

WHITEHAWK L.N.R., BRIGHTON

Insects recorded on 30th April 1997

1.0 INTRODUCTION

The following species of insects were recorded on 30th April 1997 with the help of mostly by using a portable suction sampler. The weather was warm and sunny.

2.0 SPECIES LISTS

1. Recording Compartment 5

COLEOPTERA (Beetles)

BRENTIDAE (formerly APIONIDAE) (Weevils)

- Acanephodus onopordi
- Catapion seniculus
- Ceratapion gibbirostre
- Ischnopterapion loti
- Ischnopterapion virens
- Perapion curtirostre
- Squamapion atomarium
- LEIODIDAE
- Nargus anisotomoides

CHRYSOMELIDAE (Leaf beetles)

- Apteropeda orbiculata
- Longitarsus parvulus
- Longitarsus pratensis
- Phaedon tumidulus
- Sphaeroderma rubidum
- COCCINELLIDAE (Ladybirds)
- Coccinella septempunctata
- Psyllobora vigintiduopunctata
- Rhyzobius litura
 - Scymnus frontalis
- Subcoccinella vigintiquattuorpunctata
- CORYLOPHIDAE
- Corylophus sublaevipennis
- CURCULIONIDAE (Weevils)
- Barypeithes araneiformis
- Gymnetron labile
- Gymnetron pascuorum
- Hyp[era plantaginis
- Mecinus pyraster
- Phyllobius roboretanus
- Sciaphilus asperatus
- Sitona lineatus
- Sitona sulcifrons
 - Smicronyx reichi
 - Trachyphloeus angustisetulus
- Trachyphloeus asperatus
- Tychius schneideri

Common on thistles

Common on Trifolium species

Common on thistles

Common on Lotus corniculatus

Common on Trifolium species

Common on Rumex species

Local on Thymus species

Common

Common in moss, etc.

Nationally Scarce Category A

Common on Plantago lanceolata

Common on Umbelliferous plants Common on Centaurea nigra

Common

Common

Common

Common

Common



Common

Local on Plantago lanceolata

Common on Plantago lanceolata

Common on Lotus corniculatus

Common on Plantago lanceolata

Common in grassland habitats

Common

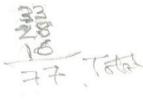
Common on Trifolium, etc.

Local on Trifolium species, especially T. medium

Red Data Book 3 - Rare

Common in sparsely vegetated dry grassland

Nationally Scarce Category B



Common in sparsely vegetated dry grassland - Not Scorce Cat B

ELATERIDAE (Click beetles)

Agriotes sputator Agrypnus murinus

HISTERIDAE

Kissister minima

HYDROPHILIDAE (Water beetles)

Sphaeridium scarabaeoides

LATHRIDIIDAE (Fungus beetles)

Enicmus transversus

NITIDULIDAE (Pollen beetles, etc)

Epuraea aestiva Meligethes aeneus **PHALACRIDAE** Phalacrus fimetarius

SCYDMAENIDAE

Stenichnus pusillus STAPHYLINIDAE (Rove beetles)

Cypha longicornis Drusilla canaliculata Metopsia gallica Micropeplus fulvus Sepidophilus nigripennis Stenus brunnipes Tachyporus hypnorum

HEMIPTERA-HETEROPTERA (Bugs)

BERYTINIDAE (Stilt bugs)

· Berytinus signoreti LYGAEIDAE (Ground bugs)

Megalonotus chiragra

PENTATOMIDAE (Shield bugs)

· Podops inuncta . Zicrona caerulea TINGIDAE (Lace bugs) Acalypta parvula

Agramma laeta

HYMENOPTERA (Bees, wasps, ants, etc)

APIDAE (Bees) Nomada flavoguttata Osmia aurulenta Osmia bicolor

CHRYSIDIDAE (Ruby-tailed wasps)

Trichrysis cyanea FORMICIDAE (Ants)

Lasius flavus Lasius niger

Common in grassland habitats Common in grassland habitats

Local, most frequent in coastal habitats

Common in fresh dung

Common

Common Common

Common on flowers

Nationally Scarce

Common Common Common Common Common Common Common

Local on Hippopcrepis comosa & Lotus corniculatus

Common

Common Common

Common in moss

Common on rushes or sedges

Common

Local near the coast

Nationally Scarce Category B

Common

Common Common

2. Recording Compartment 6

COLEOPTERA (Beetles)

BRENTIDAE (formerly APIONIDAE) (Weevils)

Malvapion malvae
Aspidapion aeneum
Aspidapion radiolus
Pseudapion rufirostre

CHRYSOMELIDAE (Leaf beetles)

Longitarsus ballotae

COCCINELLIDAE (Ladybirds) Coccinella septempunctata Psyllobora vigintiduopunctata

Rhyzobius litura CORYLOPHIDAE

Corylophus sublaevipennis CURCULIONIDAE (Weevils)

Parethelcus pollinarius Tychius picirostris

NITIDULIDAE (Pollen beetles, etc)

Meligethes ovatus

STAPHYLINIDAE (Rove beetles)

Cypha longicornis Sepidophilus nigripennis

HEMIPTERA-HETEROPTERA (Bugs)

PENTATOMIDAE (Shield bugs)

Podops inuncta

TINGIDAE (Lace bugs)

Tingis ampliata

Common on Malva sylvestris

Local on Malva sylvestris Common on Malva sylvestris Common on Malva sylvestris

Nationally Scarce Category B

Common Common

Local

Common on *Urtica dioica*Common on *Trifolium* species

Common in Glechoma hederacea flowers

Common Common

Common

Common on Creeping Thistle Cirsium arvense

16

3.0 RED DATA BOOK & NATIONALLY SCARCE SPECIES

COLEOPTERA (Beetles)

CHRYSOMELIDAE (Leaf beetles)

Nb Longitarsus ballotae

Nationally Scarce Category B

Widespread but local in southern England and South Wales. It is a grassland species which is associated with Black Horehound *Ballota nigra* and white horehound *Marrubium vulgare* Numerous on Black Horehound *Ballota nigra* in compartment 6.

Na Longitarsus parvulus

Nationally Scarce Category A

After having undergone a period of decline, this tiny black flea-beetle has now become common almost everywhere in southern England. It is thought to be associated with flax, Linum species and its present abundance may be linked to the current trend of growing flax as a commercial crop.

One specimen recorded from a suction sample in compartment 5.

CURCULIONIDAE (Weevils)

Nb Trachyphloeus asperatus

Nationally Scarce Category B

A widespread but local weevil which occurs on both sandy and chalky soils. Phytophagous, probably polyphagous, and parthenogenetic. Adults have been found at the base of plants such as Sheep's Sorrel Rumex acetosella, Bird's-foot Trefoil Lotus corniculatus and plantain Plantago species.

One specimen recorded from a suction sample in compartment 5.

Nb Tychius schneideri

Nationally Scarce Category B

A tiny grey and brown-striped weevil which is widespread but local in southern Britain. Phytophagous. It is found on calcareous grassland, cliff-tops and shingle beach habitats where its foodplant Kidney Vetch *Anthyllis vulneraria* grows.

Several specimens recorded from suction samples in compartment 5.

RDB3 Smicronyx reichi

Red Data Book 3 - Rare

Very local in southern England with recent (post-1970) records from East Sussex, Surrey and West Kent. Phytophagous, associated with Common Centaury Centaurium erythraea, Yellowwort Blackstonia perfoliata and possibly Autumn Gentian Gentianella germanica. It probably breeds in the flowers or seed heads. The species is difficult to find and may be under recorded. One specimen recorded from a suction sample in the southern half of in compartment 5 on area of short grassland.

SCYDMAENIDAE

N Stenichnus pusillus

Nationally Scarce

A very local species with a widely scattered distribution in England and Wales. There appear to be very few recent records of this species. It's ecology is poorly understood but it is probably associated with grassland, in moss and at plant roots. An extremely small beetle that is difficult to find by conventional searching and it may therefore be somewhat under recorded.

A few specimens recorded from a suction sample in the southern half of in compartment 5 on area of short grassland. The only other recent Sussex record is from The Coombe at Lewes.

HYMENOPTERA (Bees, wasps, ants, etc)

APIDAE (Bees)

Nb Osmia bicolor

Nationally Scarce Category B

Local and evidently scarcer than formerly, with about 40 post-1970 sites known according to Falk, (1991). Confined to calcareous soils in southern England where it occurs in open woodland, or short grassland where some scrub is present. There is probably a close association with Horse-shoe Vetch *Hippopcrepis comosa* and Bird's-foot Trefoil *Lotus corniculatus*. Nesting occurs in empty snail shells.

A few females on apple blossom in compartment 5.

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WHITEHAWK L.N.R., BRIGHTON

Report No. 2 Insects recorded between June and August 2001

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1.0 INTRODUCTION

The insects listed in this report were recorded during four visits to the northern part of Whitehawk LNR between Swanborough Drive and Wilson Avenue on 13th June, 29th June, 16th July, and 14th August 2001.

