen	1f	1	Diptera
Erioptera lutea	Limoniidae	Jb	Phragmites fen	5m8f	8	Diptera
Melanolimonia morio	Limoniidae	Jb	Phragmites fen	1f	1	Diptera
Metalimnobia quadrinotata	Limoniidae	Jb	Phragmites fen	2m	2	Diptera
Molophilus pleuralis	Limoniidae	Jb	Phragmites fen	1m2f	2	Diptera
Ormosia depilata	Limoniidae	Jb	Phragmites fen	5m	5	Diptera
Ormosia nodulosa	Limoniidae	Jb	Phragmites fen	1m	1	Diptera
Phylidorea ferruginea	Limoniidae	Jb	Phragmites fen	93m15f	108	Diptera
Pilaria discicollis	Limoniidae	Jb	Phragmites fen	2m1f	2	Diptera
Rhipidia maculata	Limoniidae	Jb	Phragmites fen	6f	5	Diptera
Lonchoptera lutea	Lonchopteridae	Jb	Phragmites fen	3f	3	Diptera
Azelia macquarti	Muscidae	Jb	Phragmites fen	3m9f	12	Diptera
Azelia trigonica	Muscidae	Jb	Phragmites fen	1m	1	Diptera
Coenosia mollicula	Muscidae	Jb	Phragmites fen	1m5f	6	Diptera
Coenosia testacea	Muscidae	Jb	Phragmites fen	35m11f	46	Diptera
Coenosia tigrina	Muscidae	Jb	Phragmites fen	2f	2	Diptera
Coenosia tigrina	Muscidae	Jb	Phragmites fen	2f	2	Diptera
Graphomyia maculata	Muscidae	Jb	Phragmites fen	1m1f	2	Diptera

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TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
Hebecnema fumosa	Muscidae	Jb	Phragmites fen	1m	1	Diptera
Hebecnema nigra	Muscidae	Jb	Phragmites fen	6m23f	29	Diptera
Hebecnema umbratica	Muscidae	Jb	Phragmites fen	1m1f	2	Diptera
Hebecnema vespertina	Muscidae	Jb	Phragmites fen	4m4f	8	Diptera
Helina evecta	Muscidae	Jb	Phragmites fen	1m	1	Diptera
Helina reversio	Muscidae	Jb	Phragmites fen	1m	1	Diptera
Hydrophoria ruralis	Anthomyiidae	Jb	Phragmites fen	2m	2	Diptera
Hydrotaea armipes	Muscidae	Jb	Phragmites fen	1m	1	Diptera
Hydrotaea irritans	Muscidae	Jb	Phragmites fen	1m7f	8	Diptera
Lispe pygmaea	Muscidae	Jb	Phragmites fen	3m3f	6	Diptera
Mesembrina meridiana	Muscidae	Jb	Phragmites fen	1m	1	Diptera
Morellia simplex	Muscidae	Jb	Phragmites fen	4m7f	11	Diptera
Muscina levida	Muscidae	Jb	Phragmites fen	5m8f	13	Diptera
Muscina prolapsa	Muscidae	Jb	Phragmites fen	4f	4	Diptera
Mydaea electa	Muscidae	Jb	Phragmites fen	2m1f	3	Diptera
Mydaea nebulosa	Muscidae	Jb	Phragmites fen	2m1f	3	Diptera
Mydaea nebulosa	Muscidae	Jb	Phragmites fen	1m1f	2	Diptera
Mydaea urbana	Muscidae	Jb	Phragmites fen	1m	1	Diptera
Phaonia atriceps	Muscidae	Jb	Phragmites fen	10m9f	19	Diptera
Phaonia errans	Muscidae	Jb	Phragmites fen	1m1f	2	Diptera
Phaonia palpata	Muscidae	Jb	Phragmites fen	1m	1	Diptera
Phaonia tuguriorum	Muscidae	Jb	Phragmites fen	2m2f	4	Diptera
Polietes lardaria	Muscidae	Jb	Phragmites fen	3f	3	Diptera
Spanochaeta dorsalis	Muscidae	Jb	Phragmites fen	22m15f	36	Diptera
Paloptera saltuum	Palopteridae	Jb	Phragmites fen	1f	1	Diptera
Toxoneura muliebris	Palopteridae	Jb	Phragmites fen	6f	6	Diptera
Parapiophila vulgaris	Piophilidae	Jb	Phragmites fen	1f	1	Diptera
Chamaepsila rosae agg.	Psilidae	Jb	Phragmites fen	2f	2	Diptera
Loxocera albiseta	Psilidae	Jb	Phragmites fen	1f	1	Diptera
Ptychoptera minuta	Ptychopteridae	Jb	Phragmites fen	83m15f	98	Diptera
Rhagio lineola	Rhagionidae	Jb	Phragmites fen	1m	1	Diptera
Metopia campestris	Sarcophagidae	Jb	Phragmites fen	1f	1	Diptera
Sarcophaga carnaria	Sarcophagidae	Jb	Phragmites fen	1m	1	Diptera
Sarcophaga haemorrhoea	Sarcophagidae	Jb	Phragmites fen	1f	1	Diptera
Sarcophaga melanura	Sarcophagidae	Jb	Phragmites fen	1f	1	Diptera
Sarcophaga scoparia	Sarcophagidae	Jb	Phragmites fen	1m1f	2	Diptera
Senotainia conica	Sarcophagidae	Jb	Phragmites fen	1f	1	Diptera
Chaetosa punctipes	Scathophagidae	Jb	Phragmites fen	1f	1	Diptera
Cleigastra apicalis	Scathophagidae	Jb	Phragmites fen	3m3f	6	Diptera
Cordilurina albipes	Scathophagidae	Jb	Phragmites fen	5m6f	11	Diptera
Norellisoma spinimanum	Scathophagidae	Jb	Phragmites fen	1m1f	2	Diptera
Scathophaga furcata	Scathophagidae	Jb	Phragmites fen	1m	1	Diptera
Scathophaga suilla	Scathophagidae	Jb	Phragmites fen	3m2f	5	Diptera
Antichaeta brevipennis	Sciomyzidae	Jb	Phragmites fen	2m2f	4	Diptera
Ctenulus bifasciella	Sciomyzidae	Jb	Phragmites fen	1m	1	Diptera
Elgiva cucularia	Sciomyzidae	Jb	Phragmites fen	1m	1	Diptera
Limnia unguicornis.	Sciomyzidae	Jb	Phragmites fen	1f	1	Diptera
Pherbellia albocostata	Sciomyzidae	Jb	Phragmites fen	1f	1	Diptera
Pherbellia griseola	Sciomyzidae	Jb	Phragmites fen	2m1f	3	Diptera
Pherbellia schoenherri	Sciomyzidae	Jb	Phragmites fen	1m2f	3	Diptera
Pherbina coryleti	Sciomyzidae	Jb	Phragmites fen	1m1f	2	Diptera
Pteromicra angustipennis	Sciomyzidae	Jb	Phragmites fen	13m12f	25	Diptera
Tetanocera arrogans	Sciomyzidae	Jb	Phragmites fen	4m2f	6	Diptera
Tetanocera ferruginea	Sciomyzidae	Jb	Phragmites fen	3m	3	Diptera
Tetanocera laevifrons	Sciomyzidae	Jb	Phragmites fen	1m2f	3	Diptera
Sepsis punctum	Sepsidae	Jb	Phragmites fen	4f	4	Diptera
Stenomicroa delicatula	Stenomicroidae	Jb	Phragmites fen	1f	1	Diptera
Beris vallata	Stratiomyiidae	Jb	Phragmites fen	1f	1	Diptera

**APPENDIX H: INVERTEBRATES IDENTIFIED FROM MALAISE TRAP IN PHRAGMITES FEN (SAMPLE SITE J) AT
SIZEWELL IN 2007**

Ja = July 2007, Jb = August 2007

TAXON	FAMILY	SITE	DESCRIPTION	NUMBER	TOTAL	ORDER
Baccha elongata	Syrphidae	Jb	Phragmites fen	2f	1	Diptera
Chalcosyrphus nemorum	Syrphidae	Jb	Phragmites fen	1m	1	Diptera
Cheilosia pagana	Syrphidae	Jb	Phragmites fen	1f	1	Diptera
Dasysyrphus albostrigatus	Syrphidae	Jb	Phragmites fen	1f	1	Diptera
Episyrphus balteatus	Syrphidae	Jb	Phragmites fen	37m58f	95	Diptera
Eristalis pertinax	Syrphidae	Jb	Phragmites fen	1m1f	2	Diptera
Eupeodes luniger	Syrphidae	Jb	Phragmites fen	1f	1	Diptera
Helophilus pendulus	Syrphidae	Jb	Phragmites fen	3m3f	6	Diptera
Melanostoma mellinum	Syrphidae	Jb	Phragmites fen	2m	2	Diptera
Melanostoma scalare	Syrphidae	Jb	Phragmites fen	7m24f	31	Diptera
Meliscaeva auricollis	Syrphidae	Jb	Phragmites fen	4m4f	8	Diptera
Neoascia tenur	Syrphidae	Jb	Phragmites fen	4m6f	10	Diptera
Platycheirus albimanus	Syrphidae	Jb	Phragmites fen	1m6f	7	Diptera
Platycheirus fulviventris	Syrphidae	Jb	Phragmites fen	1f	1	Diptera
Platycheirus scutatus	Syrphidae	Jb	Phragmites fen	1f	1	Diptera
Rhingia campestris	Syrphidae	Jb	Phragmites fen	3m	3	Diptera
Sericomyia silentis	Syrphidae	Jb	Phragmites fen	1f	1	Diptera
Sphegina clunipes	Syrphidae	Jb	Phragmites fen	1f	1	Diptera
Syrphus ribesii	Syrphidae	Jb	Phragmites fen	9m5f	14	Diptera
Tropidia scita	Syrphidae	Jb	Phragmites fen	1f	1	Diptera
Volucella bombylans	Syrphidae	Jb	Phragmites fen	1m	1	Diptera
Xylota segnis	Syrphidae	Jb	Phragmites fen	1m	1	Diptera
Haematopota pluvialis	Tabanidae	Jb	Phragmites fen	1f	1	Diptera
Hybomitra bimaculata	Tabanidae	Jb	Phragmites fen	1m	1	Diptera
Hybomitra ciureai	Tabanidae	Jb	Phragmites fen	2m5f	7	Diptera
Blepharomyia pagana	Tachinidae	Jb	Phragmites fen	2f	2	Diptera
Epicampocera succincta	Tachinidae	Jb	Phragmites fen	1f	1	Diptera
Loewia foeda	Tachinidae	Jb	Phragmites fen	1	1	Diptera
Lydella grisescens	Tachinidae	Jb	Phragmites fen	1m	1	Diptera
Siphona maculata	Tachinidae	Jb	Phragmites fen	74	74	Diptera
Thereva nobilitata	Therevidae	Jb	Phragmites fen	1m1f	2	Diptera
Nephrotoma scurra	Tipulidae	Jb	Phragmites fen	1f	1	Diptera
Prionocera subserricornis	Tipulidae	Jb	Phragmites fen	1m	1	Diptera
Tipula fascipennis	Tipulidae	Jb	Phragmites fen	1m	1	Diptera
Tipula nigra	Tipulidae	Jb	Phragmites fen	6m	4	Diptera
Tipula oleracea	Tipulidae	Jb	Phragmites fen	1f	1	Diptera
Aphrodes makarovi	Cicadellidae	Jb	Phragmites fen	1m1f	2	Hemiptera
Cicadella viridis	Cicadellidae	Jb	Phragmites fen	1f	1	Hemiptera
Evacanthus interrogationis	Cicadellidae	Jb	Phragmites fen	1f	1	Hemiptera
Paralimnus phragmitis	Cicadellidae	Jb	Phragmites fen	8m	8	Hemiptera
Delphax pulchellus	Delphacidae	Jb	Phragmites fen	1m	1	Hemiptera
Euidella speciosa	Delphacidae	Jb	Phragmites fen	2m	2	Hemiptera
Trigonalis hahni	Trigonalyidae	Jb	Phragmites fen	1f	1	Hymenoptera
Paravespula germanica	Vespidae	Jb	Phragmites fen	1w	1	Hymenoptera
Vespula rufa	Vespidae	Jb	Phragmites fen	27w	27	Hymenoptera
Epione repandaria	Geometridae	Jb	Phragmites fen	2	2	Lepidoptera
Odonestis potatoria	Lasiocampidae	Jb	Phragmites fen	1m1f	2	Lepidoptera
Archanara dissoluta	Noctuidae	Jb	Phragmites fen	216	216	Lepidoptera
Archanara geminipuncta	Noctuidae	Jb	Phragmites fen	27	27	Lepidoptera
Archanara neurica	Noctuidae	Jb	Phragmites fen	6	6	Lepidoptera
Chilodes maritimus	Noctuidae	Jb	Phragmites fen	6	6	Lepidoptera
Mythimna straminea	Noctuidae	Jb	Phragmites fen	6	6	Lepidoptera
Pieris napi	Pieridae	Jb	Phragmites fen	1f	1	Lepidoptera
Chilo phragmitella	Pyalidae	Jb	Phragmites fen	2	2	Lepidoptera
Pleuroptya ruralis	Pyalidae	Jb	Phragmites fen	3	3	Lepidoptera
Caecilius atricornis	Caeciliidae	Jb	Phragmites fen	4	4	Psocoptera

