

**Summary of the
Invertebrate Fauna of
the Mid-Yare Valley
1889-1994**

Matt Shardlow

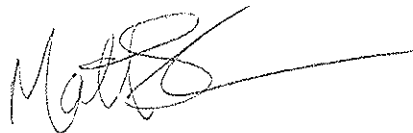
2007

Preface

This project was started in 1992 when I was undertaking voluntary work with the RSPB in Norwich. Distracted by paid employment in 1995 I never quite got around to putting the finishing touches to the work and when about a year later I tried to I found that technology had moved on and the file format I had used to input all the data was redundant. Really the work needed to be transferred manually into a newer format and a full analysis undertaken. However, new contracts, an MPhil and a role at the RSPB HQ meant that this daunting task never rose near the top of priorities. It remained uncompleted when I left in 2002 to set up Buglife – The Invertebrate Conservation Trust. However, the project has never been laid to rest and the idea that all this data from 100 years of dedicated recording, mainly by Ted Ellis and his friends, but also by the RSPB staff and volunteers might never see the light of day has prompted me to take the unsatisfactory but expedient step of pulling together a brief analysis and attaching this to the only full version of the list.

It should be noted that this is a UNIQUE DOCUMENT it does not exist in any other format anywhere else on the planet!

I hope that it is useful.

A handwritten signature in black ink, appearing to read 'Matt Shardlow', with a long horizontal line extending to the right.

Matt Shardlow, 2007.

The Invertebrate Fauna of the Mid-Yare Valley

A systematic list

Introduction

Between 1992 and 1994 I took on a project to collate all invertebrate records from the Mid-Yare Valley. This naturally focussed on the RSPB Mid-Yare Valley Nature reserve and the Wheatfen Trust nature reserve.

There is a considerable amount of invertebrate data from the RSPB reserve, largely dating from after the acquisition of the first part of the nature reserve in 1975. Wheatfen has a much longer history of invertebrate recording with two residents of the site, Captain M.J.D. Cockle and his friend and the subsequent owner of the site Ted Ellis producing extensive records from about 1933 to the 1950s. The activity at Wheatfen was supplemented by the work of friends of Ted Ellis including many national invertebrate experts. After his death in 1986 many of Ted's records were left in the form of notes in the margins of books and box files at the Castle Museum. Much of the work focussed on compiling these records, often a challenge due to changes in taxonomy.

Since completion of the list it has always been my intention to write some interpretive text to accompany the work. Alas, pressures of work have always prevented this occurrence, and this has been compounded by difficulties in converting the original word processor files into a format that can be edited by modern operating systems. What appears here is therefore a list of pre-1994 records with some rough annotations. However, below are some of the key ecological conclusions reached through interpretation of the records.

Changes in the invertebrate fauna

Extinctions

The following species have not been recorded for a considerable period of time and may well be extinct in the valley. Taxa for which there has been little or no recent recording effort have not been counted as extinct. The recent rediscovery of the silver colonel *Odontomyia argentata* (a soldier fly) at Strumpshaw in 2000, the first record since 1939 shows the need for caution in interpreting a lack of records as an absence of the species, however many of the species have been carefully looked for and not found. The occurrence of the great silver diving beetle (*Hydrophilus piceus*) in 1996 at Strumpshaw (recorded by Brad Robson) was the first record since 1883. The amount of survey (ditches and moth trapping) and the obviousness of the species would suggest that it had been absent for the intervening period and had then recolonised.

Table 1 Invertebrate that have probably become extinct in the Mid-Yare Valley in the last 100 years.