2.0 METHODS

Most species were recorded either by beating foliage of bushes, sweeping grassland vegetation or by visual observation. In addition, insects were collected from low growing herbaceous plants using a portable suction sampler (a Flymo BVL 360 adapted to catch terrestrial insects) on 13th June 2001.

3.0 ENTOMOLOGICAL ASSESSMENT

Although much of the survey area consists of former allotment gardens, a surprisingly varied insect community is present. Several quite uncommon species were recorded. These included the Large Velvet Ant *Mutilla europaea* and Britain's largest robber-fly *Asilus crabroniformis*, both of which are known to have declined significantly in the British Isles during the second half of the 20th century.

Other Nationally Scarce species recorded are less vulnerable, but nevertheless they could be threatened if substantial habitat loss continues. The snail predator *Drilus flavescens* has a high proportion of its British colonies in the counties of East and West Sussex and furthermore it is confined to chalky soils. The weevil *Ceutorhynchus quercicola* may always have been uncommon in Britain, perhaps because our climate does not suit its preferred habitat requirements.

Some very tiny insects are either poorly studied or are difficult to identify and these could possibly be under recorded. The pollen beetle *Meligethes rotundicollis* may fall into this category.

A few species have dramatically increased their range during the past 10 years. The Bee Wolf *Philanthus triangulum*, a large and brightly coloured yellow and black solitory wasp, is a classic example. Formerly confined to the south coast of the Isle of Wight, this fierce predator of the Honey Bee has recently spread very rapidly and now breeds in England and Wales as far north as Yorkshire. At the present time it certainly does not qualify for **Red Data Book** status but since the reason for its spread may well be the supposed increase in global temperatures, more research is needed before its national status is changed. Indeed, a sudden collapse of its population in the near future is always a possibility.

There are numerous insects that are recent colonists to Britain and one of these was recorded during this survey. This is the tiny clover-feeding pea-weevil *Bruchidius varius*, first discovered in Britain in 1993 at Ditchling Beacon and currently rapidly extending its range.

On the other hand the leaf beetle *Altica carinthiaca*, associated with Yellow Vetchling, was formerly confused by British entomologists with its close relative *Altica palustris*, a species associated with willowherbs. Although likely to prove a common species, its status in Britain has not yet officially been declared and therefore **Status Unknown** has been applied.

Finally, the species diversity of the old allotments could be significantly increased if brambles and other rank vegetation were cut regularly. This would encourage many chalk grassland plants, currently being strangled by more invasive plants, to colonise the area. This could be very important for Whitehawk LNR as a whole, because even a small reduction in the available breeding habitat could threaten several of the most vulnerable species.

4.0 STATUS CATEGORY DEFINITIONS AND CRITERIA FOR INVERTEBRATES

Criteria for the selection of species into the Red Data Book categories follow Shirt (1987), with minor modifications which are *italicised*. Categories **RDB K (Insufficiently known)** and **RDB I (Indeterminate)** are based on the criteria used by Wells, Pyle & Collins (1983). Criteria for the selection of **Nationally Notable** species follow Eversham (1983). For the purposes of site evaluation for the selection of **Sites of Special Scientific Interest (SSSI)** the term **Nationally Notable** is now replaced by the term **Nationally Scarce**, but the criteria remain unchanged (Nature Conservancy Council, 1989).

STATUS CATEGORIES

Red Data Book Category 1 (RDB 1) - Endangered

Definition.

Taxa in danger of extinction in Great Britain and whose survival is unlikely if the causal factors continue operating.

Included are those taxa whose numbers have been reduced to a critical level or whose habitats have been so dramatically reduced that they are deemed to be in immediate danger of extinction. Also included are *some* taxa that are *possibly* extinct.

Criteria.

Species which are known *or believed to occur* as only a single population within one 10 km square of the National Grid.

Species which only occur in habitats known to be especially vulnerable.

Species which have shown a rapid or continuous decline over the last twenty years and are now *estimated* to exist in five or fewer 10 km squares.

Species which are *possibly* extinct but have been recorded this century and if rediscovered would need protection.

Red Data Book Category 2 (RDB 2) - Vulnerable

Definition.

Taxa *believed* likely to move into the endangered category in the near future if the causal factors continue operating.

Included are taxa of which most or all of the populations are decreasing because of *over-exploitation*, extensive destruction of habitat or other environmental disturbance; taxa with populations that have been seriously depleted and whose ultimate security is not yet assured; and taxa with populations that are still abundant but are under threat from serious adverse factors throughout their range.

Criteria.

Species declining throughout their range. Species in vulnerable habitats.

Definition.

Taxa with small populations in *Great Britain* that are not at present endangered or vulnerable, but are at risk.

These taxa are usually localised within restricted geographical areas or habitats or are thinly scattered over a more extensive range.

Criterion.

Species which are estimated to exist in only fifteen or fewer 10 km squares. This criterion may be relaxed where populations are likely to exist in over fifteen 10 km squares but occupy small areas of especially vulnerable habitat

Red Data Book Category 4 (RDB 4) - Out of Danger

Definition.

Taxa formerly meeting the criteria of one of the above categories, but which are now considered relatively secure because effective conservation measures have been taken or the previous threat to their survival *in Great Britain* has been removed.

Red Data Book Category 5 (RDB 5) - Endemic

Definition.

Taxa which are not known to occur naturally outside *Great Britain*. Taxa within this category may also be in any of the other RDB categories *or not threatened at all*.

Red Data Book Appendix (RDB app.) - Extinct

Definition.

Taxa which were formerly native to Great Britain but have not been recorded since 1900.

Red Data Book Category I (RDB I) - Indeterminate

Definition.

Taxa *considered* to be Endangered, Vulnerable or Rare in Great Britain, but where there is not enough information to say which of the three categories (RDB 1 to 3) is appropriate.

Red Data Book Category K (RDB K) - Insufficiently Known

Definition.

Taxa in Great Britain that are suspected, but not definitely known, to belong to any of the above categories, because of lack of information.

Criteria.

Taxa recently discovered or recognised in Great Britain which may prove to be more widespread in the future.

Taxa with very few or perhaps only a single known locality but which belong to poorly recorded or taxonomically difficult groups.

Species known from very few localities but which occur in inaccessible habitats or habitats which are seldom sampled.

Species with very few or perhaps only a single known locality and of questionable native status, but not clearly falling into the category of recent colonist, vagrant or introduction.

4

Provisionally Red Data Book species - pRDB

RDB (Red Data Book) categories may require revision in the light of new information but a new Red Data Book has yet to be compiled. Such revisions are indicated as pRDB.

Nationally Scarce Category A - Notable A (Na)

Definition.

Taxa which do not fall within **RDB** categories but which are none-the-less uncommon in Great Britain and are thought to occur in 30 or fewer 10 km squares of the National Grid or, for less well recorded groups, within seven or fewer vice-counties.

Nationally Scarce Category B - Notable B (Nb)

Definition.

Taxa which do not fall within **RDB** categories but which are none-the-less uncommon in Great Britain and are thought to occur in between 31 and 100 10 km squares of the National Grid or, for less well recorded groups, between eight and twenty vice-counties.

Nationally Scarce - Notable (N)

Definition.

Taxa which do not fall within **RDB** categories but which are none-the-less uncommon in Great Britain and are thought to occur in between 16 to 100 10 km squares of the National Grid. Species within this category are often too poorly known for their status to be more precisely estimated.

SPECIES NOT INCLUDED

Certain species may meet one or more of the above criteria but are not considered to warrant consideration in conservation evaluation. These fall into three categories:

- 1. Species associated with non-native plants in Great Britain, including species associated with pine, and other conifers, but not occurring in areas where pine is considered native.
- 2. Migrant and vagrant/accidental species i.e., species with no established population.
- 3. Obligate synanthropic species.

RDB (Red Data Book) categories may require revision in the light of new information but a new Red Data Book has yet to be compiled. Such revisions are indicated as pRDB.

In addition to these established categories described above, a classification of the remaining species, based on the known distribution range, is being developed. Where possible a provisional national distribution range status under this system is given.

5.0 RED DATA BOOK, NATIONALLY SCARCE AND OTHER NOTABLE SPECIES

One **Red Data Book**, 14 **Nationally Scarce** and two other noteworthy species were recorded. These are summarised in Table 1 below.