APPENDIX I: INCIDENTAL INVERTEBRATE RECORDS FROM SIZEWELL FOR 2007

TAXON	SITE	DATE	NUMBER	SEX, ETC	COMMENTS
ARACHNIDA (SPIDERS, MITES AND HARVESTMEN)					
Eriophyes goniothorax typicus	Kenton Hills	18/06/07	Not recorded	Galls	
NEUROPTERA (ANT-LION AND LACEWINGS)					
Euroleon nostras	Walk Barn	17/08/07	c.50	Larval pits	
ODONATA (DRAGONFLIES AND DAMSELFLIES)					
Aeshna isoceles	Goose Hill	19/06/07	1	Not sexed	Sample site 9
Libellula depressa	Goose Hill	19/06/07	1	Female	
Orthetrum cancellatum	Goose Hill	19/06/07	1	Not sexed	
Orthetrum cancellatum	Goose Hill	18/06/07	1	Not sexed	
COLEOPTERA (BEETLES)					
Oedemera nobilis	New build area	18/06/07	1	Male	
Pseudovadonia livida	New build area	18/06/07	1	Not sexed	
Strangalia maculata	Turf Pits	18/06/07	1	Not sexed	
LEPIDOPTERA (MOTHS AND BUTTERFLIES)					
Acrolepia autumnitella	Goose Hill	18/06/07	Not recorded	Leafmines	
Coleophora serratella	Sizewell Estate	18/06/07	1	Not sexed	Vacuum
Emmelina monodactyla	Sizewell beach	20/06/07	1	Not sexed	
Leucoma salicis	Not newbuild	22/07/07	1	Not sexed	
Pieris rapae	Sizewell beach	19/09/07	1	Not sexed	
Hipparchia semele	Walks Barn	17/08/07	1	Not sexed	
Hipparchia semele	Eastern bund	21/07/07	1	Not sexed	
Maniola jurtina	New build area	18/06/07	1	Not sexed	
Coenonympha pamphilus	New build area	18/06/07	1	Not sexed	
Coenonympha pamphilus	North bund	19/09/07	1	Not sexed	
Parage aegeria	New build area	18/06/07	1	Not sexed	
Vanessa atalanta	Kenton Hills	18/06/07	1	Not sexed	
Vanessa atalanta	New build area	18/06/07	1	Not sexed	
Vanessa cardui	Sizewell beach	18/06/07	1	Not sexed	
Polyommatus icarus	Sizewell beach	18/06/07	1	Not sexed	
Polyommatus icarus	New build area	18/06/07	1	Not sexed	
Thymelicus lineola/sylvestris	New build area	18/06/07	1	Not sexed	
DIPTERA (TRUE-FLIES)					
Dasyneura urticae	Goose Hill	18/06/07	1	Gall	
Hybomitra bimaculata	Goose Hill	17/06/07	1	Female	
Hybomitra distinguenda	Goose Hill	17/06/07	1	Female	
Tabanus maculicornis	Goose Hill	17/06/07	1	Female	
Episyrphus balteatus	Goose Hill	18/06/07	1	Not sexed	
Serricomyia silentis	Kenton Hills	18/06/07	1	Not sexed	
Volucella bombylans	New build area	18/06/07	1	Not sexed	
Phytomyza loniceræ	Goose Hills	18/06/07	Not recorded	Leafmines	
HYMENOPTERA (BEES, WASPS, ANTS AND ALLIES)					
Andricus kollari	Eastern bund	20/06/07	Not recorded	Galls	
Andricus quercuscalicis	North of N. bund	19/09/07	Not recorded	Galls	
Bombus lapidarius	Kenton Hills	18/06/07	1	Not sexed	
Bombus pascuorum	Kenton Hills	18/06/07	1	Not sexed	

Annex 2

Invertebrate Survey Report 2009 Appendices

Count of Species

Group	Order	Family	Species	GB_STATUS	Total		
Arachnida	Araneae	Cybaeidae	Argyroneta aquatica	3	10		
Crustacea	Amphipoda	Crangonycitidae	Crangonyx pseudogracilis	21	20		
			Gammaridae	Gammarus duebeni	2	1	
		Isopoda	Asellidae	Gammarus pulex	2	2	
				Asellus aquaticus	2	17	
Hirudinea	Hirudinea	Ligiidae	Asellus meridianus	2	3		
			Ligidium hypnorum	3	1		
		Erpobdellidae	Erpobdella octoculata	2	13		
			Glossiphoniidae	Glossiphonia complanata	2	6	
				Glossiphonia heteroclita	3	2	
		Insecta	Coleoptera	Hirudinidae	Helobdella stagnalis	2	1
					Theromyzon tessulatum	2	6
				Carabidae	Haemopsis sanguisuga	3	10
Agonum thoreyi	3				7		
Chrysomelidae	Bembidion assimile			2	4		
	Demetrias imperialis			5	1		
	Odacantha melanura			5	4		
	Oodes helopioides			5	2		
	Pterostichus nigrita			2	1		
	Stenolophus mixtus			3	2		
	Aphthona nonstriata			3	1		
	Galerucella nymphaeae			3	7		
	Phaedon cochleariae			2	2		
	Prasocuris junci			3	1		
	Prasocuris phellandrii			3	5		
	Psylliodes laticollis			3	1		
	Coccinellidae			Anisosticta novemdecimpunctata	3	11	
				Coccidula rufa	2	14	
Curculionidae	Hypera pollux			3	3		
	Tanysphyrus lemnae			3	2		
	Thryogenes nereis			3	5		
Dryopidae	Dryops luridus			2	6		
	Dytiscidae			Agabus bipustulatus	2	4	
Agabus sturmii				2	8		
Colymbetes fuscus				2	4		
Colymbetini				0	5		
Dytiscus				0	12		
Dytiscus semisulcatus				3	1		
Graphoderus cinereus		10	1				
Graptodytes pictus		3	2				
Hydaticus seminiger		5	5				
Hydaticus transversalis		9	1				
Hydroglyphus geminus		5	2				
Hydroporus angustatus		2	13				
Hydroporus memnonius		2	1				
Hydroporus palustris		2	11				
Hydroporus planus		2	10				
Hydroporus pubescens		2	18				
Hydrovatus clypealis	6	1					
Hygrotus impressopunctatus	3	8					
Hygrotus inaequalis	2	12					
Hygrotus parallelogrammus	5	3					
Hyphydrus ovatus	2	13					
Ilybius ater	2	2					
Ilybius quadriguttatus	2	2					
Laccophilus hyalinus	2	2					
Laccophilus minutus	3	2					
Liopterus haemorrhoidalis	3	5					
Rhantus frontalis	5	6					
Rhantus grapii	5	4					

Count of Species (continued)

Group	Order	Family	Species	GB_STATUS	Total
			Rhantus suturalis	5	11
		Gyrinidae	Gyrinus caspius	3	1
			Gyrinus paykulli	6	1
		Halipidae	Halipus	0	15
			Halipus immaculatus	3	1
			Halipus lineatocollis	2	2
			Halipus ruficollis	2	10
			Halipus sibiricus	3	1
			Peltodytes caesus	5	7
		Helophoridae	Helophorus aequalis	2	1
			Helophorus griseus	5	5
			Helophorus minutus	2	9
			Helophorus obscurus	2	1
		Hydraenidae	Hydraena riparia	3	2
			Hydraena testacea	5	1
			Limnebius truncatellus	2	1
			Ochthebius dilatatus	3	1
			Ochthebius marinus	5	1
			Ochthebius minimus	2	11
			Ochthebius nanus	5	2
		Hydrochidae	Hydrochus angustatus	5	2
		Hydrophilidae	Anacaena globulus	2	1
			Anacaena limbata	2	17
			Cercyon convexiusculus	5	1
			Cercyon marinus	3	6
			Cercyon tristis	5	3
			Coelostoma orbiculare	2	6
			Cymbiodyta marginellus	3	12
			Enochrus coarctatus	3	6
			Enochrus halophilus	6	3
			Enochrus melanocephalus	5	3
			Enochrus ochropterus	5	1
			Enochrus quadripunctatus	2	1
			Enochrus testaceus	3	11
			Helochares lividus	5	2
			Hydrobius fuscipes	2	11
			Hydrophilus piceus	10	2
			Laccobius bipunctatus	2	11
			Laccobius colon	3	1
		Noteridae	Noterus clavicornis	3	17
		Scirtidae	Cyphon laevipennis	3	2
			Cyphon padi	3	1
			Scirtidae	0	17
		Silvanidae	Psammoecus bipunctatus	3	1
		Staphylinidae	Paederus fuscipes	5	1
			Paederus riparius	3	3
			Stenus bifoveolatus	3	1
			Stenus boops	2	3
			Stenus cicindeloides	3	12
			Stenus formicetorum	3	1
			Stenus incrassatus	3	1
			Stenus junco	2	4
			Stenus latifrons	2	13
			Stenus melanopus	3	1
			Stenus nitidiusculus	2	6
			Stenus picipennis	3	2
			Stenus solutus	3	4
	Diptera	Chaoboridae	Chaoborus crystallinus	2	1
		Culicidae	Anopheles atroparvus	2	1
		Dixidae	Dixella attica	5	2

Count of Species (continued)

Group	Order	Family	Species	GB_STATUS	Total
			Dixella autumnalis	3	12
		Dolichopodidae	Achalcus thalhammeri	0	1
		Empididae	Clinocera stagnalis	2	1
		Ephydriidae	Coenia palustris	2	4
			Hydrellia maura	2	2
			Parydra coarctata	2	2
			Pelina aenea	0	1
			Pelina similis	0	1
			Scatella stagnalis	2	3
			Scatella tenuicosta	2	2
		Lauxaniidae	Trigonometopus frontalis	3	1
		Lonchopterae	Lonchoptera lutea	2	1
			Lonchoptera scutellata	5	1
		Ptychopteridae	Ptychoptera minuta	3	1
		Scathophagidae	Spaziphora hydromyzina	3	1
		Sciomyzidae	Pherbellia dorsata	5	2
			Pherbellia schoenherri	3	1
			Sepedon spinipes	3	3
		Sphaeroceridae	Lotophila atra	2	1
		Stratiomyidae	Odontomyia ornata	12	5
			Odontomyia tigrina	5	6
			Oplodontha viridula	3	15
			Oxycera rara	3	1
			Oxycera trilineata	3	1
			Stratiomys singularior	5	3
			Vanoyia tenuicornis	5	5
		Syrphidae	Chrysogaster	0	1
			Eristalini	0	1
			Neoascia tener	3	1
		Tabanidae	Tabanidae	0	8
	Ephemeroptera	Baetidae	Cloeon dipterum	2	19
		Caenidae	Caenis robusta	4	2
	Hemiptera	Corixidae	Corixa panzeri	3	1
			Corixa punctata	2	2
			Corixidae	0	1
			Cymatia coleoptrata	3	2
			Hesperocorixa linnaei	2	14
			Hesperocorixa sahlbergi	2	5
			Sigara dorsalis	2	4
		Gerridae	Gerris	0	3
			Gerris lacustris	2	4
			Gerris lateralis	3	1
			Gerris odontogaster	2	8
			Gerris thoracicus	2	1
		Hebridae	Hebrus ruficeps	3	3
		Hydrometridae	Hydrometra stagnorum	2	10
		Lygaeidae	Ischnodemus sabuleti	2	1
		Naucoridae	Ilyocoris cimicoides	2	17
		Nepidae	Nepa cinerea	2	9
			Ranatra linearis	3	3
		Notonectidae	Notonecta	0	2
			Notonecta glauca	2	17
		Pleidae	Plea minutissima	2	9
		Saldidae	Chartoscirta cincta	2	7
			Saldula pallipes	2	3
			Saldula palustris	2	1
		Tingidae	Dictyla convergens	3	1
		Veliidae	Microvelia pygmaea	5	4
			Microvelia reticulata	2	16
			Velia	0	1

Count of Species (continued)

Group	Order	Family	Species	GB_STATUS	Total
	Lepidoptera	Pyralidae	Cataclysta lemnata	2	4
	Odonata	Aeshnidae	Aeshna grandis	2	1
			Aeshnidae	0	2
			Brachytron pratense	5	11
		Coenagriidae	Ischnura elegans	2	8
			Pyrrhosoma nymphula	2	6
		Coenagrionidae	Coenagrion	0	19
		Lestidae	Lestes	0	1
		Libellulidae	Sympetrum	0	5
	Trichoptera	Leptoceridae	Trienodes bicolor	2	1
		Limnephilidae	Glyphotaenius pellucidus	2	1
			Limnephilus affinis	2	2
			Limnephilus auricula	2	1
			Limnephilus lunatus	2	4
			Limnephilus marmoratus	2	18
Mollusca	Mollusca	Acroloxidae	Acroloxus lacustris	2	3
		Bithyniidae	Bithynia leachii	3	1
			Bithynia tentaculata	2	18
		Euconulidae	Euconulus alderi	3	2
		Hydrobiidae	Potamopyrgus antipodarum	21	3
		Lymnaeidae	Lymnaea palustris	2	16
			Lymnaea stagnalis	2	8
			Radix balthica	2	17
		Physidae	Aplexa hypnorum	3	2
			Physa fontinalis	2	10
		Planorbidae	Anisus ?vorticulus	12	1
			Anisus vortex	2	18
			Bathyomphalus contortus	3	6
			Gyraulus albus	3	1
			Gyraulus crista	2	2
			Hippeutis complanatus	3	12
			Planorbarius corneus	2	17
			Planorbis carinatus	2	14
			Planorbis planorbis	2	13
		Sphaeriidae	Musculium lacustre	2	3
			Pisidium	0	15
			Sphaerium corneum	2	10
		Succineidae	Oxyloma elegans	2	6
			Succinea putris	2	1
		Valvatidae	Valvata ?macrostoma	12	1
			Valvata cristata	3	13
			Valvata piscinalis	3	1
		Vertiginidae	Vertigo antivertigo	3	1
		Viviparidae	Viviparus contectus	3	6
Tricladida	Tricladida	Dendrocoelidae	Dendrocoelum lacteum	2	2
		Dugesiidae	Dugesia lugubris	0	4
Vertebrata	Anura	(blank)	Anura	0	2
	Pisces	Esocidae	Esox lucius	0	1
		Gasterosteidae	Gasterosteus aculeatus	0	1
			Pungitius pungitius	0	11
	Squamata	Colubridae	Natrix natrix	0	1
	Urodela	Salamandridae	Triturus	0	3
			Triturus vulgaris	0	6
Grand Total					1202