Species	Status	Group	Last Record	Potential Cause
<i>Theodoxus fluviatilis</i>	Local	Mollusca	1940	WQ
<i>Anisus vorticulus</i>	<u>RDB 2</u>	Mollusca	1939	WQ
<i>Pisidium casertanum</i>	Common	Mollusca	1940	WQ
<i>Pisidium hibernicum</i>	Local	Mollusca	1940	WQ
<i>Pisidium pulchellum</i>	N/b	Mollusca	1940	WQ
<i>Fredericella sultana</i>	Local	Bryozoa	1943	WQ
<i>Hyalinella punctata</i>	Local	Bryozoa	1911	WQ
<i>Plumatella coralloides</i>	Local	Bryozoa	1934	WQ
<i>Plumatella fruticosa</i>	Unknown	Bryozoa	1911	WQ
<i>Plumatella fungosa</i>	Local	Bryozoa	1934	WQ
<i>Plumatella repens</i>	Common	Bryozoa	1911	WQ
<i>Lophopus crystallinus</i>	<u>RDB 3</u>	Bryozoa	1943	WQ
<i>Cristatella mucedo</i>	Common	Bryozoa	1943	WQ
<i>Paludicella articulata</i>	Local	Bryozoa	1943	WQ
Large red damselfly	Common	Odonata	1989	?
Broad-bodied chaser	Common	Odonata	1945	?*
<i>Megalonotus praetextus</i>	N/b	a true bug	1941	? →
<i>Stygnocoris pedestris</i>	Local	a true bug	1941	HL
<i>Scolopostethus decoratus</i>	Local	a true bug	1944	HL
<i>Orthotylus ericetorum</i>	Local	a true bug	1940	HL
<i>Velia caprai</i>	Local	a true bug	1943	WQ+TI
<i>Microvelia umbricola</i>	RDB 3	a true bug	1943	WQ+OS
<i>Micronecta poweri</i>	Common	a true bug	1889	WQ
<i>Bembidion clarki</i>	N/b	a ground beetle	1939	?
<i>Trichocellus cognatus</i>	Local	a ground beetle	1939	HL
<i>Bradycellus ruficollis</i>	Common	a ground beetle	1945	HL
<i>Demetrias monostigma</i>	N/b	a ground beetle	1939	?
<i>Rhantus frontalis</i>	N/b	a water beetle	1932	WQ
<i>Helophorus dorsalis</i>	RDB 3	a water beetle	1939	WQ
<i>Malachius marginellus</i>	N/b	a false soldier beetle	1944	TI?
<i>Coccinella heiroglyphica</i>	Local	a ladybird	1938	HL
<i>Adonia variegata</i>	N/b	a ladybird	1940	HL?, TI? →?
<i>Melandrya caraboides</i>	N/b	a beetle	1937	DW
<i>Conopalpus testaceus</i>	N/b	a beetle	1936	DW
<i>Odemera virescens</i>	RDB 2	a beetle	Pre. 1983	DW**
<i>Ancistrocerus antelope</i>	RDB 3	a solitary wasp	1939	DW, ND, ?
<i>Crossocerus vagabundus</i>	RDB 1	a solitary wasp	1936	DW, ND, +?*
<i>Andrena varians</i>	N/b	a mining bee	1938	?
<i>Bombus jonellus</i>	Local	a bumblebee	1964	HL
<i>Bombus ruderalis</i>	<u>N/b</u>	a bumblebee	1943	ND, AI
<i>Bombus sylvarium</i>	<u>N/b</u>	shrill carder bumblebee	1957	ND, AI
<i>Bombus muscorum</i>	Local	a bumblebee	1938	ND, AI
<i>Psithyrus rupestris</i>	N/b	a bumblebee	1937	ND, AI
<i>Nephrotoma crocata</i>	RDB 3	a crane fly	1949	HL?
<i>Dixella serotina</i>	N	a meniscus midge	1989	***

<i>Beris clavipes</i>	N	a soldier-fly	1936	TI?
<i>Lejops vittata</i>	RDB 2	a hoverfly	1938	TI →
<i>Phacopteryx (=Anabolia) brevipennis</i>	N	a caddisfly	1946	TI?
<i>Grammotaulius nitidus</i>	RDB 1	a caddisfly	Pre 1965	ND, WL
<i>Sitochroa verticalis</i>	Local	a pyralid moth	1938	ND, ?
Dingy skipper	Local	a butterfly	1946	ND, ?
Purple hairstreak	Local	a butterfly	1944	?
Silver studded-blue	<u>N/b</u>	a butterfly	1928	HL
Large tortoiseshell	RDB 1	a butterfly	1945	ND, ?
High brown fritillary	<u>RDB 2</u>	a butterfly	1949	ND, OS →
Silver washed fritillary	Local	a butterfly	1949	ND, OS
The forester	N/b	a moth	1944	HL
<i>Trichophaga tapetzella</i>	N/b	a moth	1939	?
Small grass emerald	N/a	a moth	1976	ND, HL, →
Autumn green carpet	Local	a moth	1939	?
Brussels lace	Local	a moth	1937	?
Dotted footman	RDB 3	a moth	1899	WQ
Water ermine	N/b	a moth	1939	?****
White speck	Migrant	a moth	1988/9	→
Swordgrass	<u>N/b</u>	a moth	1938	ND, ?
Rush wainscot	RDB 3	a moth	1985	→
Mother shipton	Common	a moth	1939	?
Burnet companion	Common	a moth	1944	?
Buttoned snout	<u>N/b</u>	a moth	1938	ND, ?
Common fanfoot	<u>N/a</u>	a moth	1937	ND, ?