Table 1: NOTABLE SPECIES

SPECIES	RECORDING COMPARTMENT			NATIONAL STATUS
	3	3a	4	
COLEOPTERA (Beetles)				
CARABIDAE (Ground beetles)				
Panagaeus bipustulatus		+		Nationally Scarce Category B (Nb)
DRILIDAE				
Drilus flavescens	+	+		Nationally Scarce Category A (Na)
CHRYSOMELIDAE (Leaf beetles)				
Altica carinthiaca	+	+		Status Unknown
Bruchidius varius			+	Recent Colonist
CURCULIONIDAE (Weevils)				
Ceutorhynchus quercicola			+	Nationally Scarce Category A (Na)
Gymnetron melanarium		+		Nationally Scarce Category B (Nb)
Zacladus exiguus			+	Nationally Scarce Category B (Nb)
NITIDULIDAE (Pollen beetles, etc)				
Meligethes rotundicollis			+	Nationally Scarce Category B (Nb)
DIPTERA (Flies)				
ASILIDAE (Robber flies)				
Asilus crabroniformis	+			Nationally Scarce (N)
TACHINIDAE (Parasitic flies)				
Zophomyia temula	+	+	+	Nationally Scarce (N)
TEPHRITIDAE (Picture-winged flies)				
Icterica westermanni	+			Nationally Scarce (N)
Urophora cuspidata	+	+		Nationally Scarce (N)
HEMIPTERA-HETEROPTERA (Bugs)				
LYGAEIDAE (Ground bugs)				
Drymus latus		+		Nationally Scarce Category B (Nb)
HYMENOPTERA (Bees, wasps, ants, etc)				
APIDAE (Bees)				
Melitta tricincta	+			Nationally Scarce Category B (Nb)
Psithyrus rupestris	+	+		Nationally Scarce Category B (Nb)
MUTILLIDAE (Velvet Ants)				
Mutilla europaea (The Large Velvet Ant)	+			Nationally Scarce Category B (Nb)
SPHECIDAE (Solitary wasps)			15	
Philanthus triangulum			+	Red Data Book 2 - Vulnerable
Number of RDB + Nat. Scarce (Total = 15)	8	7	5	

COLEOPTERA (Beetles)

CARABIDAE (Ground beetles)

Nb Panagaeus bipustulatus

Widely distributed over the south-eastern half of Britain. Found in calcareous grasslands, sand dunes and sand or gravel-pits.

There are scattered records for East and West Sussex, all on sandy or chalky soils.

One was found in a suction sample taken from Germander Speedwell growing close to the northern boundary of Compartment 3a on 13th June 2001.

DRILIDAE

Na Drilus flavescens

This beetle somewhat resembles a small soldier beetle. It has a very restricted range in Britain and there are recent records for only the Isle of Wight, Hampshire, Surrey, Kent and Sussex. Seldom found away from chalk grassland, the larvae feed on snails. The female is flightless.

The counties of East and West Sussex contain a substantial proportion of the known British sites for this species.

A few males were swept off low plants in Compartments 3 and 3a on 13th June 2001.

CHRYSOMELIDAE (Leaf beetles)

Status

Altica carinthiaca

Unknown

Until recently this species was confused in the British Isles with *Altica palustris* and the status of both species needs to be determined. At the present time *A. carinthiaca* has been recorded from several localities in south-east England and it is thought likely to be a common species, at least in southern Britain. Although the two species closely resemble each other they have different foodplants (*A. palustris* is associated with *Epilobium* species and *A. carinthiaca* with Yellow Vetchling *Lathyrus pratensis*.

Several were noted on Yellow Vetchling in Compartments 3 and 3a on 13th June 2001.

Recent

Bruchidius varius

Colonist

This species was first discovered in the British Isles at Ditchling Beacon, East Sussex, on 9th October 1994 (Hodge, 1997) and is almost certainly a recent colonist which is likely to spread. It has now been recorded from several vice counties in south-east England including Hertfordshire, South Essex, South Hampshire, North Hampshire, Surrey, West Sussex, East Sussex, West Kent and East Kent (Hodge, 1998). The larvae develop in the flower heads of clover, probably preferring Red Clover *Trifolium pratense* and Zigzag Clover *Trifolium medium*. No conservation status is likely to be applied.

A female was swept off red clover in Compartment 4 at TQ33690550 on 13th June 2001

CURCULIONIDAE (Weevils)

Na Ceutorhynchus quercicola

Formerly widely distributed in Britain but, according to Hyman (1992), it has only been recorded from Dorset, East Sussex, West Suffolk, North Northumberland and Cumberland in the period from 1970 onwards. Found on disturbed ground. Phytophagous. Associated with Common Fumitory *Fumaria officinalis*. The larvae develop in galls on the lower stems of the food plant.

There are only a few records of this species from Sussex (all are from the South Downs) and this is the first for about 20 years.

A female was tapped off Common Fumitory at TQ33690550 in Compartment 4 on 13th June 2001.

Nb *Gymnetron melanarium*

A tiny black weevil which is widespread though very local in England and Wales, with most records in the south. It is found in a variety of grassland habitats and is associated with Germander Speedwell *Veronica chamaedrys*. Because it is attached to a very low-growing plant it is seldom swept and it may therefore be somewhat under recorded.

This species is probably not uncommon in Sussex.

One was found in a suction sample taken from a patch of Germander Speedwell growing close to the northern boundary of Compartment 3a on 13th June 2001.

Nb Zacladus exiguus

Widespread but local in England and Wales. Phytophagous, associated with small-flowered cranesbills, particularly cut-leaved cranesbill *Geranium dissectum* and pyrenean cranesbill *Geranium pyrenaicum*.

Occurs locally on South Downs in East Sussex. Status unknown in West sussex.

One tapped off *Geranium rotundifolius* at TQ337054 in Compartment 4 on 13th June 2001.

NITIDULIDAE (Pollen beetles, etc)

Nb *Meligethes rotundicollis*

Very local and only recorded from parts of South-east and Central England. Associated with Cruciferae, particularly Charlock *Sinapis arvensis* and Hedge Mustard *Sisymbrium officinale* growing on waste ground such as field margins and sandpits. The larvae develop in the flowers.

Recorded from Hastings and Brighton in the Sussex VCH list (Fowler, 1905) but there are very few, if any recent records for the county.

One female was tapped off Charlock flowers at TQ33690550 in Compartment 4 on 13th June 2001 and several of both sexes were found in the same place on 29th June 2001.

DIPTERA (Flies)

ASILIDAE (Robber flies)

N Asilus crabroniformis

Widely distributed in the southern half of Britain as far north as Cheshire and Lincolnshire, but evidently less common than formarly. Found in dry heathland, chalk downland and rough unimproved pastures. The larvae are thought to be predatory on the larvae of dung beetles (probable Geotrupes). Eggs are laid in dung (mainly cow dung but probably also horse dung). Adults are predators of other insects including calypterate flies, grasshoppers, staphylinid beetles and small scarabaeid beetles.

Recent records for Sussex are relatively few but this large robber-fly is surprisingly easily overlooked since it rests with its wings closed over its brightly coloured body. One settled on the path at TQ33880547 in Compartment 3 on 14th August 2001.

TACHINIDAE (Parasitic flies)

N Zophomyia temula

well-de

This widespread but local parasitic fly is associated with a variety of habitats including woodland, calcareous grassland and coastal dunes. The life history is unknown.

Local but widely distributed in a variety of grassland habitats in East Sussex. Its status in West Sussex is not known.

A few were observed flying over tall grassland vegetation in Compartments 3, 3a and 4 on 13th June 2001.

TEPHRITIDAE (Picture-winged flies)

N Icterica westermanii

Local in south-east England but perhaps more frequent than originally thought. Breeds in a variety of habitats. The larvae develop in the flower-heads of ragwort *Senecio* species. Local but widely distributed in grassland habitats in Sussex.

One swept off ragwort at TQ33800557 in Compartment 3 on 14th August 2001.

N Urophora cuspidata

Very local in chalk grassland habitats in southern England although not rare on the South Downs in East Sussex. Larvae develop in the flower-heads of Greater Knapweed *Centaurea scabiosa*.

Occurs locally on the South Downs in Sussex.

One female swept off Greater Knapweed at TQ33880547 in Compartment 3 on 29th June 2001 and another in the centre of Compartment 3a on 16th July 2001.

HEMIPTERA-HETEROPTERA (Bugs)

LYGAEIDAE (Ground bugs)

N Drymus latus Very loca sunny loc grassland

Very local in southern England. The ecological requirements are rather obscure but warm sunny locations on well drained soils may be needed. It has been found in a variety grassland and ruderal situations, mostly on well drained soils. the bugs are probably seed feeders but no definite plant association has been established.

Although there are only a few recent records from Sussex this bug is thought likely to be quite widely distributed.

One male was swept from close to the centre of Compartment 3a on 14th August 2001.

HYMENOPTERA (Bees, wasps, ants, etc)

APIDAE (Bees)

Nb Melitta tricincta

A very local species which is confined to southern Britain. It nests in the ground in sandy or chalky soils. Pollen and nectar is collected almost exclusively from Red Bartsia *Odontites verna*.

At the present time this species is found commonly in both East and West Sussex wherever Red Bartsia is present.

A few noted visiting Red Bartsia flowers at TQ33760557 in Compartment 3 on 14th August 2001.