Sizewell and Minsere 2009 (continued)
Data from Martin Drake

actual count or Occasional,Frequent,Numerous

Marsh	Subsite	Code (Bugl.)	ditch number	YEAR	MONTH	Group	Order	Family	Species	Abundance 1	GB_STATUS	GB_STATUS_L	SITE_L	GRID	ABUNDANCE_STAGE	DATE	RECORDER_L	SEX_STAGE
Sizewell	Minsmere	SM13	13	2009	April	Crustacea	Isopoda	Asellidae	Asellus meridianus	10	2	Common	Minsmere 29	TM47116563	10 adults	29-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM13	13	2009	April	Crustacea	Isopoda	Asellidae	Asellus aquaticus	11	2	Common	Minsmere 29	TM47116563	11 adults	29-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM13	13	2009	April	Insecta	Coleoptera	Hydrophilidae	Cymbiodyta marginellus	13	3	Local	Minsmere 29	TM47116563	13 adults	29-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM13	13	2009	April	Insecta	Coleoptera	Hydrophilidae	Hydrobius fuscipes	13	2	Common	Minsmere 29	TM47116563	13 adults	29-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM13	13	2009	April	Insecta	Coleoptera	Scirtidae	Cyphon laevipennis	2	3	Local	Minsmere 29	TM47116563	1 male, 1 female	29-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM13	13	2009	April	Insecta	Coleoptera	Hydrophilidae	Enochrus halophilus	4	6	Na	Minsmere 29	TM47116563	2 males, 2 females	29-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM13	13	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus impressopunctatus	F	3	Local	Minsmere 29	TM47116563	adult frequent	29-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM13	13	2009	April	Crustacea	Amphipoda	Crangonyctidae	Crangonyx pseudogracilis	F	21	Naturalised	Minsmere 29	TM47116563	adult frequent	29-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM13	13	2009	April	Mollusca	Mollusca	Bithyniidae	Bithynia tentaculata	F	2	Common	Minsmere 29	TM47116563	adult frequent	29-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM13	13	2009	April	Mollusca	Mollusca	Lymnaeidae	Lymnaea palustris	F	2	Common	Minsmere 29	TM47116563	adult frequent	29-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM13	13	2009	April	Arachnida	Araneae	Cybaeidae	Argyroneta aquatica	F	3	Local	Minsmere 29	TM47116563	adult frequent	29-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM13	13	2009	April	Insecta	Trichoptera	Limnephilidae	Limnephilus marmoratus	F	2	Common	Minsmere 29	TM47116563	larva frequent	29-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM13	13	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis planorbis	N	2	Common	Minsmere 29	TM47116563	adult numerous	29-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM13	13	2009	April	Insecta	Hemiptera	Naucoridae	Ilyocoris cimicoides	O	2	Common	Minsmere 29	TM47116563	adult occasional	29-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM13	13	2009	April	Mollusca	Mollusca	Lymnaeidae	Radix balthica	O	2	Common	Minsmere 29	TM47116563	adult occasional	29-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM13	13	2009	April	Insecta	Odonata	Aeshnidae	Brachytron pratense	O	5	Notable/Nb	Minsmere 29	TM47116563	larva occasional	29-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM13	13	2009	April	Insecta	Diptera	Tabanidae	Tabanidae	1	0	Unknown	Minsmere 29	TM47116563	larva several	29-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus pubescens	1	2	Common	Minsmere 19	TM46546567	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Dytiscidae	Laccophilus hyalinus	1	2	Common	Minsmere 19	TM46546567	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Hydrophilidae	Cymbiodyta marginellus	1	3	Local	Minsmere 19	TM46546567	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Hydrophilidae	Enochrus melanocephalus	1	5	Notable/Nb	Minsmere 19	TM46546567	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Hydraenidae	Ochthebius dilatatus	1	3	Local	Minsmere 19	TM46546567	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Hydraenidae	Ochthebius minimus	1	2	Common	Minsmere 19	TM46546567	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Coccinellidae	Coccidula rufa	1	2	Common	Minsmere 19	TM46546567	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Sphaeriidae	Musculium lacustre	1	2	Common	Minsmere 19	TM46546567	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Physidae	Aplexa hypnorum	1	3	Local	Minsmere 19	TM46546567	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Chrysomelidae	Galerucella nymphaeae	1	3	Local	Minsmere 19	TM46546567	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Carabidae	Bembidion assimile	1	2	Common	Minsmere 19	TM46546567	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Curculionidae	Thryogenes nereis	1	3	Local	Minsmere 19	TM46546567	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus latifrons	1	2	Common	Minsmere 19	TM46546567	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Hydrophilidae	Hydrophilus piceus	1	10	RDB3	Minsmere 19	TM46546567	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Diptera	Sciomyzidae	Pherbellia dorsata	1	5	Notable/Nb	Minsmere 19	TM46546567	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Hydrophilidae	Laccobius colon	1	3	Local	Minsmere 19	TM46546567	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Dytiscidae	Dytiscus	1	0	Unknown	Minsmere 19	TM46546567	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Ephemeroptera	Caenidae	Caenis robusta	1	4	Nr	Minsmere 19	TM46546567	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Trichoptera	Limnephilidae	Limnephilus lunatus	1	2	Common	Minsmere 19	TM46546567	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Diptera	Dixidae	Dixella attica	1	5	Notable/Nb	Minsmere 19	TM46546567	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Diptera	Ephydriidae	Coenia palustris	1	2	Common	Minsmere 19	TM46546567	1 male	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Dytiscidae	Hydaticus seminiger	2	5	Notable/Nb	Minsmere 19	TM46546567	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Dytiscidae	Hyphydrus ovatus	2	2	Common	Minsmere 19	TM46546567	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Hydrophilidae	Anacaena limbata	2	2	Common	Minsmere 19	TM46546567	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Hemiptera	Notonectidae	Notonecta glauca	2	2	Common	Minsmere 19	TM46546567	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Hemiptera	Nepidae	Ranatra linearis	2	3	Local	Minsmere 19	TM46546567	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Hemiptera	Saldidae	Chartoscirta cincta	2	2	Common	Minsmere 19	TM46546567	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Diptera	Stratiomyidae	Odontomyia tigrina	2	5	Notable/Nb	Minsmere 19	TM46546567	2 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Odonata	Coenagriidae	Ischnura elegans	2	2	Common	Minsmere 19	TM46546567	2 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Diptera	Dixidae	Dixella autumnalis	2	3	Local	Minsmere 19	TM46546567	2 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Dytiscidae	Rhantus suturalis	3	5	Notable/Nb	Minsmere 19	TM46546567	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Coccinellidae	Anisosticta novemdecimpunctata	3	3	Local	Minsmere 19	TM46546567	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Planorbidae	Hippeutis complanatus	4	3	Local	Minsmere 19	TM46546567	4 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Odonata	Coenagrionidae	Coenagrion	4	0	Unknown	Minsmere 19	TM46546567	4 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Ephemeroptera	Baetidae	Cloeon dipterum	4	2	Common	Minsmere 19	TM46546567	4 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Hemiptera	Veliidae	Microvelia reticulata	10	2	Common	Minsmere 19	TM46546567	10 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus inaequalis	14	2	Common	Minsmere 19	TM46546567	14 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Hydrophilidae	Laccobius bipunctatus	2	2	Common	Minsmere 19	TM46546567	1 male, 1 female	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Staphylinidae	Paederus riparius	2	3	Local	Minsmere 19	TM46546567	1 male, 1 female	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Noteridae	Noterus clavicornis	F	3	Local	Minsmere 19	TM46546567	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Crustacea	Amphipoda	Crangonyctidae	Crangonyx pseudogracilis	F	21	Naturalised	Minsmere 19	TM46546567	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Bithyniidae	Bithynia tentaculata	F	2	Common	Minsmere 19	TM46546567	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Lymnaeidae	Lymnaea palustris	F	2	Common	Minsmere 19	TM46546567	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Lymnaeidae	Lymnaea stagnalis	F	2	Common	Minsmere 19	TM46546567	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Sphaeriidae	Pisidium	F	0	Unknown	Minsmere 19	TM46546567	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis carinatus	F	2	Common	Minsmere 19	TM46546567	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Sphaeriidae	Sphaerium corneum	F	2	Common	Minsmere 19	TM46546567	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Valvatidae	Valvata cristata	F	3	Local	Minsmere 19	TM46546567	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Trichoptera	Limnephilidae	Limnephilus marmoratus	F	2	Common	Minsmere 19	TM46546567	larva frequent	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Hydrophilidae	Enochrus coarctatus	O	3	Local	Minsmere 19	TM46546567	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Hemiptera	Naucoridae	Ilyocoris cimicoides	O	2	Common	Minsmere 19	TM46546567	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Hirudinea	Hirudinea	Erpobdellidae	Erpobdella octoculata	O	2	Common	Minsmere 19	TM46546567	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Hirudinea	Hirudinea	Hirudinidae	Haemopsis sanguisuga	O	3	Local	Minsmere 19	TM46546567	adult occasional	28-Apr-09	Drake, C.M.	AD

Sizewell and Minsere 2009 (continued)
Data from Martin Drake

actual count or Occasional,Frequent,Numerous

Marsh	Subsite	Code (Bugl.)	ditch number	YEAR	MONTH	Group	Order	Family	Species	Abundance 1	GB_STATUS	GB_STATUS_L	SITE_L	GRID	ABUNDANCE_STAGE	DATE	RECORDER_L	SEX_STAGE
Sizewell	Minsmere	SM14	14	2009	April	Hirudinea	Hirudinea	Glossiphoniidae	Theromyzon tessulatum	0		2 Common	Minsmere 19	TM46546567	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Vertebrata	Pisces	Gasterosteidae	Pungitius pungitius	0		0 Unknown	Minsmere 19	TM46546567	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Planorbidae	Anisus vortex	0		2 Common	Minsmere 19	TM46546567	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Lymnaeidae	Radix balthica	0		2 Common	Minsmere 19	TM46546567	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Succineidae	Oxyloma elegans	0		2 Common	Minsmere 19	TM46546567	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Physidae	Physa fontinalis	0		2 Common	Minsmere 19	TM46546567	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Planorbidae	Planorbarius corneus	0		2 Common	Minsmere 19	TM46546567	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Mollusca	Mollusca	Viviparidae	Viviparus contectus	0		3 Local	Minsmere 19	TM46546567	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Odonata	Aeshnidae	Brachytron pratense	0		5 Notable/Nb	Minsmere 19	TM46546567	larva occasional	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM14	14	2009	April	Insecta	Coleoptera	Scirtidae	Scirtidae	0	0	Unknown	Minsmere 19	TM46546567	larva occasional	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Graptodytes pictus	1		3 Local	Minsmere 15	TM46646601	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus angustatus	1		2 Common	Minsmere 15	TM46646601	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Laccophilus hyalinus	1		2 Common	Minsmere 15	TM46646601	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Hydrophilidae	Enochrus testaceus	1		3 Local	Minsmere 15	TM46646601	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Coccinellidae	Anisosticta novemdecimpunctata	1		3 Local	Minsmere 15	TM46646601	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Mollusca	Mollusca	Planorbidae	Hippeutis complanatus	1		3 Local	Minsmere 15	TM46646601	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Mollusca	Mollusca	Sphaeriidae	Musculium lacustre	1		2 Common	Minsmere 15	TM46646601	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Mollusca	Mollusca	Valvatidae	Valvata cristata	1		3 Local	Minsmere 15	TM46646601	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Rhantus frontalis	1		5 Notable/Nb	Minsmere 15	TM46646601	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Chrysomelidae	Prasocuris phellandrii	1		3 Local	Minsmere 15	TM46646601	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Hemiptera	Saldidae	Chartoscirta cincta	1		2 Common	Minsmere 15	TM46646601	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Hydrophilidae	Cercyon marinus	1		3 Local	Minsmere 15	TM46646601	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Curculionidae	Hypera pollux	1		3 Local	Minsmere 15	TM46646601	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus parallelogrammus	1		5 Notable/Nb	Minsmere 15	TM46646601	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Helophoridae	Helophorus obscurus	1		2 Common	Minsmere 15	TM46646601	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM15	15	2009	April	Vertebrata	Urodela	Salamandridae	Triturus vulgaris	1		0 Unknown	Minsmere 15	TM46646601	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Odonata	Coenagrionidae	Coenagrion	1		0 Unknown	Minsmere 15	TM46646601	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Colymbetini	1	0	Unknown	Minsmere 15	TM46646601	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Trichoptera	Limnephilidae	Limnephilus lunatus	1		2 Common	Minsmere 15	TM46646601	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Diptera	Tabanidae	Tabanidae	1	0	Unknown	Minsmere 15	TM46646601	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Diptera	Dixidae	Dixella autumnalis	1		3 Local	Minsmere 15	TM46646601	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Ilybius quadriguttatus	1		2 Common	Minsmere 15	TM46646601	1 male	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Hyphydrus ovatus	2		2 Common	Minsmere 15	TM46646601	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Hydrophilidae	Anacaena limbata	2		2 Common	Minsmere 15	TM46646601	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Hydrophilidae	Cymbiodyta marginellus	2		3 Local	Minsmere 15	TM46646601	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Coccinellidae	Coccidula rufa	2		2 Common	Minsmere 15	TM46646601	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Haliplidae	Pelodytes caesus	2		5 Notable/Nb	Minsmere 15	TM46646601	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Hemiptera	Notonectidae	Notonecta glauca	2		2 Common	Minsmere 15	TM46646601	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Mollusca	Mollusca	Physidae	Physa fontinalis	2		2 Common	Minsmere 15	TM46646601	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Mollusca	Mollusca	Hydrobiidae	Potamopyrgus antipodarum	2		21 Naturalised	Minsmere 15	TM46646601	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Trichoptera	Limnephilidae	Limnephilus marmoratus	2		2 Common	Minsmere 15	TM46646601	2 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Helophoridae	Helophorus griseus	2		5 Notable/Nb	Minsmere 15	TM46646601	2 males	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Chrysomelidae	Phaedon cochleariae	3		2 Common	Minsmere 15	TM46646601	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Ephemeroptera	Baetidae	Cloeon dipterum	3		2 Common	Minsmere 15	TM46646601	3 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Hemiptera	Veliidae	Microvelia reticulata	4		2 Common	Minsmere 15	TM46646601	4 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus cicindeloides	4		3 Local	Minsmere 15	TM46646601	4 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Dytiscus	4		0 Unknown	Minsmere 15	TM46646601	4 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus inaequalis	5		2 Common	Minsmere 15	TM46646601	5 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Hydraenidae	Ochthebius minimus	5		2 Common	Minsmere 15	TM46646601	5 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Hemiptera	Corixidae	Hesperocorixa linnaei	5		2 Common	Minsmere 15	TM46646601	5 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Hemiptera	Corixidae	Sigara dorsalis	5		2 Common	Minsmere 15	TM46646601	5 females	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus impressopunctatus	8		3 Local	Minsmere 15	TM46646601	8 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Rhantus suturalis	9		5 Notable/Nb	Minsmere 15	TM46646601	9 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus pubescens	10		2 Common	Minsmere 15	TM46646601	10 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus planus	11		2 Common	Minsmere 15	TM46646601	11 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Hydrophilidae	Hydrobius fuscipes	11		2 Common	Minsmere 15	TM46646601	11 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Noteridae	Noterus clavicornis	12		3 Local	Minsmere 15	TM46646601	12 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Haliplidae	Haliplus	2		0 Unknown	Minsmere 15	TM46646601	1 female, 1 larva	28-Apr-09	Drake, C.M.	F, L
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Hydrophilidae	Laccobius bipunctatus	2		2 Common	Minsmere 15	TM46646601	1 male, 1 female	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus palustris	6		2 Common	Minsmere 15	TM46646601	3 males, 3 females	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Helophoridae	Helophorus minutus	25		2 Common	Minsmere 15	TM46646601	5 males, 20 females	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM15	15	2009	April	Crustacea	Isopoda	Asellidae	Asellus aquaticus	F		2 Common	Minsmere 15	TM46646601	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Crustacea	Amphipoda	Crangonyctidae	Crangonyx pseudogracilis	F		21 Naturalised	Minsmere 15	TM46646601	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Mollusca	Mollusca	Planorbidae	Anisus vortex	F		2 Common	Minsmere 15	TM46646601	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Mollusca	Mollusca	Planorbidae	Bathymorphalus contortus	F		3 Local	Minsmere 15	TM46646601	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Mollusca	Mollusca	Lymnaeidae	Lymnaea palustris	F		2 Common	Minsmere 15	TM46646601	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Mollusca	Mollusca	Lymnaeidae	Radix balthica	F		2 Common	Minsmere 15	TM46646601	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Mollusca	Mollusca	Planorbidae	Planorbarius corneus	F		2 Common	Minsmere 15	TM46646601	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Mollusca	Mollusca	Sphaeriidae	Pisidium	N		0 Unknown	Minsmere 15	TM46646601	adult numerous	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Hemiptera	Naucoridae	Ilyocoris cimicoides	0		2 Common	Minsmere 15	TM46646601	adult occasional	28-Apr-09	Drake, C.M.	AD