Nb Psithyrus rupestris

Widely distributed in England and Wales, but evidently rarer than formerly. Found in a variety of open flower-rich situations including grassland, heathland and disturbed ground. It is a social parasite of the Red-tailed Bumble-bee *Bombus lapidarius*.

Currently found commonly on the South Downs, this species may be increasing again after a period of decline.

A few noted visiting flowers in Compartments 3 and 3a on 14th August 2001.

MUTILLIDAE (Solitary wasps)

Nb Mutilla europaea

Widely distributed but very local in England and eastern Scotland and largely absent from midland counties. Found in a variety of open habitats, including heathland, moorland and downland. It is a parasitoid of bumble bees (Bombus species) but it occasionally attacks honey bees. The female enters the host nest and deposits single eggs inside cocoons containing young pupae or pre-pupae. The larva eats the host then spins its own cocoon within the cell. Females are wingless but males are winged and visit flowers such as *Rubus*, *Daucus*, *Angelica*, *Scabiosa* and *Achillea*.

There are recent records for isolated sites in East and West Sussex, including several for the Brighton district.

One male was observed flying across the path at TQ33880547 in Compartment 3 on 16th July 2001.

SPHECIDAE (Solitary wasps)

RDB2 *Philanthus triangulum* (THE BEE-WOLF)

For many years the only permanent breeding population in Britain was on the south coast of the Isle of Wight. Recently a rapid expansion has taken place and there are now modern records for most counties in South-east England. It is well known that this species fluctuates in numbers and the recent run of hot summers are probably responsible for its expansion. It nests in open sandy soil and its prey is the honey bee *Apis melifera*. Currently found fairly commonly in Sussex, especially on dry sandy soils.

One male settled on a recently disturbed patch of soil in the disused allotment gardens at TQ337054 in Compartment 4 on 16th July 2001.

6.0 LIST OF INSECT SPECIES RECORDED

Table 2: COLEOPTERA (Beetles)



SPECIES		CORDI IPARTI		STATUS & ECOLOGY	
	3	3a	4		
COLEOPTERA (Beetles)					
APIONIDAE (Weevils)					
Acanephodus onopordi	+	+	+	Common, on thistles & knapweeds	
Aspidapion radiolus	+	+		Common, on Malvaceae	
Ceratapion carduorum (= C. lacertense)	+			Local, on thistles	
Ceratapion gibbirostre	+	+		Common, on thistles	
Eutrichapion ervi	+	+		Common, on vetches	
Ischnopterapion loti	+			Common, on Bird's-foot Trefoil	
Malvapion malvae	+			Common, on mallow	
Oxystoma pomonae	+	+	+ 4	Local, on vetches	
Oxystoma subulatum	+	+		Local, on vetches	
Perapion curtirostre	+			Common, on Rumex species	
Perapion violaceum	+			Common, on Rumex species	
Protapion dichroum	+	+		Common, on clover	
Pseudapion rufirostre	+	+		Common, on mallow	
BYTURIDAE (Raspberry beetles)				,	
Byturus tomentosus		+		Common, on Rubus species	
CANTHARIDAE (Soldier beetles)					
Cantharis cryptica		+		Common	
Cantharis cryptica Cantharis nigra	+	<u> </u>	<u> </u>	Common	
	+	+	+	Common	
Rhagonycha fulva		+	 	Common	
CARABIDAE (Ground beetles)	+		+	Common	
Demetrias atricapillus		+		Common	
Dromius linearis		+ -	-	Common, on light soils	
Metabletus foveatus	+	+		Nationally Scarce Category B (Nb)	
Panagaeus bipustulatus		+ -	-	Nationally Scarce Category B (14b)	
CHRYSOMELIDAE (Leaf beetles)				Status Unknown	
Altica carinthiaca	+	+	-	Common, on Epilobium hirsutum	
Altica lythri	+	-		Recent Colonist	
Bruchidius varius		1	+		
Bruchus loti	+	+		Common, on vetches	
Bruchus rufipes	+		+	Common, on vetches	
Cassida rubiginosa	+	+		Common, on thistles	
Cassida vibex	+			Common, on thistles	
Chrysolina polita		+		Common, on Labiatae	
Longitarsus pratensis		+		Common, on <i>Plantago</i> species	
Phaedon tumidulus	+	+		Common, on Umbelliferae	
Phyllotreta nodicornis	+		+	Common, on Cruciferae	
Phyllotreta ochripes			+	Common, on Cruciferae	
Sermylassa halensis		+	-	Local, on Lady's Bedstraw	
Sphaeroderma testaceum		+		Common, on thistles	
COCCINELLIDAE (Ladybirds)					
Coccinella septempunctata	+	+		Common	
Nephus redtenbacheri		+		Local, on light soils	
Propylea quattuordecimpunctata	+			Common	
Psyllobora vigintiduopunctata	+			Common	
Rhyzobius litura	+	+		Common	
Subcoccinella vigintiquattuorpunctata	+	+		Common	



Table 2: COLEOPTERA (Beetles) - continued

SPECIES		ECORDI IPARTI		STATUS & ECOLOGY
	3	3a	4	-
CURCULIONIDAE (Weevils)		Ja	1 4	
Ceutorhynchus chalybaeus	+		+	Local, on Sisymbrium officinale
Ceutorhynchus floralis	· ·		+	Common, on Cruciferae
Ceutorhynchus obstrictus (=C. assimilis)			+	Common, on Cruciferae
Ceutorhynchus pyrrhorhynchus	+		+	Common, on Sisymbrium officinale
Ceutorhynchus quercicola	'		+	Nationally Scarce Category A (Na)
Glocianus distinctus		+		
Hadroplontus litura		+	-	Local, on hawkweed or related plants
Gymnetron antirrhini	+			Common, on thistles
Gymnetron melanarium			-	Common, on Linaria vulgaris
Gymnetron metanarum Gymnetron pascuorum		+	- 30	Nationally Scarce Category B (Nb)
Nedyus quadrimaculatus	+	+	+	Common, on Plantago lanceolata
Parethelcus pollinarius	<u> </u>		+	Common, on Urtica dioica
Phyllobius roboretanus	+	+	-	Common, on Urtica dioica
Phyllobius viridiaeris		+	-	Common, in grassland habitats
	+		-	Common, in grassland habitats
Sirocalodes depressicollis			+	Common, on fumitory
Sitona cylindricollis	+			Local, on Melilotus officinalis
Sitona hispidulus	+	+		Common, on Trifolium species
Sitona lepidus	+			Common, on, Labiatae
Sitona lineatus		+	+	Common, on Labiatae
Trichosirocalus troglodytes		+		Common, on Plantago lanceolata
Tychius picirostris	+	+	+	Common, on Trifolium species
Tychius stephensi		+		Local, on Trifolium species
Zacladus exiguus			+	Nationally Scarce Category B (Nb)
DASCILLIDAE				
Dascillus cervinus	+			Local, in grassland habitats
DRILIDAE				
Drilus flavescens	+	+		Nationally Scarce Category A (Na)
ELATERIDAE (Click beetles)				
Athous bicolor		+		Local, in grassland habitats
HYDROPHILIDAE				
Megasternum obscurum		+		Common
MELYRIDAE				
Malachius viridis	+	+	+	Local, in grassland habitats
MORDELLIDAE (Tumbling flower beetles)				
Mordellistena pumila		+		Local, in grassland habitats
NITIDULIDAE (Pollen beetles, etc)				, ,
Brachypterus urticae	+	+	+	Common, on Urtica dioica
Epuraea aestiva	+			Common
Meligethes (female on Charlock)			+	Nationally Scarce Category B (Nb)
Meligethes aeneus	+		+	Common, on flowers
Meligethes ruficornis	+			Common, in <i>Ballota nigra</i> flowers
OEDEMERIDAE				Danion, in Banona riigi a nowers
Oedemera nobilis	+	+	+	Common, on flowers
SCRAPTIIDAE				common, on nowers
Anaspis maculata	+	+	+	Common, on flowers
Anaspis pulicaria	+		+	Common, on flowers
STAPHYLINIDAE (Rove beetles)	· ·		-10	Common, on nowers
Sepedophilus nigripennis		+		Common
TENEBRIONIDAE				COMMINUM
Isomira murina	+	+		Common in grandland believe
ADOTHER WITHIN THE	T	+		Common, in grassland habitats



Table 3: DIPTERA (Flies)

SPECIES		ECORDI IPARTN		STATUS & ECOLOGY
	3	3a	4	7
DIPTERA (Flies)				
ASILIDAE (Robber flies)				
Asilus crabroniformis	+			Nationally Scarce (N)
Leptogaster cylindrica			+	Common, in grassland habitats
DOLICHOPODIDAE (Long-legged flies)				Successive Mexicological Property of the Prope
Sciapus longulus	+		+	Local, in grassland habitats
RHAGIONIDAE (Snipe flies)				Sweetens Accitate
Symphoromyia immaculata	+			Local, in grassland habitats
SCIOMYZIDAE (Snail-killing flies)				Superior Meditals
Trypetoptera punctulata	+		+	Common, in grassland habitats
STRATIOMYIDAE (Soldier flies)				S. Washing Machines
Beris vallata			+	Common
Chloromyia formosa	+		+	Common
Chorisops tibialis		+		Common
Pachygaster atra		+		Common
SYRPHIDAE (Hover-flies)				
Cheilosia variabilis	+			Common
Chrysotoxum bicinctum	+			Common
Episyrphus balteatus		+		Common
Eristalis intricarius	+			Common
Scaeva pyrastri		+	+	Common
TACHINIDAE (Parasitic flies)				
Zophomyia temula	+	+	+	Nationally Scarce (N)
TEPHRITIDAE (Picture-winged flies)				(1.1)
Chaetorellia jaceae	+			Common, on Centaurea nigra
Chaetostomella cylindrica	+			Common, on Centaurea nigra
Dithryca guttularis	+			Common, on Achillea millefolium
Icterica westermanni	+			Nationally Scarce (N)
Tephritis formosa	+			Common, on Sonchus species
Terellia colon	+	+		Local, on Centaurea scabiosa
Terellia ruficauda		+		Common, on thistles
Urophora cuspidata	+	+		Nationally Scarce (N)
Urophora jaceana	+			Common, on Centaurea nigra
Urophora quadrifasciata	+			Common, on Centaurea nigra
Xyphosia miliaria		+	+	Common, on thistles



Table 4: HEMIPTERA-HETEROPTERA (Bugs)

SPECIES		ECORDI IPARTN		STATUS & ECOLOGY
	3	3a	4	7
HEMIPTERA-HETEROPTERA (Bugs)				
COREIDAE (Squash bugs)				
Coriomeris denticulatus	+			Common, in grassland habitats
LYGAEIDAE (Ground bugs)				S. W. S. M.
Drymus latus		+		Nationally Scarce Category B (Nb)
Heterogaster urticae	+	+	+	Common, on <i>Urtica dioica</i>
Ischnodemus sabuleti		+		Common, usually in wetland habitats
Scolopostethus thomsoni		+		Common, in grassland habitats
Stygnocoris sabulosus (= S. pedestris)		+		Common, in grassland habitats
MIRIDAE (Capsid bugs)				, , , , , , , , , , , , , , , , , , , ,
Amblytylus nasutus		+	+	Common, on grasses
Calocoris norvegicus		+	+	Common
Campyloneura virgula		+		Common
Capsus ater		+		Common, on grasses
Dicyphus epilobii	+			Common, on Epilobium hirsutum
Leptoterna dolobrata		+	+	Common, on grasses
Leptoterna ferrugata	+			Common, on grasses
Liocoris tripustulatus	+		+	Common, on Urtica dioica
Megalocoleus pilosus			+	Common, on Tanacetum vulgare
Notostira elongata	+	+		Common, on grasses
Oncotylus viridiflavus	+			Common, on Centaurea nigra
Phytocoris varipes	+	+		Common, on grasses
Pithanus maerkeli		+		Common, on grasses
Plagiognathus arbustorum	+	+	+	Common
Plagiognathus chrysanthemi	+		+	Common
Psallus perrisi		+		Common
Stenodema laevigatum		+	+	Common, on grasses
Stenotus binotatus		+	+	Common, on grasses
NABIDAE (Damsel bugs)				, 8
Aptus mirmicoides	+	+		Common
Nabis rugosus		+		Common
PENTATOMIDAE (Shield bugs)				
Aelia acuminata	+			Common, on grasses
Eysarcoris fabricii			+	Common, on Labiatae
Podops inuncta	+	+		Common, in grassland habitats

Table 5: HEMIPTERA-HOMOPTERA (Bugs)

SPECIES	RECORDING COMPARTMENT			STATUS & ECOLOGY
	3	3a	4	
HEMIPTERA-HOMOPTERA (Bugs)				
CERCOPIDAE				
Neophilaenus lineatus	+			Common
Philaenus spumarius	+	+	+	Common
CICADELLIDAE				
Aphrodes makarovi	+			Common



Table 6: HYMENOPTERA (Bees, wasps, ants, etc)

SPECIES	RECORDING COMPARTMENT			STATUS & ECOLOGY
	3	3a	4	
HYMENOPTERA (Bees, wasps, ants, etc)				
APIDAE (Bees)				
Andrena flavipes	+			Common
Apis mellifera (The Honey Bee)	+			Common
Bombus lapidarius	+	+	+	Common
Bombus pascuorum	+	+		Common
Halictus tumulorum		+		Common
Hylaeus annularis			+	Common
Lasioglossum morio			+	Common
Melitta tricincta	+			Nationally Scarce Category B (Nb)
Nomada flavoguttata		+		Common
Psithyrus rupestris	+	+		Nationally Scarce Category B (Nb)
CHRYSIDIDAE (Ruby-tailed wasps)				, see gar, 2 (2.12)
Omalus auratus	+		+	Common
MUTILLIDAE (Solitary wasps)				
Mutilla europaea (The Large Velvet Ant)	+			Nationally Scarce Category B (Nb)
SPHECIDAE (Solitary wasps)				y construction of the control of the
Philanthus triangulum (The Bee Wolf)			+	Red Data Book 2 - Vulnerable

Table 7: LEPIDOPTERA (Butterflies)

SPECIES	RECORDING COMPARTMENT			STATUS & ECOLOGY
	3	3a	4	
LEPIDOPTERA (Butterflies)				
HESPERIIDAE				
Thymelicus lineola (Essex Skipper)	+		+	Local, in grassland habitats
Thymelicus sylvestris (Small Skipper)		+		Common, in grassland habitats
LYCAENIDAE				
Lycaena phlaeas (Small Copper)	+			Common
Polyommatus icarus (Common Blue)	+	+	+	Common
NYMPHALIDAE				
Cynthia cardui (Painted Lady)	+			Common
Inachis io (The Peacock)	+			Common
PIERIDAE				
Pieris brassicae (Large White)	+			Common
Pieris rapae (Small White)	+			Common
SATYRIDAE				
Lasiommata megera (The Wall)	+			Local, in grassland habitats
Maniola jurtina (Meadow Brown)	+	+		Common, in grassland habitats
Melanargia galathea (Marbled White)	+	+	+	Local, in grassland habitats
Pyronia tithonus (The Gatekeeper)	+	+	+	Common, in grassland habitats

Table 8: LEPIDOPTERA (Moths)

SPECIES	RECORDING COMPARTMENT			STATUS & ECOLOGY
	3	3a	4	
LEPIDOPTERA (Moths)				
GEOMETRIDAE				
Scotopteryx chenopodiata (Shaded Broad-bar)		+		Common, larvae on vetch & clover
LASIOCAMPIDAE				, salvas en vecen es elevel
Malacosoma neustria (Lackey)		+		Common, larvae on several trees
NOCTUIDAE				The state of the s
Euclidea glyphica (Burnet Companion)		+		Local, in grassland habitats
PYRALIDAE				3
Purausta aurata	+			Common, larvae on Labiatae
ZYGAENIDAE (Burnets & foresters)				, and the same same same same same same same sam
Zygaena lonicerae	+	+		Common, on Bird's-foot Trefoil
(Narrow-bordered Five-spot Burnet)				and a root recon

Table 9: NEUROPTERA (Lacewings)

SPECIES		ECORDING IPARTMENT		STATUS & ECOLOGY
	3	3a	4	
NEUROPTERA (Lacewings)				
CHRYSOPIDAE (Green Lacewings)				
Chrysopa perla		+	+	Common

Table 10: ORTHOPTERA (Grasshoppers & crickets)

SPECIES	RECORDIN COMPARTM			STATUS & ECOLOGY
	3	3a	4	
ORTHOPTERA (Grasshoppers & crickets)				
TETTIGONIIDAE (Bush-crickets)				
Leptophyes punctatissima (Speckled Bush-cricket)		+	+	Common
Pholidoptera griseoaptera (Dark Bush-cricket)		+		Common

Table 11: SUMMARY

INSECT ORDER	NUMBER OF SPECIES			TOTAL
	COMPARTMENT NUMBER			NO. OF
	3	3a	4	SPECIES
COLEOPTERA (Beetles)	51	46	26	(80)
DIPTERA (Flies)	18	9	8	26
HEMIPTERA-HETEROPTERA (Bugs)	13	20	11	29
HEMIPTERA-HOMOPTERA (Bugs)	3	1	1	3
HYMENOPTERA (Bees, wasps, ants, etc)	8	5	5	13
LEPIDOPTERA (Butterflies)	11	5	4	12
LEPIDOPTERA (Moths)	2	4	0	5
NEUROPTERA (Lacewings)	0	1	1	1
ORTHOPTERA (Grasshoppers & crickets)	0	2	1	2
Total number of species recorded	106	93	57	(172)
No. of RDB + Nationally Scarce species	8	7	5	15

1000 Cast

7.0 SPECIES DATA

The lists below should be used for entering the data onto the RECORDER database. It should be noted that *Altica carinthiaca* and *Bruchidius varius* have not yet been added to the SPECIES TABLE.