Sizewell and Minsere 2009 (continued)
Data from Martin Drake

actual count or Occasional,Frequent,Numerous

Marsh	Subsite	Code (Bugl.)	ditch number	YEAR	MONTH	Group	Order	Family	Species	Abundance	1	GB_STATUS	GB_STATUS_L	SITE_L	GRID	ABUNDANCE_STAGE	DATE	RECORDER_L	SEX_STAGE
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Hemiptera	Pleidae	Plea minutissima	0		2	Common	Minsmere 15	TM46646601	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Hirudinea	Hirudinea	Erpobdellidae	Erpobdella octoculata	0		2	Common	Minsmere 15	TM46646601	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Hirudinea	Hirudinea	Hirudinidae	Haemopsis sanguisuga	0		3	Local	Minsmere 15	TM46646601	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Vertebrata	Pisces	Gasterosteidae	Pungitius pungitius	0		0	Unknown	Minsmere 15	TM46646601	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Mollusca	Mollusca	Bithyniidae	Bithynia tentaculata	0		2	Common	Minsmere 15	TM46646601	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis planorbis	0		2	Common	Minsmere 15	TM46646601	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Arachnida	Araneae	Cybaeidae	Argyroneta aquatica	0		3	Local	Minsmere 15	TM46646601	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM15	15	2009	April	Insecta	Coleoptera	Scirtidae	Scirtidae	0	0		Unknown	Minsmere 15	TM46646601	larva occasional	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Dytiscidae	Agabus sturmii	1		2	Common	Minsmere 13	TM46596618	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus planus	1		2	Common	Minsmere 13	TM46596618	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus pubescens	1		2	Common	Minsmere 13	TM46596618	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Dytiscidae	Rhantus grapii	1		5	Notable/Nb	Minsmere 13	TM46596618	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Hydrophilidae	Anacaena limbata	1		2	Common	Minsmere 13	TM46596618	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Hydraenidae	Ochthebius minimus	1		2	Common	Minsmere 13	TM46596618	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Coccinellidae	Anisosticta novemdecimpunctata	1		3	Local	Minsmere 13	TM46596618	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Coccinellidae	Coccidula rufa	1		2	Common	Minsmere 13	TM46596618	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Tricladida	Tricladida	Dugesidae	Dugesia lugubris	1		0	Unknown	Minsmere 13	TM46596618	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Diptera	Sciomyzidae	Sepedon spinipes	1		3	Local	Minsmere 13	TM46596618	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Diptera	Sphaeroceridae	Lotophila atra	1		2	Common	Minsmere 13	TM46596618	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Chrysomelidae	Prasocuris phellandrii	1		3	Local	Minsmere 13	TM46596618	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Halipidae	Halipus	1		0	Unknown	Minsmere 13	TM46596618	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Staphylinidae	Paederus fuscipes	1		5	Notable/Nb	Minsmere 13	TM46596618	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Diptera	Ephydriidae	Coenia palustris	1		2	Common	Minsmere 13	TM46596618	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Diptera	Dolichopodidae	Achalcus thalhammeri	1		0	Unknown	Minsmere 13	TM46596618	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM16	16	2009	April	Vertebrata	Urodela	Salamandridae	Triturus	1		0	Unknown	Minsmere 13	TM46596618	1 immature	28-Apr-09	Drake, C.M.	IM
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Odonata	Coenagriidae	Ischnura elegans	1		2	Common	Minsmere 13	TM46596618	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Ephemeroptera	Baetidae	Cloeon dipterum	1		2	Common	Minsmere 13	TM46596618	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Dytiscidae	Colymbetini	1	0		Unknown	Minsmere 13	TM46596618	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus solutus	1		3	Local	Minsmere 13	TM46596618	1 male	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus latifrons	1		2	Common	Minsmere 13	TM46596618	1 male	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Dytiscidae	Liopterus haemorrhoidalis	2		3	Local	Minsmere 13	TM46596618	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus angustatus	2		2	Common	Minsmere 13	TM46596618	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus impressopunctatus	2		3	Local	Minsmere 13	TM46596618	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus inaequalis	2		2	Common	Minsmere 13	TM46596618	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Hydrophilidae	Cymbiodyta marginellus	2		3	Local	Minsmere 13	TM46596618	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Hemiptera	Notonectidae	Notonecta glauca	2		2	Common	Minsmere 13	TM46596618	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Mollusca	Mollusca	Sphaeriidae	Pisidium	2		0	Unknown	Minsmere 13	TM46596618	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Carabidae	Odacantha melanura	2		5	Notable/Nb	Minsmere 13	TM46596618	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Hemiptera	Saldidae	Chartoscirta cincta	2		2	Common	Minsmere 13	TM46596618	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Hemiptera	Veliidae	Microvelia pygmaea	2		5	Notable/Nb	Minsmere 13	TM46596618	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Hemiptera	Hydrometridae	Hydrometra stagnorum	2		2	Common	Minsmere 13	TM46596618	2 females	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Dytiscidae	Rhantus suturalis	3		5	Notable/Nb	Minsmere 13	TM46596618	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Hydrophilidae	Enochrus testaceus	3		3	Local	Minsmere 13	TM46596618	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Mollusca	Mollusca	Physidae	Physa fontinalis	3		2	Common	Minsmere 13	TM46596618	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Diptera	Stratiomyidae	Oplodontha viridula	3		3	Local	Minsmere 13	TM46596618	3 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Helophoridae	Helophorus minutus	3		2	Common	Minsmere 13	TM46596618	3 males	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Halipidae	Halipus ruficollis	3		2	Common	Minsmere 13	TM46596618	3 males	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Trichoptera	Limnephilidae	Limnephilus marmoratus	4		2	Common	Minsmere 13	TM46596618	4 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Diptera	Dixidae	Dixella attica	4		5	Notable/Nb	Minsmere 13	TM46596618	4 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Hydrophilidae	Hydrobius fuscipes	5		2	Common	Minsmere 13	TM46596618	5 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Hemiptera	Corixidae	Hesperocorixa linnaei	5		2	Common	Minsmere 13	TM46596618	5 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Odonata	Coenagrionidae	Coenagrion	5		0	Unknown	Minsmere 13	TM46596618	5 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Diptera	Dixidae	Dixella autumnalis	6		3	Local	Minsmere 13	TM46596618	6 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Noteridae	Noterus clavicornis	7		3	Local	Minsmere 13	TM46596618	7 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Hemiptera	Veliidae	Microvelia reticulata	11		2	Common	Minsmere 13	TM46596618	11 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus palustris	4		2	Common	Minsmere 13	TM46596618	3 males, 1 female	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM16	16	2009	April	Crustacea	Isopoda	Asellidae	Asellus aquaticus	F		2	Common	Minsmere 13	TM46596618	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Crustacea	Amphipoda	Crangonyctidae	Crangonyx pseudogracilis	F		21	Naturalised	Minsmere 13	TM46596618	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Mollusca	Mollusca	Planorbidae	Bathymophalus contortus	F		3	Local	Minsmere 13	TM46596618	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Mollusca	Mollusca	Lymnaeidae	Lymnaea palustris	F		2	Common	Minsmere 13	TM46596618	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Mollusca	Mollusca	Lymnaeidae	Radix balthica	F		2	Common	Minsmere 13	TM46596618	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis corneus	F		2	Common	Minsmere 13	TM46596618	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis carinatus	F		2	Common	Minsmere 13	TM46596618	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis planorbis	F		2	Common	Minsmere 13	TM46596618	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Mollusca	Mollusca	Bithyniidae	Bithynia tentaculata	N		2	Common	Minsmere 13	TM46596618	adult numerous	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Dytiscidae	Colymbetes fuscus	0		2	Common	Minsmere 13	TM46596618	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Hemiptera	Nepidae	Nepa cinerea	0		2	Common	Minsmere 13	TM46596618	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Vertebrata	Pisces	Gasterosteidae	Pungitius pungitius	0		0	Unknown	Minsmere 13	TM46596618	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Mollusca	Mollusca	Planorbidae	Anisus vortex	0		2	Common	Minsmere 13	TM46596618	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Mollusca	Mollusca	Succineidae	Succinea putris	0		2	Common	Minsmere 13	TM46596618	adult occasional	28-Apr-09	Drake, C.M.	AD

Sizewell and Minsere 2009 (continued)
Data from Martin Drake

actual count or Occasional,Frequent,Numerous

Marsh	Subsite	Code (Bugl.)	ditch number	YEAR	MONTH	Group	Order	Family	Species	Abundance 1	GB_STATUS	GB_STATUS_L	SITE_L	GRID	ABUNDANCE_STAGE	DATE	RECORDER_L	SEX_STAGE
Sizewell	Minsmere	SM16	16	2009	April	Arachnida	Araneae	Cybaeidae	Argyroneta aquatica	0		3 Local	Minsmere 13	TM46596618	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Odonata	Aeshnidae	Brachytron pratense	0		5 Notable/Nb	Minsmere 13	TM46596618	larva occasional	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM16	16	2009	April	Insecta	Coleoptera	Scirtidae	Scirtidae	0	0	Unknown	Minsmere 13	TM46596618	larva occasional	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus inaequalis	1		2 Common	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus parallelogrammus	1		5 Notable/Nb	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Ilybius ater	1		2 Common	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Laccophilus minutus	1		3 Local	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Hydrophilidae	Cymbiodyta marginellus	1		3 Local	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Coccinellidae	Coccidula rufa	1		2 Common	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Hemiptera	Veliidae	Microvelia reticulata	1		2 Common	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Hemiptera	Pleidae	Plea minutissima	1		2 Common	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Hirudinea	Hirudinea	Glossiphoniidae	Glossiphonia complanata	1		2 Common	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Diptera	Sciomyzidae	Sepedon spinipes	1		3 Local	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Carabidae	Demetrias imperialis	1		5 Notable/Nb	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Tricladida	Tricladida	Dendrocoelidae	Dendrocoelum lacteum	1		2 Common	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Chrysomelidae	Galerucella nymphaeae	1		3 Local	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroglyphus geminus	1		5 Notable/Nb	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus latifrons	1		2 Common	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Curculionidae	Thryogenes nereis	1		3 Local	Minsmere 9	TM46046617	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Physidae	Aplexa hypnorum	1		3 Local	Minsmere 9	TM46046617	1 dead	28-Apr-09	Drake, C.M.	D
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Ilybius quadriguttatus	1		2 Common	Minsmere 9	TM46046617	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Hydrophilidae	Laccobius bipunctatus	1		2 Common	Minsmere 9	TM46046617	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Hemiptera	Saldidae	Saldula pallipes	1		2 Common	Minsmere 9	TM46046617	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM17	17	2009	April	Hirudinea	Hirudinea	Glossiphoniidae	Theromyzon tessulatum	1		2 Common	Minsmere 9	TM46046617	1 immature	28-Apr-09	Drake, C.M.	IM
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Colymbetes fuscus	1		2 Common	Minsmere 9	TM46046617	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Diptera	Stratiomyidae	Odontomyia ornata	1		12 RDB2	Minsmere 9	TM46046617	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Diptera	Stratiomyidae	Oplodontha viridula	1		3 Local	Minsmere 9	TM46046617	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Odonata	Libellulidae	Sympetrum	1		0 Unknown	Minsmere 9	TM46046617	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Diptera	Culicidae	Anopheles atroparvus	1		2 Common	Minsmere 9	TM46046617	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus memnonius	1		2 Common	Minsmere 9	TM46046617	1 male	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Haliplidae	Haliplus ruficollis	1		2 Common	Minsmere 9	TM46046617	1 male	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Hemiptera	Gerridae	Gerris lacustris	1		2 Common	Minsmere 9	TM46046617	1 male	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Agabus sturmi	2		2 Common	Minsmere 9	TM46046617	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Hydaticus seminiger	2		5 Notable/Nb	Minsmere 9	TM46046617	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus angustatus	2		2 Common	Minsmere 9	TM46046617	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus pubescens	2		2 Common	Minsmere 9	TM46046617	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Hydrophilidae	Enochrus testaceus	2		3 Local	Minsmere 9	TM46046617	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Coccinellidae	Anisosticta novemdecimpunctata	2		3 Local	Minsmere 9	TM46046617	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Acroloxidae	Acroloxus lacustris	2		2 Common	Minsmere 9	TM46046617	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Planorbidae	Anisus vortex	2		2 Common	Minsmere 9	TM46046617	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Dytiscus	2		0 Unknown	Minsmere 9	TM46046617	2 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Rhantus suturalis	3		5 Notable/Nb	Minsmere 9	TM46046617	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Hydrophilidae	Anacaena limbata	3		2 Common	Minsmere 9	TM46046617	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Hydraenidae	Ochthebius minimus	3		2 Common	Minsmere 9	TM46046617	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Hemiptera	Notonectidae	Notonecta glauca	3		2 Common	Minsmere 9	TM46046617	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Sphaeriidae	Sphaerium corneum	3		2 Common	Minsmere 9	TM46046617	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Hydrophilidae	Cercyon marinus	3		3 Local	Minsmere 9	TM46046617	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Colymbetini	3	0	Unknown	Minsmere 9	TM46046617	3 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Trichoptera	Limnephilidae	Limnephilus marmoratus	3		2 Common	Minsmere 9	TM46046617	3 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Agabus bipustulatus	4		2 Common	Minsmere 9	TM46046617	4 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Ephemeroptera	Baetidae	Cloeon dipterum	4		2 Common	Minsmere 9	TM46046617	4 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Hemiptera	Corixidae	Hesperocorixa linnaei	8		2 Common	Minsmere 9	TM46046617	8 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Crustacea	Isopoda	Asellidae	Asellus aquaticus	8		2 Common	Minsmere 9	TM46046617	8 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Hydrophilidae	Hydrobius fuscipes	9		2 Common	Minsmere 9	TM46046617	9 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Noteridae	Noterus clavicornis	9		3 Local	Minsmere 9	TM46046617	9 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus planus	11		2 Common	Minsmere 9	TM46046617	11 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Odonata	Coenagrionidae	Coenagrion	11		0 Unknown	Minsmere 9	TM46046617	11 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Hydrophilidae	Hydrophilus piceus	2		10 RDB3	Minsmere 9	TM46046617	1 female, 1 egg/ovum	28-Apr-09	Drake, C.M.	F, O
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus juno	4		2 Common	Minsmere 9	TM46046617	2 males, 2 females	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Helophoridae	Helophorus minutus	7		2 Common	Minsmere 9	TM46046617	2 males, 5 females	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus palustris	6		2 Common	Minsmere 9	TM46046617	4 males, 2 females	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Hemiptera	Naucoridae	Ilyocoris cimicoides	F		2 Common	Minsmere 9	TM46046617	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Hirudinea	Hirudinea	Erpobdellidae	Erpobdella octoculata	F		2 Common	Minsmere 9	TM46046617	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Planorbidae	Bathyomphalus contortus	F		3 Local	Minsmere 9	TM46046617	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Planorbidae	Hippeutis complanatus	F		3 Local	Minsmere 9	TM46046617	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Sphaeriidae	Pisidium	F		0 Unknown	Minsmere 9	TM46046617	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis carinatus	F		2 Common	Minsmere 9	TM46046617	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Valvatidae	Valvata cristata	F		3 Local	Minsmere 9	TM46046617	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Viviparidae	Viviparus contectus	F		3 Local	Minsmere 9	TM46046617	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Crustacea	Amphipoda	Crangonyctidae	Crangonyx pseudogracilis	N		21 Naturalised	Minsmere 9	TM46046617	adult numerous	28-Apr-09	Drake, C.M.	AD