7.1 SPECIES RECORDED ON 13th JUNE 2001

a. Species recorded from Compartment 3 on 13th June 2001

COLEOPTERA (Beetles)

APIONIDAE (Weevils)

Acanephodus onopordi

Eutrichapion ervi

Ischnopterapion loti

Oxystoma pomonae

Perapion curtirostre

Perapion violaceum

Protapion dichroum

CARABIDAE (Ground beetles)

Metabletus foveatus

CHRYSOMELIDAE (Leaf beetles)

Altica carinthiaca

Altica lythri

Bruchus loti

Cassida rubiginosa

Cassida vibex

Phyllotreta nodicornis

COCCINELLIDAE (Ladybirds)

Rhyzobius litura

Subcoccinella vigintiquattuorpunctata

CURCULIONIDAE (Weevils)

Gymnetron pascuorum

Phyllobius viridiaeris

Tychius picirostris

DASCILLIDAE

Dascillus cervinus

DRILIDAE

Drilus flavescens (males swept)

MELYRIDAE

Malachius viridis

NITIDULIDAE (Pollen beetles, etc)

Brachypterus urticae

Epuraea aestiva

OEDEMERIDAE

Oedemera nobilis

SCRAPTIIDAE

Anaspis maculata

TENEBRIONIDAE

Isomira murina

DIPTERA (Flies)

DOLICHOPODIDAE (Long-legged flies)

Sciapus longulus

RHAGIONIDAE (Snipe flies)

Symphoromyia immaculata

STRATIOMYIDAE (Soldier flies)

Chloromyia formosa

TACHINIDAE (Parasitic flies)

Zophomyia temula

TEPHRITIDAE (Picture-winged flies)

Tephritis formosa

Urophora jaceana

Urophora quadrifasciata

HEMIPTERA-HETEROPTERA (Bugs)

COREIDAE (Squash bugs)

Coriomeris denticulatus

MIRIDAE (Capsid bugs)

Liocoris tripustulatus

Notostira elongata

PENTATOMIDAE (Shield bugs)

Aelia acuminata

LEPIDOPTERA (Butterflies)

NYMPHALIDAE

Cynthia cardui (Painted Lady)

NEUROPTERA (Lacewings)

CHRYSOPIDAE (Green Lacewings)

Chrysopa perla

40 >

b. Species recorded from Compartment 3a (proposed development area) on 13th June 2001

COLEOPTERA (Beetles)

APIONIDAE (Weevils)

Acanephodus onopordi

Eutrichapion ervi

Oxystoma pomonae

Oxystoma subulatum

Protapion dichroum

BYTURIDAE (Raspberry beetles)

Byturus tomentosus

CARABIDAE (Ground beetles)

Dromius linearis

Panagaeus bipustulatus (elytra in suction sample)

CHRYSOMELIDAE (Leaf beetles)

Altica carinthiaca

Bruchus loti

Cassida rubiginosa

Chrysolina polita

Longitarsus pratensis

Sphaeroderma testaceum

COCCINELLIDAE (Ladybirds)

Nephus redtenbacheri

Rhyzobius litura

Subcoccinella vigintiquattuorpunctata

CURCULIONIDAE (Weevils)

Glocianus distinctus (female in suction sample)

Gymnetron melanarium (one in suction sample)

Gymnetron pascuorum

Phyllobius roboretanus

Sitona hispidulus

Sitona lineatus

Trichosirocalus troglodytes

Tychius picirostris

Tychius stephensi

DRILIDAE

Drilus flavescens (male swept)

HYDROPHILIDAE

Megasternum obscurum

MELYRIDAE

Malachius viridis

NITIDULIDAE (Pollen beetles, etc)

Brachypterus urticae

OEDEMERIDAE

Oedemera nobilis

SCRAPTIIDAE

Anaspis maculata

STAPHYLINIDAE (Rove beetles)

Sepedophilus nigripennis

TENEBRIONIDAE

Isomira murina

DIPTERA (Flies)

TACHINIDAE (Parasitic flies)

Zophomyia temula

HEMIPTERA-HETEROPTERA (Bugs)

LYGAEIDAE (Ground bugs)

Ischnodemus sabuleti

Scolopostethus thomsoni

MIRIDAE (Capsid bugs)

Capsus ater

Pithanus maerkeli

Psallus perrisi (male)

Stenodema laevigatum

NABIDAE (Damsel bugs)

Aptus mirmicoides

Nabis rugosus

PENTATOMIDAE (Shield bugs)

Podops inuncta

HYMENOPTERA (Bees, wasps, ants, etc)

APIDAE (Bees)

Bombus pascuorum

LEPIDOPTERA (Moths)

LASIOCAMPIDAE

Malocosoma neustria (Lackey Moth) (larva)

NOCTUIDAE

Euclidea glyphica (Burnett Companion)

NEUROPTERA (Lacewings)

CHRYSOPIDAE (Green Lacewings)

Chrysopa perla

ORTHOPTERA (Grasshoppers & crickets)

TETTIGONIIDAE (Bush-crickets)

Pholidoptera griseoaptera (Dark Bush-cricket)

(nymph)



c. Species recorded from Compartment 4 on 13th June 2001

COLEOPTERA (Beetles)

APIONIDAE (Weevils)

Acanephodus onopordi

Oxystoma pomonae

CARABIDAE (Ground beetles)

Demetrias atricapillus

CHRYSOMELIDAE (Leaf beetles)

Bruchidius varius (one swept off red clover)

Bruchus rufipes

Phyllotreta nodicornis (on Wild Mignonette Reseda lutea)

Phyllotreta ochripes (on Field Pennycress)

CURCULIONIDAE (Weevils)

Ceutorhynchus floralis

Ceutorhynchus obstrictus (=C. assimilis)

Ceutorhynchus chalybaeus (on Hedge Mustard Sisymbrium officinale)

Ceutorhynchus quercicola (female)

Gymnetron pascuorum

Nedyus quadrimaculatus

Sirocalodes depressicollis

Tychius picirostris

Zacladus exiguus (one on Geranium rotundifolius at TQ337054)

MELYRIDAE

Malachius viridis

NITIDULIDAE (Pollen beetles, etc)

Brachypterus urticae

Meligethes aeneus

Meligethes rotundicollis (1 female on Charlock)

OEDEMERIDAE

Oedemera nobilis

SCRAPTIIDAE

Anaspis maculata

Anaspis pulicaria

DIPTERA (Flies)

STRATIOMYIDAE (Soldier flies)

Beris vallata

Chloromyia formosa

TACHINIDAE (Parasitic flies)

Zophomyia temula

HEMIPTERA-HETEROPTERA (Bugs)

PENTATOMIDAE (Shield bugs)

Eysarcoris fabricii

LEPIDOPTERA (Butterflies)

LYCAENIDAE

Polyommatus icarus (Common Blue)

365

7.2 SPECIES RECORDED ON 29th JUNE 2001

a. Species recorded from Compartment 3 on 29th June 2001

COLEOPTERA (Beetles)

APIONIDAE (Weevils)

Aspidapion radiolus

Ceratapion gibbirostre

Eutrichapion ervi

Malvapion malvae

Oxystoma subulatum

Perapion curtirostre

Pseudapion rufirostre

CANTHARIDAE (Soldier beetles)

Cantharis nigra

CARABIDAE (Ground beetles)

Demetrias atricapillus

CHRYSOMELIDAE (Leaf beetles)

Bruchus loti

Phaedon tumidulus

Phyllotreta nodicornis

CURCULIONIDAE (Weevils)

Ceutorhynchus chalybaeus

Ceutorhynchus pyrrhorhynchus

Parethelcus pollinarius

Gymnetron pascuorum

NITIDULIDAE (Pollen beetles, etc)

Brachypterus urticae

Meligethes aeneus

Meligethes ruficornis (= *M. flavipes*)

OEDEMERIDAE

Oedemera nobilis

SCRAPTIIDAE

Anaspis pulicaria

DIPTERA (Flies)

TEPHRITIDAE (Picture-winged flies)

Chaetorellia jaceae

Terellia colon

Urophora cuspidata (female on Greater Kanpweed Centaurea scabiosa at TQ33880547)

Urophora jaceana

Urophora quadrifasciata

HEMIPTERA-HETEROPTERA (Bugs)

LYGAEIDAE (Ground bugs)

Heterogaster urticae

MIRIDAE (Capsid bugs)

Leptoterna ferrugata

NABIDAE (Damsel bugs)

Aptus mirmicoides

HEMIPTERA-HOMOPTERA (Bugs)

CERCOPIDAE

Philaenus spumarius

LEPIDOPTERA (Moths)

ZYGAENIDAE (Burnets & foresters)

Zygaena lonicerae (Narrow-bordered Five-spot Burnet)

b. Species recorded from Compartment 3a (proposed development area) on 29th June 2001

COLEOPTERA (Beetles)

CANTHARIDAE (Soldier beetles)

Cantharis cryptica **MELYRIDAE** Malachius viridis **OEDEMERIDAE** Oedemera nobilis

TENEBRIONIDAE

Isomira murina

HEMIPTERA-HETEROPTERA (Bugs)

MIRIDAE (Capsid bugs) Amblytylus nasutus Leptoterna dolobrata Notostira elongata Stenotus binotatus

DIPTERA (Flies)

TEPHRITIDAE (Picture-winged flies)

Xvphosia miliaria

HEMIPTERA-HOMOPTERA (Bugs)

CERCOPIDAE Philaenus spumarius

LEPIDOPTERA (Butterflies)

SATYRIDAE

Maniola jurtina (Meadow Brown)

LEPIDOPTERA (Moths)

ZYGAENIDAE (Burnets & foresters)

Zygaena lonicerae (Narrow-bordered Five-spot Burnet)

Species recorded from Compartment 4 on 29th June 2001

COLEOPTERA (Beetles)

APIONIDAE (Weevils)

Oxystoma pomonae

CURCULIONIDAE (Weevils)

Ceutorhynchus obstrictus (=C. assimilis)

Ceutorhynchus pyrrhorhynchus

Gymnetron pascuorum Nedyus quadrimaculatus Sirocalodes depressicollis

Sitona lineatus Tychius picirostris **MELYRIDAE** Malachius viridis

NITIDULIDAE (Pollen beetles, etc)

Meligethes aeneus Meligethes rotundicollis **OEDEMERIDAE** Oedemera nobilis **SCRAPTIIDAE** Anaspis maculata

DIPTERA (Flies)

ASILIDAE (Robber flies) Leptogaster cylindrica

DOLICHOPODIDAE (Long-legged flies)

Sciapus longulus

SCIOMYZIDAE (Snail-killing flies)

Trypetoptera punctulata

TEPHRITIDAE (Picture-winged flies)

Xyphosia miliaria

HEMIPTERA-HETEROPTERA (Bugs)

LYGAEIDAE (Ground bugs)

Heterogaster urticae MIRIDAE (Capsid bugs) Amblytylus nasutus Calocoris norvegicus Leptoterna dolobrata Liocoris tripustulatus Plagiognathus arbustorum

Plagiognathus chrysanthemi Stenodema laevigatum

Stenotus binotatus

HEMIPTERA-HOMOPTERA (Bugs)

CERCOPIDAE Philaenus spumarius

NEUROPTERA (Lacewings)

CHRYSOPIDAE (Green Lacewings)

Chrysopa perla

ORTHOPTERA (Grasshoppers & crickets)

TETTIGONIIDAE (Bush-crickets)

Leptophyes punctatissima (Speckled Bush-cricket)

76

7.3 SPECIES RECORDED ON 16th JULY 2001

a. Species recorded from Compartment 3 on 16th July 2001

COLEOPTERA (Beetles)

APIONIDAE (Weevils)

 $Ceratapion\ carduorum\ (=C.\ lacertense)$

CANTHARIDAE (Soldier beetles)

Rhagonycha fulva MELYRIDAE

Malachius viridis

OEDEMERIDAE

Oedemera nobilis

DIPTERA (Flies)

STRATIOMYIDAE (Soldier flies)

Chloromyia formosa

SYRPHIDAE (Hover-flies)

Chrysotoxum bicinctum

TEPHRITIDAE (Picture-winged flies)

Chaetorellia jaceae

 $Chae to stomella\ cylindrica$

HEMIPTERA-HETEROPTERA (Bugs)

MIRIDAE (Capsid bugs)

Oncotylus viridiflavus

HYMENOPTERA (Bees, wasps, ants, etc)

APIDAE (Bees)

Andrena flavipes

Apis mellifera

Bombus lapidarius

Bombus pascuorum

CHRYSIDIDAE (Ruby-tailed wasps)

Omalus auratus

MUTILLIDAE (Solitary wasps)

Mutilla europaea (male flying over path at TQ33760557)

LEPIDOPTERA (Butterflies)

HESPERIIDAE

Thymelicus lineola (Essex Skipper)

PIERIDAE

Pieris brassicae (Large White)

SATYRIDAE

Maniola jurtina (Meadow Brown)

Melanargia galathea (Marbled White)

Pyronia tithonus (The Gatekeeper)

b. Species recorded from Compartment 3a (proposed development area) on 16th July 2001

COLEOPTERA (Beetles)

APIONIDAE (Weevils)

Aspidapion radiolus

Ceratapion gibbirostre

Pseudapion rufirostre

CANTHARIDAE (Soldier beetles)

Rhagonycha fulva

CHRYSOMELIDAE (Leaf beetles)

Bruchus loti

COCCINELLIDAE (Ladybirds)

Coccinella septempunctata

Subcoccinella vigintiquattuorpunctata

CURCULIONIDAE (Weevils)

Hadroplontus litura

ELATERIDAE (Click beetles)

Athous bicolor

MELYRIDAE

Malachius viridis

MORDELLIDAE (Tumbling flower beetles)

Mordellistena pumila (female)

OEDEMERIDAE

Oedemera nobilis

DIPTERA (Flies)

STRATIOMYIDAE (Soldier flies)

Chorisops tibialis

Pachygaster atra

SYRPHIDAE (Hover-flies)

Episyrphus balteatus

Scaeva pyrastri

TEPHRITIDAE (Picture-winged flies)

Terellia ruficauda

Urophora cuspidata

Xyphosia miliaria

HEMIPTERA-HETEROPTERA (Bugs)

LYGAEIDAE (Ground bugs)

Heterogaster urticae

MIRIDAE (Capsid bugs)

Amblytylus nasutus

Calocoris norvegicus

Campyloneura virgula

Notostira elongata

HEMIPTERA-HOMOPTERA (Bugs)

CERCOPIDAE

Philaenus spumarius

HYMENOPTERA (Bees, wasps, ants, etc)

APIDAE (Bees)

Bombus lapidarius

Nomada flavoguttata

LEPIDOPTERA (Butterflies)

HESPERIIDAE

Thymelicus sylvestris (Small Skipper)

SATYRIDAE

Maniola jurtina (Meadow Brown)

Melanargia galathea (Marbled White)

Pyronia tithonus (The Gatekeeper)

LEPIDOPTERA (Moths)

ZYGAENIDAE (Burnets & foresters)

Zygaena lonicerae (Narrow-bordered Five-spot Burnet)

NEUROPTERA (Lacewings)

CHRYSOPIDAE (Green Lacewings)

Chrysopa perla

Species recorded from Compartment 4 on 16th July 2001 c;

COLEOPTERA (Beetles)

CANTHARIDAE (Soldier beetles) Rhagonycha fulva

MELYRIDAE

OEDEMERIDAE Malachius viridis

Oedemera nobilis

HEMIPTERA-HETEROPTERA (Bugs)

MIRIDAE (Capsid bugs) Calocoris norvegicus

Megalocoleus pilosus (on Tansy) Leptoterna dolobrata

HYMENOPTERA (Bees, wasps, ants, etc) Bombus lapidarius APIDAE (Bees)

CHRYSIDIDAE (Ruby-tailed wasps) Hylaeus annularis (female) Lasioglossum morio

Philanthus triangulum (The Bee Wolf) (male) SPHECIDAE (Solitary wasps) Omalus auratus

LEPIDOPTERA (Butterflies)

HESPERIIDAE

Thymelicus lineola (Essex Skipper) SATYRIDAE

Melanargia galathea (Marbled White) Pyronia tithonus (The Gatekeeper)

NEUROPTERA (Lacewings)

CHRYSOPIDAE (Green Lacewings) Chrysopa perla

SPECIES RECORDED ON 14th AUGUST 2001 4.7

Species recorded from Compartment 3 on 14th August 2001 a.