Sizewell and Minsere 2009 (continued)
Data from Martin Drake

actual count or Occasional,Frequent,Numerous

Marsh	Subsite	Code (Bugl.)	ditch number	YEAR	MONTH	Group	Order	Family	Species	Abundance 1	GB_STATUS	GB_STATUS_L	SITE_L	GRID	ABUNDANCE_STAGE	DATE	RECORDER_L	SEX_STAGE
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Lymnaeidae	Lymnaea palustris	0		2 Common	Minsmere 9	TM46046617	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Lymnaeidae	Radix balthica	0		2 Common	Minsmere 9	TM46046617	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Lymnaeidae	Lymnaea stagnalis	0		2 Common	Minsmere 9	TM46046617	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Planorbidae	Planorbarius corneus	0		2 Common	Minsmere 9	TM46046617	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis planorbis	0		2 Common	Minsmere 9	TM46046617	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Arachnida	Araneae	Cybaeidae	Argyroneta aquatica	0		3 Local	Minsmere 9	TM46046617	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM17	17	2009	April	Insecta	Coleoptera	Scirtidae	Scirtidae	0	0	Unknown	Minsmere 9	TM46046617	larva occasional	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Dytiscidae	Colymbetes fuscus	1		2 Common	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus impressopunctatus	1		3 Local	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus inaequalis	1		2 Common	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Dytiscidae	Rhantus grapii	1		5 Notable/Nb	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Dytiscidae	Rhantus suturalis	1		5 Notable/Nb	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Hydrophilidae	Anacaena limbata	1		2 Common	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Hydrophilidae	Cymbiodyta marginellus	1		3 Local	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Coccinellidae	Anisosticta novemdecimpunctata	1		3 Local	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Crustacea	Isopoda	Asellidae	Asellus aquaticus	1		2 Common	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis planorbis	1		2 Common	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Mollusca	Mollusca	Sphaeriidae	Sphaerium corneum	1		2 Common	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Dytiscidae	Rhantus frontalis	1		5 Notable/Nb	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Carabidae	Odacantha melanura	1		5 Notable/Nb	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Diptera	Ephydriidae	Parydra coarctata	1		2 Common	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Tricladida	Tricladida	Dugesidae	Dugesia lugubris	1		0 Unknown	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Hemiptera	Saldidae	Chartoscirta cincta	1		2 Common	Minsmere 1	TM45996635	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Halipidae	Haliplus	1		0 Unknown	Minsmere 1	TM45996635	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Diptera	Ephydriidae	Pelina similis	1		0 Unknown	Minsmere 1	TM45996635	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Hemiptera	Saldidae	Saldula palustris	1		2 Common	Minsmere 1	TM45996635	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus incrassatus	1		3 Local	Minsmere 1	TM45996635	1 male	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Dytiscidae	Agabus bipustulatus	2		2 Common	Minsmere 1	TM45996635	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus angustatus	2		2 Common	Minsmere 1	TM45996635	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus planus	2		2 Common	Minsmere 1	TM45996635	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus pubescens	2		2 Common	Minsmere 1	TM45996635	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Hemiptera	Corixidae	Hesperocorixa linnaei	2		2 Common	Minsmere 1	TM45996635	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Hemiptera	Veliidae	Microvelia reticulata	2		2 Common	Minsmere 1	TM45996635	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Crustacea	Amphipoda	Crangonyctidae	Crangonyx pseudogracilis	2		21 Naturalised	Minsmere 1	TM45996635	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Chrysomelidae	Galerucella nymphaeae	2		3 Local	Minsmere 1	TM45996635	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Hydraenidae	Ochthebius minimus	3		2 Common	Minsmere 1	TM45996635	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus junco	3		2 Common	Minsmere 1	TM45996635	3 females	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Coccinellidae	Coccidula rufa	4		2 Common	Minsmere 1	TM45996635	4 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Hemiptera	Corixidae	Hesperocorixa sahlbergi	4		2 Common	Minsmere 1	TM45996635	4 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Hydrophilidae	Hydrobius fuscipes	5		2 Common	Minsmere 1	TM45996635	5 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Diptera	Stratiomyidae	Oplodontha viridula	5		3 Local	Minsmere 1	TM45996635	5 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus cicindeloides	6		3 Local	Minsmere 1	TM45996635	6 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus palustris	2		2 Common	Minsmere 1	TM45996635	1 male, 1 female	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Coleoptera	Helophoridae	Helophorus minutus	9		2 Common	Minsmere 1	TM45996635	4 males, 5 females	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM18	18	2009	April	Mollusca	Mollusca	Bithyniidae	Bithynia tentaculata	F		2 Common	Minsmere 1	TM45996635	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Odonata	Coenagrionidae	Coenagrion	F		0 Unknown	Minsmere 1	TM45996635	larva frequent	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Ephemeroptera	Baetidae	Cloeon dipterum	F		2 Common	Minsmere 1	TM45996635	larva frequent	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Trichoptera	Limnephilidae	Limnephilus marmoratus	F		2 Common	Minsmere 1	TM45996635	larva frequent	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM18	18	2009	April	Hirudinea	Hirudinea	Erpobdellidae	Erpobdella octoculata	0		2 Common	Minsmere 1	TM45996635	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Vertebrata	Pisces	Gasterosteidae	Pungitius pungitius	0		0 Unknown	Minsmere 1	TM45996635	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Mollusca	Mollusca	Acroloxidae	Acroloxus lacustris	0		2 Common	Minsmere 1	TM45996635	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Mollusca	Mollusca	Planorbidae	Anisus vortex	0		2 Common	Minsmere 1	TM45996635	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Mollusca	Mollusca	Lymnaeidae	Radix balthica	0		2 Common	Minsmere 1	TM45996635	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Mollusca	Mollusca	Planorbidae	Planorbarius corneus	0		2 Common	Minsmere 1	TM45996635	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Hemiptera	Gerridae	Gerris	0		0 Unknown	Minsmere 1	TM45996635	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Hemiptera	Notonectidae	Notonecta	0		0 Unknown	Minsmere 1	TM45996635	immature occasional	28-Apr-09	Drake, C.M.	IM
Sizewell	Minsmere	SM18	18	2009	April	Insecta	Odonata	Aeshnidae	Brachytron pratense	0		5 Notable/Nb	Minsmere 1	TM45996635	larva occasional	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Dytiscidae	Agabus sturmii	1		2 Common	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Dytiscidae	Hydaticus seminiger	1		5 Notable/Nb	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus planus	1		2 Common	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Coccinellidae	Anisosticta novemdecimpunctata	1		3 Local	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Noteridae	Noterus clavicornis	1		3 Local	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Halipidae	Pelodytes caesus	1		5 Notable/Nb	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Curculionidae	Tanyssphyrus lemnae	1		3 Local	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Hemiptera	Corixidae	Hesperocorixa sahlbergi	1		2 Common	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Hemiptera	Hydrometridae	Hydrometra stagnorum	1		2 Common	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Hemiptera	Notonectidae	Notonecta glauca	1		2 Common	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Hemiptera	Pleidae	Plea minutissima	1		2 Common	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Mollusca	Mollusca	Acroloxidae	Acroloxus lacustris	1		2 Common	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis planorbis	1		2 Common	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD

Sizewell and Minsere 2009 (continued)
Data from Martin Drake

actual count or Occasional,Frequent,Numerous

Marsh	Subsite	Code (Bugl.)	ditch number	YEAR	MONTH	Group	Order	Family	Species	Abundance 1	GB_STATUS	GB_STATUS_L	SITE_L	GRID	ABUNDANCE_STAGE	DATE	RECORDER_L	SEX_STAGE
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Carabidae	Oodes helopioides	1		5 Notable/Nb	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Diptera	Ephydriidae	Scatella tenuicosta	1		2 Common	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Diptera	Ephydriidae	Scatella stagnalis	1		2 Common	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Chrysomelidae	Aphthona nonstriata	1		3 Local	Minsmere 3	TM46126634	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Hydraenidae	Hydraena riparia	1		3 Local	Minsmere 3	TM46126634	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Hydraenidae	Limnebius truncatellus	1		2 Common	Minsmere 3	TM46126634	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus junco	1		2 Common	Minsmere 3	TM46126634	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Dytiscidae	Dytiscus semisulcatus	1		3 Local	Minsmere 3	TM46126634	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Dytiscidae	Dytiscus	1		0 Unknown	Minsmere 3	TM46126634	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Diptera	Stratiomyidae	Oplodontha viridula	1		3 Local	Minsmere 3	TM46126634	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Odonata	Coenagrionidae	Coenagrion	1		0 Unknown	Minsmere 3	TM46126634	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Diptera	Dixidae	Dixella autumnalis	1		3 Local	Minsmere 3	TM46126634	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Diptera	Stratiomyidae	Vanoyia tenuicornis	1		5 Notable/Nb	Minsmere 3	TM46126634	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Dryopidae	Dryops luridus	1		2 Common	Minsmere 3	TM46126634	1 male	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Trichoptera	Limnephilidae	Limnephilus auricula	1		2 Common	Minsmere 3	TM46126634	1 male	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus boops	1		2 Common	Minsmere 3	TM46126634	1 male	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Hydrophilidae	Enochrus halophilus	1		6 Na	Minsmere 3	TM46126634	1 male	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Helophoridae	Helophorus griseus	1		5 Notable/Nb	Minsmere 3	TM46126634	1 male	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Dytiscidae	Graptodytes pictus	2		3 Local	Minsmere 3	TM46126634	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Dytiscidae	Hyphydrus ovatus	2		2 Common	Minsmere 3	TM46126634	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Helophoridae	Helophorus aequalis	2		2 Common	Minsmere 3	TM46126634	2 males	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Helophoridae	Helophorus minutus	2		2 Common	Minsmere 3	TM46126634	2 males	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Chrysomelidae	Galerucella nymphaeae	3		3 Local	Minsmere 3	TM46126634	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Hydraenidae	Ochthebius nanus	3		5 Notable/Nb	Minsmere 3	TM46126634	3 males	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus angustatus	4		2 Common	Minsmere 3	TM46126634	4 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus cicindeloides	4		3 Local	Minsmere 3	TM46126634	4 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus impressopunctatus	5		3 Local	Minsmere 3	TM46126634	5 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Hydraenidae	Ochthebius minimus	5		2 Common	Minsmere 3	TM46126634	5 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Crustacea	Isopoda	Asellidae	Asellus aquaticus	5		2 Common	Minsmere 3	TM46126634	5 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus inaequalis	6		2 Common	Minsmere 3	TM46126634	6 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus palustris	6		2 Common	Minsmere 3	TM46126634	6 males	28-Apr-09	Drake, C.M.	M
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Hydrophilidae	Anacaena limbata	7		2 Common	Minsmere 3	TM46126634	7 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Hydrophilidae	Enochrus testaceus	8		3 Local	Minsmere 3	TM46126634	8 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Dytiscidae	Rhantus suturalis	11		5 Notable/Nb	Minsmere 3	TM46126634	11 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Hemiptera	Corixidae	Hesperocorixa linnaei	11		2 Common	Minsmere 3	TM46126634	11 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Hydrophilidae	Hydrobius fuscipes	14		2 Common	Minsmere 3	TM46126634	14 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Hemiptera	Veliidae	Microvelia reticulata	28		2 Common	Minsmere 3	TM46126634	28 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Halipidae	Haliplus	2		0 Unknown	Minsmere 3	TM46126634	1 female, 1 larva	28-Apr-09	Drake, C.M.	F, L
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus latifrons	2		2 Common	Minsmere 3	TM46126634	1 male, 1 female	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Hemiptera	Saldidae	Saldula pallipes	3		2 Common	Minsmere 3	TM46126634	2 males, 1 female	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM19	19	2009	April	Crustacea	Amphipoda	Crangonyctidae	Crangonyx pseudogracilis	F		21 Naturalised	Minsmere 3	TM46126634	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Mollusca	Mollusca	Planorbidae	Anisus vortex	F		2 Common	Minsmere 3	TM46126634	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Mollusca	Mollusca	Planorbidae	Bathyomphalus contortus	F		3 Local	Minsmere 3	TM46126634	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Mollusca	Mollusca	Bithyniidae	Bithynia tentaculata	F		2 Common	Minsmere 3	TM46126634	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Mollusca	Mollusca	Lymnaeidae	Lymnaea palustris	F		2 Common	Minsmere 3	TM46126634	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Ephemeroptera	Baetidae	Cloeon dipterum	F		2 Common	Minsmere 3	TM46126634	larva frequent	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Hemiptera	Nepidae	Nepa cinerea	O		2 Common	Minsmere 3	TM46126634	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Hirudinea	Hirudinea	Erpobdellidae	Erpobdella octoculata	O		2 Common	Minsmere 3	TM46126634	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Vertebrata	Pisces	Gasterosteidae	Pungitius pungitius	O		0 Unknown	Minsmere 3	TM46126634	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Mollusca	Mollusca	Lymnaeidae	Radix balthica	O		2 Common	Minsmere 3	TM46126634	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis corneus	O		2 Common	Minsmere 3	TM46126634	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Odonata	Aeshnidae	Brachytron pratense	O		5 Notable/Nb	Minsmere 3	TM46126634	larva occasional	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Coleoptera	Scirtidae	Scirtidae	O		0 Unknown	Minsmere 3	TM46126634	larva occasional	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM19	19	2009	April	Insecta	Hemiptera	Naucoridae	Ilyocoris cimicoides	O		2 Common	Minsmere 3	TM46126634	male occasional	28-Apr-09	Drake, C.M.	M
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus angustatus	1		2 Common	Sizewell 8	TM46236387	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Dytiscidae	Hyphydrus ovatus	1		2 Common	Sizewell 8	TM46236387	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Hemiptera	Gerridae	Gerris lacustris	1		2 Common	Sizewell 8	TM46236387	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Hemiptera	Gerridae	Gerris thoracicus	1		2 Common	Sizewell 8	TM46236387	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Hemiptera	Notonectidae	Notonecta glauca	1		2 Common	Sizewell 8	TM46236387	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis planorbis	1		2 Common	Sizewell 8	TM46236387	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Mollusca	Mollusca	Vertiginidae	Vertigo antivertigo	1		3 Local	Sizewell 8	TM46236387	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Diptera	Syrphidae	Neosascia tenur	1		3 Local	Sizewell 8	TM46236387	1 female	27-Apr-09	Drake, C.M.	F
Sizewell	Sizewell	SM2	2	2009	April	Hirudinea	Hirudinea	Glossiphoniidae	Theromyzon tessulatum	1		2 Common	Sizewell 8	TM46236387	1 immature	27-Apr-09	Drake, C.M.	IM
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Dytiscidae	Dytiscus	1		0 Unknown	Sizewell 8	TM46236387	1 larva	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Diptera	Stratiomyidae	Odontomyia tigrina	1		5 Notable/Nb	Sizewell 8	TM46236387	1 larva	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Odonata	Aeshnidae	Aeshnidae	1		0 Unknown	Sizewell 8	TM46236387	1 larva	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Helophoridae	Helophorus minutus	1		2 Common	Sizewell 8	TM46236387	1 male	27-Apr-09	Drake, C.M.	M
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Hydrophilidae	Laccobius bipunctatus	1		2 Common	Sizewell 8	TM46236387	1 male	27-Apr-09	Drake, C.M.	M
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus latifrons	1		2 Common	Sizewell 8	TM46236387	1 male	27-Apr-09	Drake, C.M.	M
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus nitidiusculus	1		2 Common	Sizewell 8	TM46236387	1 male	27-Apr-09	Drake, C.M.	M