COLEOPTERA (Beetles)

CANTHARIDAE (Soldier beetles)

Rhagonycha fulva

CHRYSOMELIDAE (Leaf beetles)

Cassida rubiginosa

COCCINELLIDAE (Ladybirds) Coccinella septempunctata

Propylea quattuordecimpunctata

CURCULIONIDAE (Weevils)

Psyllobora vigintiduopunctata

Gymnetron antirrhini

TQ33800557) Sitona cylindricollis (on Melilotus officinalis at

Sitona hispidulus

Sitona lepidus

DIPTERA (Flies)

ASILIDAE (Robber flies)

Asilus crabroniformis (one on path at TQ33880547)

SCIOMYZIDAE (Snail-killing flies)

Trypetoptera punctulata

Cheilosia variabilis (female) SYRPHIDAE (Hover-flies)

Eristalis intricarius

FEPHRITIDAE (Picture-winged flies)

Dithryca guttularis

at TQ33800557) Icterica westermanni (one swept off Senecio jacobaea

Terellia colon

Urophora quadrifasciata

HEMIPTERA-HETEROPTERA (Bugs)

LYGAEIDAE (Ground bugs)

Heterogaster urticae

MIRIDAE (Capsid bugs)

Notostira elongata Dicyphus epilobii

Oncotylus viridiflavus Phytocoris varipes

Plagiognathus chrysanthemi Plagiognathus arbustorum

HEMIPTERA-HOMOPTERA (Bugs)

CERCOPIDAE

Neophilaenus lineatus

Philaenus spumarius CICADELLIDAE

Aphrodes makarovi

HYMENOPTERA (Bees, wasps, ants, etc)

APIDAE (Bees)

at TQ33760557) Melitta tricincta (several on Odontites verna flowers

Psithyrus rupestris

LEPIDOPTERA (Butterflies) LYCAENIDAE

Lycaena phlaeas (Small Copper)

Polyommatus icarus (Common Blue)

NYMPHALIDAE

Inachis io (The Peacock) PIERIDAE Pieris rapae (Small White) SATYRIDAE

Melanargia galathea (Marbled White) Lasiommata megera (The Wall)

Pyronia tithonus (The Gatekeeper)

LEPIDOPTERA (Moths)

PYRALIDAE

Purausta aurata



Ь. Species recorded from Compartment 3a (proposed development area) on 14th June 2001

COLEOPTERA (Beetles)

APIONIDAE (Weevils)

Ceratapion gibbirostre

Oxystoma subulatum

CANTHARIDAE (Soldier beetles)

Rhagonycha fulva

CHRYSOMELIDAE (Leaf beetles)

Cassida rubiginosa

Phaedon tumidulus

Sermylassa halensis

Sphaeroderma testaceum

COCCINELLIDAE (Ladybirds)

Coccinella septempunctata

Subcoccinella vigintiquattuorpunctata CURCULIONIDAE (Weevils)

Parethelcus pollinarius

Sitona lineatus

DIPTERA (Flies)

STRATIOMYIDAE (Soldier flies)

Chorisops tibialis

SYRPHIDAE (Hover-flies)

Episyrphus balteatus
TEPHRITIDAE (Picture-winged flies)

Terellia colon

HEMIPTERA-HETEROPTERA (Bugs)

LYGAEIDAE (Ground bugs)

Drymus latus (male)

Heterogaster urticae

Stygnocoris sabulosus

MIRIDAE (Capsid bugs) Phytocoris varipes

Plagiognathus arbustorum

HEMIPTERA-HOMOPTERA (Bugs)

CERCOPIDAE

Philaenus spumarius

HYMENOPTERA (Bees, wasps, ants, etc)

Halictus tumulorum (female)

APIDAE (Bees)

Psithyrus rupestris

LEPIDOPTERA (Butterflies)

LYCAENIDAE

Polyommatus icarus (Common Blue)

SATYRIDAE

Maniola jurtina (Meadow Brown)

Pyronia tithonus (The Gatekeeper)

LEPIDOPTERA (Moths) GEOMETRIDAE

Scotopteryx chenopodiata Shaded Broad-bar

ORTHOPTERA (Grasshoppers & crickets)

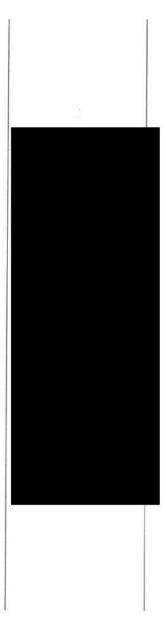
TETTIGONIIDAE (Bush-crickets)

Leptophyes punctatissima (Speckled Bush-cricket)



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WHITEHAWKHILL LNR. Aelia acuminata (L) Agallia consobrina Amblytylus nasutus (Kirschbaum) Anthocoris nemorum (L) Aphrodes albifrons (L) Aphrodes bifasciatus (L) Athysanus argentarius Metcalf - only found 4 times between 1866 o 1966 but recently extending Callicorixa praeusta (Fieber)

SE. countres. Capsus ater (L) Charagochilus gyllenhali (Fallen) Cicadula quadrinotata (Fab) Cixuis nervosus (L) Craspedolepta subpunctata (Forster) Delphacodes elegantula (Boh) Delphacodes pallens (Stal) Dicranotropis hamata (Boh) Dicyphus errans (Wolff) Drymus sylvestris (Fab) (Elipsocus hyalinus (Stevens) Empoasca vitis (Gothe) = here Eupteryx urticae (Fab) Eysarcoris fabricii (Kirk) Harpocera thoracica (Fallen) X Ischnodemus sabuleti (Fallen) Leptopterna dolobrata (L) Liocoris tripustulatus (Fab) Lygocoris pabulinus Macropsis scotti (Ed) Megalocoleus molliculus (Fallen) Mocydiopsis attenuata (Germar) Nabis ferus (L) Nabis rugosus (L) Neophilaenus lineatus (L) Oncotylus viridiflavus (Goeze) Orius niger (Wolff) Orthocephalus saltator (Hahn) (Peripsocus phaeopterus (Stevens)) Philaenus spumarius (L) Pithanus maerkeli (H-S) Plagiognathus albipennis (Fallen) Psallus perrisi/wagneri (Wagner) Psammotettix nodosus (Ribaut) Psylla mali (Schm) Psylla melanoneura (Forster) Ribautiana cruciata (Ribaut) Ribautiana tenerrima (H-S) Scolopostethus thompsoni (Reuter) Stenocranus minutus (Fab) Stenodema laevigatum Stenotus binotatus (Fab) Tingis amplicata (H-S) Tingis cardui (L)

Troiza urtica (L)
Zicrona caerulea (L)
Zyginidia scutellaris (Herri.)

53 rpp Henriptera (2 spp Psociedae-bracketed)

Other Hemiptera found at Whitehawk Hill LNR, Brighton, 2001

Aphrodes fuscofasciatus, A bifasciatus & A bicinctus. Coreus marginatus. Dolichonabis limbatus. Eupteryx aurata. Kleidocerys resedae. Heterogaster urticae. Himacerus mirmicoides. Mocydia crocea. Notostira elongata. Orthops campestris. Palomena prasina.. Phytocoris varipes. Plesiocoris rugicollis.

68 spp in all, mostly common.

The site is a v g example of a typical Downland grass based habitat, but also seems to show unique aspects. The presence of Pithanus maerkeli & Ischnodemus sabuleti confirms my view that the hill must have (had?) some slow spring/water supply, since these 2 spp, in the books & in my own experience don't inhabit dry areas typical of chalk downland. I was also surprised to see quite a thick moss bedding in 1 or 2 areas, again indicating this.

Ischnodemus s is v like Athysanus argentarius, in that it has expanded its range recently. The extent of this seems vague in the latter's' case; I have not caught this (quite large & notable) species anywhere else (I have only really collected in Sussex) & don't know of anyone else who has. Whether Whitehawk Hill is a very recently colonised territory for Athysanus, as it could be for Ischnodemus too, I would love to know! Encouragingly, Oncotylus viridiflavus, confined to below the Bristol Channel, I have found at this site more than at any other visited (obviously it's food plant, hardhead, (abundant here), has something to do with this).

I would say that many species of Hemiptera, & therefore safe to say most other insect orders, have found a safe residence here & built permanent communities, the site also allowing for new species communities to move in. I have found 4 Athysanus individuals from a wide area of the NE of the LNR & though all males, this species seems to have found a permanent niche here.

Other insects from the survey of Whitehawk Hill LNR, 2001

Mouse Moth

Diptera

Trypetoptera punctulata (Dryomyzidae). Pachygaster atra (Stratiomyidae)

Coleoptera

Anthous heamorrhoidulis. Agriotes pallidulus. Anthonomus pedicularius. Apion miniatum. Adalia bipunctata. Byturus tomentosus. Cassida rubiginosa & C vibax. Cistella murina. Cantharis pallida. Coeliodes quadrimaculatus. Ceutorrhynchus pollinarius & C litura & C asperifoliatum. Demetrias atricapillus. & D lineatus. Halyzia 24-punctata. Haltica pusilla. Malachius bipustulatus. Oedemera nobilis. Rhagonycha fulva. Phyllobius viridiaeris. Sermyla halensis. Sphaeroderma cardui. Sitones lineatus. Subcoccinella 24-punctata.

Orthoptera

Great green bushcricket (lots). Dark bushcricket (Pholidoptera griseoaptera.)

Sawflies

Tenthredopsis litterata. & T nassata

Butterflies

Meadow Brown, Small Blue. Red Admiral. Speckled Wood. Small & Large White's. Small Skipper. Gatekeeper. Marbled White (lots).