Sizewell and Minsere 2009 (continued)
Data from Martin Drake

actual count or Occasional,Frequent,Numerous

Marsh	Subsite	Code (Bugl.)	ditch number	YEAR	MONTH	Group	Order	Family	Species	Abundance 1	GB_STATUS	GB_STATUS_L	SITE_L	GRID	ABUNDANCE_STAGE	DATE	RECORDER_L	SEX_STAGE
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Diptera	Syrphidae	Chrysogaster	1		0 Unknown	Sizewell 8	TM46236387	1 pupa/pupal cocoon	27-Apr-09	Drake, C.M.	P
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Odonata	Aeshnidae	Brachytron pratense	1		5 Notable/Nb	Sizewell 8	TM46236387	1 subadult male	27-Apr-09	Drake, C.M.	SUM
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus pubescens	2		2 Common	Sizewell 8	TM46236387	2 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Mollusca	Mollusca	Sphaeriidae	Pisidium	2		0 Unknown	Sizewell 8	TM46236387	2 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Dryopidae	Dryops luridus	2		2 Common	Sizewell 8	TM46236387	2 males	27-Apr-09	Drake, C.M.	M
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Noteridae	Noterus clavicornis	3		3 Local	Sizewell 8	TM46236387	3 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Hemiptera	Veliidae	Microvelia reticulata	3		2 Common	Sizewell 8	TM46236387	3 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus cicindeloides	3		3 Local	Sizewell 8	TM46236387	3 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Hydrophilidae	Anacaena limbata	4		2 Common	Sizewell 8	TM46236387	4 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Diptera	Stratiomyidae	Oplodontha viridula	4		3 Local	Sizewell 8	TM46236387	4 larvae	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM2	2	2009	April	Crustacea	Isopoda	Asellidae	Asellus aquaticus	5		2 Common	Sizewell 8	TM46236387	5 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Diptera	Dixidae	Dixella autumnalis	6		3 Local	Sizewell 8	TM46236387	6 larvae	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Hydrophilidae	Enochrus coarctatus	8		3 Local	Sizewell 8	TM46236387	8 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Hemiptera	Gerridae	Gerris odontogaster	3		2 Common	Sizewell 8	TM46236387	1 male, 2 females	27-Apr-09	Drake, C.M.	M, F
Sizewell	Sizewell	SM2	2	2009	April	Crustacea	Amphipoda	Crangonyctidae	Crangonyx pseudogracilis	F		21 Naturalised	Sizewell 8	TM46236387	adult frequent	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Mollusca	Mollusca	Planorbidae	Anisus vortex	F		2 Common	Sizewell 8	TM46236387	adult frequent	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Mollusca	Mollusca	Planorbidae	Planorbarius corneus	F		2 Common	Sizewell 8	TM46236387	adult frequent	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis carinatus	F		2 Common	Sizewell 8	TM46236387	adult frequent	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Mollusca	Mollusca	Viviparidae	Viviparus contectus	F		3 Local	Sizewell 8	TM46236387	adult frequent	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Arachnida	Araneae	Cybidae	Argyroseta aquatica	F		3 Local	Sizewell 8	TM46236387	adult frequent	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Odonata	Coenagrionidae	Coenagrion	F		0 Unknown	Sizewell 8	TM46236387	larva frequent	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Ephemeroptera	Baetidae	Cloeon dipterum	F		2 Common	Sizewell 8	TM46236387	larva frequent	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Coleoptera	Scirtidae	Scirtidae	F	0	Unknown	Sizewell 8	TM46236387	larva frequent	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Trichoptera	Limnephilidae	Limnophilus marmoratus	F		2 Common	Sizewell 8	TM46236387	larva frequent	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM2	2	2009	April	Mollusca	Mollusca	Bithyniidae	Bithynia tentaculata	N		2 Common	Sizewell 8	TM46236387	adult numerous	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Hemiptera	Naucoridae	Ilyocoris cimicoides	O		2 Common	Sizewell 8	TM46236387	adult occasional	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Insecta	Hemiptera	Nepidae	Nepa cinerea	O		2 Common	Sizewell 8	TM46236387	adult occasional	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Hirudinea	Hirudinea	Erpobdellidae	Erpobdella octoculata	O		2 Common	Sizewell 8	TM46236387	adult occasional	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Hirudinea	Hirudinea	Hirudinidae	Haemopsis sanguisuga	O		3 Local	Sizewell 8	TM46236387	adult occasional	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Mollusca	Mollusca	Planorbidae	Bathymphalus contortus	O		3 Local	Sizewell 8	TM46236387	adult occasional	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Mollusca	Mollusca	Planorbidae	Hippeutis complanatus	O		3 Local	Sizewell 8	TM46236387	adult occasional	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Mollusca	Mollusca	Lymnaeidae	Lymnaea stagnalis	O		2 Common	Sizewell 8	TM46236387	adult occasional	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM2	2	2009	April	Mollusca	Mollusca	Valvatidae	Valvata cristata	O		3 Local	Sizewell 8	TM46236387	adult occasional	27-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus planus	1		2 Common	Minsmere 6a	TM46326630	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Dytiscidae	Hyphydrus ovatus	1		2 Common	Minsmere 6a	TM46326630	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Hydrophilidae	Cercyon convexiusculus	1		5 Notable/Nb	Minsmere 6a	TM46326630	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Hydrophilidae	Enochrus testaceus	1		3 Local	Minsmere 6a	TM46326630	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Coccinellidae	Anisosticta novemdecimpunctata	1		3 Local	Minsmere 6a	TM46326630	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Hemiptera	Veliidae	Microvelia reticulata	1		2 Common	Minsmere 6a	TM46326630	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Hemiptera	Notonectidae	Notonecta glauca	1		2 Common	Minsmere 6a	TM46326630	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Mollusca	Mollusca	Planorbidae	Gyraulus crista	1		2 Common	Minsmere 6a	TM46326630	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis planorbis	1		2 Common	Minsmere 6a	TM46326630	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Mollusca	Mollusca	Valvatidae	Valvata cristata	1		3 Local	Minsmere 6a	TM46326630	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Chrysomelidae	Prasocuris phellandrii	1		3 Local	Minsmere 6a	TM46326630	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Chrysomelidae	Galerucella nymphaeae	1		3 Local	Minsmere 6a	TM46326630	1 adult	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Helophoridae	Helophorus minutus	1		2 Common	Minsmere 6a	TM46326630	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Hydraenidae	Hydraena riparia	1		3 Local	Minsmere 6a	TM46326630	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Halipidae	Halipilus	1		0 Unknown	Minsmere 6a	TM46326630	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Hydrophilidae	Enochrus halophilus	1		6 Na	Minsmere 6a	TM46326630	1 female	28-Apr-09	Drake, C.M.	F
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Dytiscidae	Dytiscus	1		0 Unknown	Minsmere 6a	TM46326630	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Scirtidae	Scirtidae	1	0	Unknown	Minsmere 6a	TM46326630	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Diptera	Tabanidae	Tabanidae	1	0	Unknown	Minsmere 6a	TM46326630	1 larva	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM20	20	2009	April	Crustacea	Isopoda	Asellidae	Asellus aquaticus	2		2 Common	Minsmere 6a	TM46326630	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Mollusca	Mollusca	Lymnaeidae	Lymnaea palustris	2		2 Common	Minsmere 6a	TM46326630	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Dytiscidae	Rhantus frontalis	2		5 Notable/Nb	Minsmere 6a	TM46326630	2 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Odonata	Libellulidae	Sympetrum	2		0 Unknown	Minsmere 6a	TM46326630	2 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Hydraenidae	Ochthebius minimus	3		2 Common	Minsmere 6a	TM46326630	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Mollusca	Mollusca	Planorbidae	Anisus vortex	3		2 Common	Minsmere 6a	TM46326630	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Mollusca	Mollusca	Bithyniidae	Bithynia tentaculata	3		2 Common	Minsmere 6a	TM46326630	3 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Coleoptera	Dytiscidae	Colymbetini	7	0	Unknown	Minsmere 6a	TM46326630	7 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Odonata	Coenagrionidae	Ischnura elegans	9		2 Common	Minsmere 6a	TM46326630	9 larvae	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Hemiptera	Corixidae	Hesperocorixa linnaei	17		2 Common	Minsmere 6a	TM46326630	17 adults	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Hemiptera	Corixidae	Sigara dorsalis	4		2 Common	Minsmere 6a	TM46326630	1 male, 3 females	28-Apr-09	Drake, C.M.	M, F
Sizewell	Minsmere	SM20	20	2009	April	Crustacea	Amphipoda	Crangonyctidae	Crangonyx pseudogracilis	F		21 Naturalised	Minsmere 6a	TM46326630	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Mollusca	Mollusca	Sphaeriidae	Pisidium	F		0 Unknown	Minsmere 6a	TM46326630	adult frequent	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Ephemeroptera	Baetidae	Cloeon dipterum	F		2 Common	Minsmere 6a	TM46326630	larva frequent	28-Apr-09	Drake, C.M.	L
Sizewell	Minsmere	SM20	20	2009	April	Vertebrata	Pisces	Gasterosteidae	Pungitius pungitius	O		0 Unknown	Minsmere 6a	TM46326630	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Mollusca	Mollusca	Lymnaeidae	Radix balthica	O		2 Common	Minsmere 6a	TM46326630	adult occasional	28-Apr-09	Drake, C.M.	AD
Sizewell	Minsmere	SM20	20	2009	April	Insecta	Hemiptera	Gerridae	Gerris	O		0 Unknown	Minsmere 6a	TM46326630	immature occasional	28-Apr-09	Drake, C.M.	IM
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus angustatus	1		2 Common	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD

Sizewell and Minsere 2009 (continued)
Data from Martin Drake

actual count or Occasional,Frequent,Numerous

Marsh	Subsite	Code (Bugl.)	ditch number	YEAR	MONTH	Group	Order	Family	Species	Abundance 1	GB_STATUS	GB_STATUS_L	SITE_L	GRID	ABUNDANCE_STAGE	DATE	RECORDER_L	SEX_STAGE
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus planus	1		2 Common	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus pubescens	1		2 Common	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus impressopunctatus	1		3 Local	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Dytiscidae	Ilybius ater	1		2 Common	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Dytiscidae	Rhantus grapii	1		5 Notable/Nb	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Hydrophilidae	Coelostoma orbiculare	1		2 Common	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Coccinellidae	Coccidula rufa	1		2 Common	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Hemiptera	Corixidae	Hesperocorixa sahlbergi	1		2 Common	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Mollusca	Mollusca	Planorbidae	Bathyomphalus contortus	1		3 Local	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Mollusca	Mollusca	Bithyniidae	Bithynia tentaculata	1		2 Common	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Crustacea	Isopoda	Ligiidae	Ligidium hypnorum	1		3 Local	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Diptera	Lauxaniidae	Trigonometopus frontalis	1		3 Local	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Hemiptera	Saldidae	Chartoscirta cincta	1		2 Common	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Silvanidae	Psammoeocus bipunctatus	1		3 Local	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Chrysomelidae	Galerucella nymphaeae	1		3 Local	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Carabidae	Agonum thoreyi	1		3 Local	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Vertebrata	Urodela	Salamandridae	Triturus	1		0 Unknown	Sizewell 12	TM46616373	1 adult	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Hemiptera	Gerridae	Gerris lacustris	1		2 Common	Sizewell 12	TM46616373	1 female	27-Apr-09	Drake, C.M.	F
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Diptera	Ephydriidae	Pelina aenea	1		0 Unknown	Sizewell 12	TM46616373	1 female	27-Apr-09	Drake, C.M.	F
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Scirtidae	Cyphon padi	1		3 Local	Sizewell 12	TM46616373	1 female	27-Apr-09	Drake, C.M.	F
Sizewell	Sizewell	SM3	3	2009	April	Hirudinea	Hirudinea	Glossiphoniidae	Theromyzon tessulatum	1		2 Common	Sizewell 12	TM46616373	1 immature	27-Apr-09	Drake, C.M.	IM
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Trichoptera	Limnephiliidae	Glyphotaelius pellucidus	1		2 Common	Sizewell 12	TM46616373	1 larva	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Diptera	Ptychopteridae	Ptychoptera minuta	1		3 Local	Sizewell 12	TM46616373	1 larva	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Dytiscidae	Hydroporus palustris	1		2 Common	Sizewell 12	TM46616373	1 male	27-Apr-09	Drake, C.M.	M
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Halplidae	Halplus ruficollis	1		2 Common	Sizewell 12	TM46616373	1 male	27-Apr-09	Drake, C.M.	M
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus nitidiusculus	1		2 Common	Sizewell 12	TM46616373	1 male	27-Apr-09	Drake, C.M.	M
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus bifoveolatus	1		3 Local	Sizewell 12	TM46616373	1 male	27-Apr-09	Drake, C.M.	M
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Diptera	Syrphidae	Eristalini	1		0 Unknown	Sizewell 12	TM46616373	1 pupa/pupal cocoon	27-Apr-09	Drake, C.M.	P
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Dytiscidae	Rhantus suturalis	2		5 Notable/Nb	Sizewell 12	TM46616373	2 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Hydrophilidae	Cymbiodyta marginellus	2		3 Local	Sizewell 12	TM46616373	2 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Hemiptera	Notonectidae	Notonecta glauca	2		2 Common	Sizewell 12	TM46616373	2 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Hemiptera	Pleidae	Plea minutissima	2		2 Common	Sizewell 12	TM46616373	2 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Curculionidae	Thryogenes nereis	2		3 Local	Sizewell 12	TM46616373	2 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus latifrons	2		2 Common	Sizewell 12	TM46616373	2 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Diptera	Stratiomyidae	Odontomyia ornata	2		12 RDB2	Sizewell 12	TM46616373	2 larvae	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Ephemeroptera	Baetidae	Cloeon dipterum	2		2 Common	Sizewell 12	TM46616373	2 larvae	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Diptera	Tabanidae	Tabanidae	2	0	Unknown	Sizewell 12	TM46616373	2 larvae	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Diptera	Dixidae	Dixella autumnalis	2		3 Local	Sizewell 12	TM46616373	2 larvae	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus picipennis	2		3 Local	Sizewell 12	TM46616373	2 males	27-Apr-09	Drake, C.M.	M
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Dytiscidae	Hygrotus inaequalis	3		2 Common	Sizewell 12	TM46616373	3 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Dytiscidae	Hyphydrus ovatus	3		2 Common	Sizewell 12	TM46616373	3 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Hydrophilidae	Enochrus testaceus	3		3 Local	Sizewell 12	TM46616373	3 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Mollusca	Mollusca	Sphaeriidae	Musculium lacustre	3		2 Common	Sizewell 12	TM46616373	3 immatures	27-Apr-09	Drake, C.M.	IM
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Diptera	Stratiomyidae	Odontomyia tigrina	3		5 Notable/Nb	Sizewell 12	TM46616373	3 larvae	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Diptera	Stratiomyidae	Vanoyia tenuicornis	3		5 Notable/Nb	Sizewell 12	TM46616373	3 larvae	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Dytiscidae	Agabus bipustulatus	4		2 Common	Sizewell 12	TM46616373	4 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Noteridae	Noterus clavicornis	4		3 Local	Sizewell 12	TM46616373	4 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Mollusca	Mollusca	Lymnaeidae	Lymnaea palustris	4		2 Common	Sizewell 12	TM46616373	4 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Odonata	Coenagrionidae	Coenagrion	4		0 Unknown	Sizewell 12	TM46616373	4 larvae	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Hydrophilidae	Anacaena limbata	5		2 Common	Sizewell 12	TM46616373	5 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Odonata	Coenagriidae	Pyrrhosoma nymphula	5		2 Common	Sizewell 12	TM46616373	5 larvae	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Hydrophilidae	Hydrobius fuscipes	6		2 Common	Sizewell 12	TM46616373	6 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Staphylinidae	Stenus cicindeloides	8		3 Local	Sizewell 12	TM46616373	8 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Dytiscidae	Agabus sturmii	12		2 Common	Sizewell 12	TM46616373	12 adults	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Diptera	Stratiomyidae	Oplodontha viridula	13		3 Local	Sizewell 12	TM46616373	13 larvae	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Staphylinidae	Paederus riparius	2		3 Local	Sizewell 12	TM46616373	1 male, 1 female	27-Apr-09	Drake, C.M.	M, F
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Hemiptera	Hydrometridae	Hydrometra stagnorum	3		2 Common	Sizewell 12	TM46616373	1 male, 2 females	27-Apr-09	Drake, C.M.	M, F
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Hydrophilidae	Enochrus coarctatus	4		3 Local	Sizewell 12	TM46616373	2 males, 2 females	27-Apr-09	Drake, C.M.	M, F
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Hemiptera	Gerridae	Gerris odontogaster	6		2 Common	Sizewell 12	TM46616373	2 males, 4 females	27-Apr-09	Drake, C.M.	M, F
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Hydrophilidae	Laccobius bipunctatus	11		2 Common	Sizewell 12	TM46616373	7 males, 4 females	27-Apr-09	Drake, C.M.	M, F
Sizewell	Sizewell	SM3	3	2009	April	Crustacea	Isopoda	Asellidae	Asellus aquaticus	F		2 Common	Sizewell 12	TM46616373	adult frequent	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Crustacea	Amphipoda	Crangonyctidae	Crangonyx pseudogracilis	F		21 Naturalised	Sizewell 12	TM46616373	adult frequent	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Mollusca	Mollusca	Planorbidae	Anisus vortex	F		2 Common	Sizewell 12	TM46616373	adult frequent	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Mollusca	Mollusca	Planorbidae	Hippeutis complanatus	F		3 Local	Sizewell 12	TM46616373	adult frequent	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Mollusca	Mollusca	Planorbidae	Planorbis carinatus	F		2 Common	Sizewell 12	TM46616373	adult frequent	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Mollusca	Mollusca	Sphaeriidae	Sphaerium corneum	F		2 Common	Sizewell 12	TM46616373	adult frequent	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Trichoptera	Limnephiliidae	Limnephilus marmoratus	F		2 Common	Sizewell 12	TM46616373	larva frequent	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM3	3	2009	April	Mollusca	Mollusca	Sphaeriidae	Pisidium	N		0 Unknown	Sizewell 12	TM46616373	adult numerous	27-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Coleoptera	Scirtidae	Scirtidae	N	0	Unknown	Sizewell 12	TM46616373	larva numerous	27-Apr-09	Drake, C.M.	L
Sizewell	Sizewell	SM3	3	2009	April	Insecta	Hemiptera	Naucoridae	Ilyocoris cimicoides	O		2 Common	Sizewell 12	TM46616373	adult occasional	27-Apr-09	Drake, C.M.	AD

Sizewell and Minsere 2009 (continued)
Data from Martin Drake

actual count or Occasional,Frequent,Numerous

Marsh	Subsite	Code (Bugl.)	ditch number	YEAR	MONTH	Group	Order	Family	Species	Abundance 1	GB_STATUS	GB_STATUS_L	SITE_L	GRID	ABUNDANCE_STAGE	DATE	RECORDER_L	SEX_STAGE
Sizewell	Sizewell	SM9	9	2009	April	Hirudinea	Hirudinea	Erpobdellidae	Erpobdella octoculata	O	2	Common	Sizewell 38	TM46636444	adult occasional	29-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM9	9	2009	April	Vertebrata	Pisces	Gasterosteidae	Gasterosteus aculeatus	O	0	Unknown	Sizewell 38	TM46636444	adult occasional	29-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM9	9	2009	April	Vertebrata	Pisces	Gasterosteidae	Pungitius pungitius	O	0	Unknown	Sizewell 38	TM46636444	adult occasional	29-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM9	9	2009	April	Mollusca	Mollusca	Planorbidae	Hippeutis complanatus	O	3	Local	Sizewell 38	TM46636444	adult occasional	29-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM9	9	2009	April	Mollusca	Mollusca	Planorbidae	Planorbarius corneus	O	2	Common	Sizewell 38	TM46636444	adult occasional	29-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM9	9	2009	April	Mollusca	Mollusca	Hydrobiidae	Potamopyrgus antipodarum	O	21	Naturalised	Sizewell 38	TM46636444	adult occasional	29-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM9	9	2009	April	Mollusca	Mollusca	Sphaeriidae	Sphaerium corneum	O	2	Common	Sizewell 38	TM46636444	adult occasional	29-Apr-09	Drake, C.M.	AD
Sizewell	Sizewell	SM9	9	2009	April	Hirudinea	Hirudinea	Glossiphoniidae	Theromyzon tessulatum	O	2	Common	Sizewell 38	TM46636444	immature occasional	29-Apr-09	Drake, C.M.	IM

SAMPLE SITE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33			
<i>Atomaria mesomela</i>						1				1										2		2														
<i>Coccidula rufa</i>																																				
<i>Rhyzobius litura</i>																																1				
<i>Cartodere bifasciatus</i>																																				
<i>Bruchus loti</i>																				1																
<i>Galerucella tenella</i>																																				
<i>Longitarsus gracilis</i>																																				
<i>Protapion apricans</i>				1																																
<i>Ischnoptera pioni</i>																																				
<i>Sitona hispidulus</i>																																				
<i>Sitona lineatus</i>					1	3														2	1	2														
<i>Thryogenes nereis</i>																																				
<i>Datonychus melanostictus</i>																																				
<i>Molophilus obscurus (A)</i>																																				
<i>Dixella amphibis (A)</i>					2																															
<i>Dixella autumnalis (A)</i>									1								2																		1	
<i>Scatopse notata (A)</i>	1																																			
<i>Stilpon graminum (A)</i>																									1											
Hilera hirtella (A)	1																																			
<i>Achalcus britannicus (A)</i>				1																																
<i>Achalcus cinereus</i>																																				
<i>Achalcus flavicollis (A)</i>								1																												
<i>Achalcus thalhammeri (A)</i>																																				
<i>Campicnemus scambus (A)</i>						1																														
<i>Sympycnus desouteri (A)</i>	1																																			
<i>Lonchoptera furcata (A)</i>																																				
<i>Lonchoptera lutea (A)</i>																																				
Lonchoptera nitidifrons (A)										1																										
Lonchoptera scutellata (A)												1																								
<i>Pherbellia schoenherrii (A)</i>					1		1																													
Psacadina verbekei (A)																																				1
<i>Psacadina vittigera (A)</i>																																				
<i>Geomyza balachowskyi (A)</i>													1										1													
<i>Geomyza tripunctata (A)</i>																																				
<i>Opomyza florum (A)</i>		1																																		
<i>Elachiptera brevipennis (A)</i>																											1									
<i>Elachiptera comuta (A)</i>																																				
Elachiptera pubescens (A)				3		3																														
<i>Elachiptera megalis (A)</i>				1																																
<i>Elachiptera tuberculifera (A)</i>																																				
Elachiptera uniseti (A)					2																															
<i>Diatata ornata (A)</i>								1																												
<i>Coenia palustris (A)</i>																																				
<i>Hydrellia maura (A)</i>	3	3																																		
<i>Parydra coarctata (A)</i>	1																																			
<i>Parydra littoralis (A)</i>																																				
<i>Scatella stagnalis (A)</i>	1																																			
<i>Scatella tenuicornis (A)</i>	3	1																																		

KEY TO ABBREVIATIONS

A = Adult(s)
F = Female(s)
L = Larva(e)
M = Male(s)
P = Pupa(e)
PE = Pupal exuvia(e)

Table C1 Records of Norfolk Hawker from Sizewell (known to the surveyor)

LOCATION	DATE	GRID REF	RECORDER	METHOD	HABITAT	SITE	REFERENCE	STAGE	COMMENTS
Sizewell Estate	26/06/99	Not known	Alan Hubbard	Field record	Not known	Not known	Sizewell LMAR 1999-2000	Adults	
Sizewell Estate	18/06/03	Not known	Suffolk Wildlife Trust?	Field record	Not known	Not known	Sizewell LMAR 2003-2004	Adults	
Sizewell Estate	2004	Not known	Suffolk Wildlife Trust?	Field record	Not known	Not known	Sizewell LMAR 2004-2005	Adults	
Sizewell Estate	2005	Not known	Suffolk Wildlife Trust?	Field record	Not known	Not known	Sizewell LMAR 2005-2006	Adults	Breeding confirmed
Sizewell Estate	2006	Not known	Suffolk Wildlife Trust?	Field record	Not known	Not known	Sizewell LMAR 2006-2007	Adults	Breeding confirmed
Sizewell Belts	2007	Not known	Suffolk Wildlife Trust?	Field record	Not known	Not known	Sizewell LMAR 2007-2008	Adults	Breeding confirmed
Sizewell Estate	19/06/07	Not known	Carl (SWT)	Field record	Not known	Three sites	Pers.comm.	Adults	
Goose Hill	19/06/07	4659864651	A. Godfrey	Field record	Grazing marsh	F	Entec (2008)	Adult	
Sizewell Belts	29/09/09	4683664286	A. Godfrey	Pond net	Grazing marsh	18	Entec (2010)	Nymph	
Sizewell Belts	23/06/10	4674263442	A. Godfrey	Field record	Grazing marsh	L	This report	Adults	
Sizewell Belts	23/06/10	4695263643	A. Godfrey	Field record	Grazing marsh	M	This report	Adults	
Sizewell Belts	24/06/10	4729364484	A. Godfrey	Malaise trap	Reedbed	Malaise A	This report	Adult	
Sizewell Belts	24/06/10	4676364293	A. Godfrey	Field record	Grazing marsh	A	This report	Adults	

Annex 3

Invertebrate Survey Report 2010 Appendices

Table A1: Terrestrial Invertebrates recorded from the SSA reedbeds and Sizewell Belt ditches - June 2010

SAMPLE DATE	A 02/06/10	B 02/06/10	C 02/06/10	D 02/06/10	E 03/06/10	F 03/06/10	G 03/06/10	H 03/06/10	I 04/06/10	J 04/06/10	K 04/06/10	Malaise A 23/06/10	L 23/06/10	M 23/06/10
Plateumaris sericea	4													
Anthocharis cardamines		1			1	1	1	1						
Pieris napi				1					1					
Parage aegeria							1				1			
Polyommatus icarus	1								1	1				
Apamea crenata													3	
Apamea monoglypha													1	
Autographa gamma	1			1						1			4	
Cataclysta lemnata		2	1	1	1	1		1	1	1	1			
Chiasmia clathrata					1					1				
Deilephila elpenor													1	
Drepana falcataria								1						
Dypterygia scabriuscula													1	
Elophila nymphaea		1												
Lacanobia oleracea													1	
Lacanobia w-latinum							1						1	
Pterophorus pentadactylus													2	
Pyrausta purpuralis				1										
Timandra comae			1											
Tyria jacobaeae								20	20					
Xanthorhoe montanata			2											
Zygaena filipendulae	1													
Tipula luna				3	4					1			2	
Tipula maxima					1									
Tipula nigra													3	
Tipula oleracea	1	1				1	2		1	1				
Tipula paludosa	3	1			1		3							
Tipula pruinosa						1				1				
Tipula variicornis				1										
Dicranomyia modesta													2	
Erioptera fusculentata					2									
Erioptera trivialis	10	16		1	2	1	7		5	4				
Helius flavus		1												
Ilisia maculata													4	
Molophilus medius		3			1								1	
Molophilus obscurus	14	6		4	11	13	9		9	10			2	
Molophilus ochraceus													3	
Neolimnomyia adjuncta					3	1				1			1	
Neolimonia dumetorum				1										
Ormosia depilata													1	
Paradelphomyia czizecki?													1	
Phylidorea ferruginea	1				1								2	
Pseudolimnophila sepium		1												
Rhipidia duplicata													3	
Symplecta hybrida										1				
Symplecta stictica									1					
Tricyphona immaculata	14	14		3	14	4	7		9					
Ptychoptera albimana													1	
Ptychoptera contaminata	3	4			1		1		1	1				
Ptychoptera minuta													3	
Dilophus febrilis	1				1	1			2					
Beris clavipes		1		1	1	1	1			1			2	

Table A1: Terrestrial Invertebrates recorded from the SSA reedbeds and Sizewell Belt ditches - June 2010

SAMPLE DATE	A 02/06/10	B 02/06/10	C 02/06/10	D 02/06/10	E 03/06/10	F 03/06/10	G 03/06/10	H 03/06/10	I 04/06/10	J 04/06/10	K 04/06/10	Malaise A 23/06/10	L 23/06/10	M 23/06/10
Beris vallata	4	2		7	4	4	5		6	3		1		
Chloromyia formosa				1										
Microchrysa cyaneiventris						1			1			1		
Microchrysa flavicornis				1	1				1					
Nemotelus nigrinus									1					
Odontomyia ornata	2				1					1		1		
Odontomyia tigrina	13	2		3	3	5	5			8				
Sargus iridatus						1								
Vanoyia tenuicornis	1				1	2	1		1					
Chrysopilus cristatus	3	2		1	4	2	1			1		2		
Rhagio scolopacea	5	1		1	1		1		1	1	1	2		
Dioctria rufipes									1					
Thereva plebeia									1					
Haematopota crassicornis	1	1		1										
Haematopota pluvialis	1											1		
Hybomitra bimaculata	1	1			4	2	2			3		17		
Hybomitra ciureai									1					
Hybomitra montana					1									
Tabanus maculicornis	2	1			1		1					3		
Platypalpus candicans				3										
Empis femorata										1		1		
Empis stercorea						1						1		
Empis tessellata		1			1									
Rhamphomyia barbata										1		3		
Argyra diaphana		1										59		
Campsicnemus armatus		1												
Campsicnemus curvipes						1								
Dolichopus atratus	5	3		2	7	10	16		7	10		11		
Dolichopus latelimbatus												2		
Dolichopus plumipes	1	2			3	3	3			10				
Dolichopus rupestris												1		
Dolichopus simplex				4		1	1		1	6				
Dolichopus subpennatus	11	3		4	5	4	10		17	10		2		
Dolichopus trivialis							1		2					
Dolichopus unguatus				2								5		
Dolichopus urbanus	9	3		2	4	3	9					27		
Hercostomus aerosus		1		2			1			1				
Hercostomus cupreus		1								2		29		
Hercostomus metallicus												3		
Rhaphium appendiculatum												1		
Rhaphium monotrichum												1		
Sympycnus desoutteri		4		3		2	1		2	3				
Syntormon pumilus										1				
Lonchoptera lutea					1							2		
Anasimia contracta					1									
Anasymia lineata		1												
Cheilosia albitarsis	3	11		11	10	2	5		4	2				
Cheilosia bergenstammi									1	1				
Cheilosia impressa							1							
Eristalis horticola				1										
Eristalis tenax		1		3						1				
Helophilus pendulus		1		1	1		1			1				

Table A1: Terrestrial Invertebrates recorded from the SSA reedbeds and Sizewell Belt ditches - June 2010

SAMPLE DATE	A 02/06/10	B 02/06/10	C 02/06/10	D 02/06/10	E 03/06/10	F 03/06/10	G 03/06/10	H 03/06/10	I 04/06/10	J 04/06/10	K 04/06/10	Malaise A 23/06/10	L 23/06/10	M 23/06/10
Leucozona lucorum				1										
Melanogaster hirtella	22	17		27	74	56	7		7	10				
Melanostoma mellinum	1	3		1	1	6	1		3					
Melanostoma scalare		1		1			2			1		3		
Neoscia meticulosa	2				4	4								
Neoscia tenur	9	18		7		11			31	12		1		
Parhelophilus consimilis							1							
Parhelophilus frutetorum					3	2						1		
Parhelophilus versicolor	1													
Platycheirus albimanus		1										1		
Platycheirus angustatus					2									
Platycheirus clypeatus	1					1			1					
Platycheirus europaeus		2		1		3			1					
Platycheirus fulviventris	1	3		2	1									
Platycheirus granditarsa	6	6		2					3					
Platycheirus peltatus group	1								1					
Platycheirus rosarum	3	3		7	6	4	8			4				
Rhingia campestris				1	2									
Ripponensia splendens				4					4					
Syrphus vitripennis							1							
Tropidia scita	1	2		2	18	8	17			6		26		
Volucella bombylans												22		
Xylota sylvarum												1		
Myoleja caesio				1										
Ceroxys urticae									1			1		
Melieria omissa												2		
Paloptera scutellata	1				1	1			1	1				
Trigonometopus frontalis					1					1				
Antichaeta brevipennis							1							
Elgiva sollicita	4	1												
Hydromya dorsalis										1				
Limnia paludicola				1										
Pherbellia dorsata	1													
Pherbina coryleti	2	3		2	3	2				1				
Psacadina verbekei										1				
Psacadina zernyi				1										
Pteromicra angustipennis							1					1		
Sepedon spegea	3	1			3									
Sepedon spinipes				3			1		2	1				
Tetanocera arrogans	3	4		4	10	2								
Tetanocera ferruginea					2					5				
Tetanocera fuscineris								1		1				
Tetanocera montana							1							
Tetanocera punctifrons					1									
Opomyza germinationis									1					
Cerodontha denticornis	1													
Anagnota bicolor										1				
Anthomyza gracilis					1	1	1			1				
Lipara lucens						1	2			3		11		
Lipara rufitarsis												2		
Asteia amoena					1									
Parydra coarctata	2								1					

Table A1: Terrestrial Invertebrates recorded from the SSA reedbeds and Sizewell Belt ditches - June 2010

SAMPLE	A	B	C	D	E	F	G	H	I	J	K	Malaise A	L	M
DATE	02/06/10	02/06/10	02/06/10	02/06/10	03/06/10	03/06/10	03/06/10	03/06/10	04/06/10	04/06/10	04/06/10	23/06/10	23/06/10	23/06/10
Scatella stagnalis									1					
Scatella tenuicosta									2	1				
Cleigastra apicalis												5		
Cordilura impudica						1						1		
Cordilura pubera					8	11	9							
Scathophaga furcata												1		
Scathophaga stercoraria				1		1								
Melanomya nana	1													
Sarcophaga variegata												2		
Piezura graminicola												4		
Coenosia tigrina	2			1	5						1			
Graphomya maculata				1										
Musca autumnalis				4	1				1					
Muscina levida									1					
Schoenomyza litorella	1													
Spanochaeta dorsalis				1	1									
Subclytia rotundiventris												1		
Zophomyia tenella	2	3		1	3	3	2			2				
Chalcis sispes	2													
Ancistrocerus trifasciatus												3		
Crossocerus binotatus												1		
Pemphredon lugubris												1		
Trypoxylum attenuatum												15		
Bombus lapidarius					1									
Bombus lucorum												1		
Bombus pascuorum		1		1	1	1						1		
Bombus terrestris							1							2

Annex 4

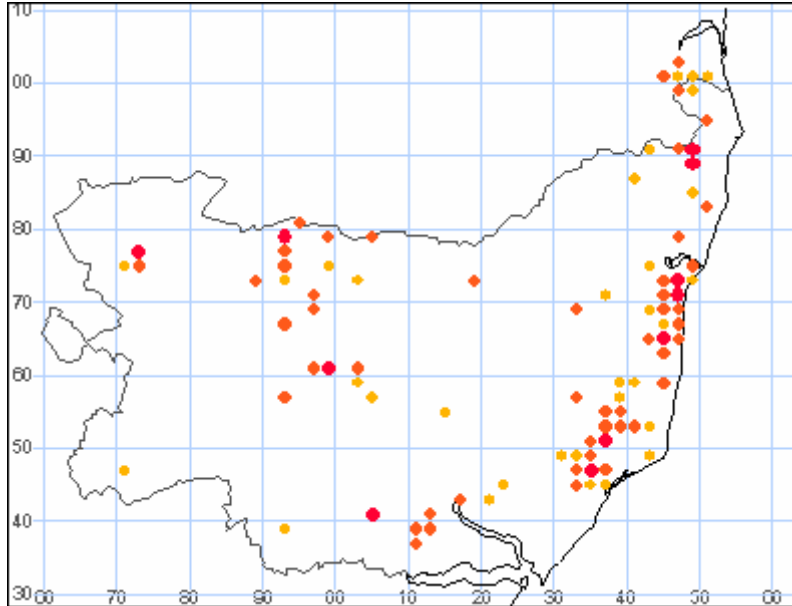
White Admiral Survey Report 2007

Appendices

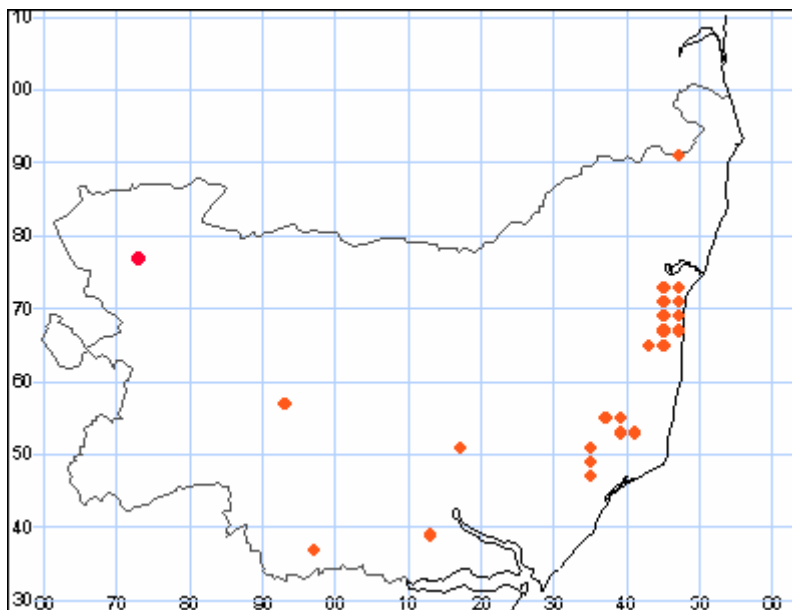
Appendix A

White Admiral Distribution Maps

White Admiral 1995-2006 (91 tetrads), provided by Rob Parker.



White Admiral 2007 (23 tetrads, including 2 new ones), provided by Rob Parker.



Annex 5

White Admiral Larval Survey Report 2009

Appendices

Appendix A

Details from Search Areas

50m X 50m search areas; 30-minute search period at each site					
No.	Central Grid Refs. to 50m X 50m area	No. of instances of White Admiral larvae feeding damage	No. of White Admiral larvae recorded	Larval instar	Predominant woodland-type in search area
1	TM46686467	0	0	-	coniferous
2	TM46756477	0	0	-	coniferous
3	TM46826488	0	0	-	deciduous
4	TM46626473	1	1	1 st	mixed
5	TM46456458	1	0	-	mixed
6	TM46376456	0	0	-	mixed
7	TM46546442	3	0	-	deciduous
8	TM46576431	2	1	2 nd	coniferous
9	TM46456420	2	0	-	mixed
10	TM46336414	3	1	1 st	deciduous
11	TM46246403	0	0	-	deciduous
12	TM46086407	5	2	1 st , 3 rd	coniferous
13	TM45986431	1	0	-	coniferous
14	TM45956408	4	2	1 st , 2 nd	coniferous
15	TM45916404	6	1	1 st	coniferous
16	TM45856401	3	1	1 st	coniferous
17	TM45796422	0	0	-	coniferous
18	TM45726390	0	0	-	deciduous
19	TM45666390	2	0	-	coniferous
20	TM45636382	0	0	-	deciduous