LEGEND

- * 1989 record was probably a vagrant
- ** no recent Norfolk records
- *** one known site in valley destroyed when scrape put in
- **** recent decline in Norfolk
- one record – may have been a vagrant or temporary resident

Status

Underlined = BAP priority species

Potential Cause

ND = National Decline

? = No obvious potential cause

† = Nationally Extinct

WQ = Water Quality deterioration

HL = Heather Loss

TI = a reduction in Tidal Influence and the influence of saline water

OS = Over Shading of dykes or food plants

AI = Agricultural Intensification and associated loss of nectaring sources

WL = changes in Water Level management

DW = needs Dead Wood

Additions

As well as species becoming extinct, over the last 100 years a number of species have colonised the site. While many of these colonisers are difficult to distinguish from previously overlooked species, the following list are almost certainly all new residents.

Table 2 Species that have probably colonised the Mid-Yare Valley in the last 100 years

Species	Status	Group	Date of first Record	Notes
<i>Dugesia tigrina</i>	Introduced	a flatworm	1974	From Scandinavia
<i>Planaria torva</i>	Introduced	a flatworm	1977	From N. America
<i>Potamopyrgus jenkinsi</i>	Common	a mollusc	1954	From coastal waters
<i>Dreissena polymorpha</i>	Introduced	Zebra mussel	1992	From Russia
<i>Crangonyx pseudogracilis</i>	Introduced	a shrimp	1977	From N. America
<i>Orchestia cavimana</i>		a shrimp	1948	
Scarce chaser	RDB 3	Odonata	1989	Possibly overlooked
<i>Ranatra linearis</i>	Local	Water stick insect	1994	Distribution expansion
<i>Scymus suturalis</i>	Common	a ladybird	1978	On Scot's pine
<i>Aphidecta oblitterata</i>	Common	Larch ladybird	1942	On conifers
<i>Harmonia quadripunctata</i>	Common	Cream streaked lb.	1937	On conifers
<i>Anatis ocellata</i>	Common	Eyed ladybird	Pre1983	On conifers
<i>Myrrha octodeciguttata</i>	Common	18 spot ladybird	1938	On conifers
<i>Andricus quercuscalicis</i>	Introduced	a gall wasp	1993	On oak, N. American?
Speckled wood	Common	a butterfly	1987	Distribution expansion
Balsam carpet	RDB 3	a moth	1991	Distribution expansion
Grey pine carpet	Common	a moth	1971/2	On conifers
Dwarf pug	Common	a moth	1991	On conifers
Scorched carpet	Local	a moth	1983	On spindle
Tawny-barred angle	Common	a moth	1991	On conifers
Bordered white	Common	a moth	1985	On Pinus spp.
Varied coronet	Common	a moth	1972	On sweet William
The sycamore	Local	a moth	1988	On <i>Acer</i> spp. and horse chestnut

Introductions

At least three species (all of which are now extinct) are known to have arrived in the Mid-Yare Valley through direct human assistance. *Buckleria paludum* (RDB 3), a plume moth, was accidentally introduced in 1966 in sundew plants grown at Wheatfen. Large copper was introduced to Wheatfen in 1949 but died out in 1951 after deep winter floods. Marsh fritillary was introduced to Strumpshaw in 1986 but failed to breed.

Conservation Management Interpretations

Introduction

Gathering all this invertebrate data together is only of use if it helps us to understand the ecology of the area and to define the priorities and guide us to the successful conservation of the habitats and species.

There is much that this information can teach us about the ecological history of the site and understanding this history can inform its future. This represents a brief summary of some of the key issues that the list of invertebrate species raises, it is by no means exhaustive and further analysis and understanding of the individual species (particularly the specialist, internationally threatened and very local species) will no doubt further improve the effectiveness of habitat management in terms of assisting this site to achieve its maximum potential for saving Britain's and the planet's biodiversity resources.

There is evidence that at least 20 rare invertebrates have become extinct during the last century (and there are many more with some evidence). On the other hand of the 23 invertebrates known to be new to the site only two (the Scarce chaser and Balsam carpet) are rarities.

The fact that during the last century over half of the invertebrate species from the Mid-Yare that are included in "Biodiversity: The UK Steering Group Report" (1995 HMSO, London) have become extinct. This is partly because the Biodiversity Action Plan process identifies the very species that have declined, but it should also remind us that even on protected sites the species do not look after themselves and many endangered species continue to disappear from SSSIs and Nature Reserves.

The Mid-Yare is a saline system!

Or to be more accurate the Mid-Yare contains an important element to the fauna that is actually associated with low salinity and low tidal ranges. The epitome of this is the Swollen spire snail (*Pseudamnicola confusa* (now known as *Mercuria similis*)). The extinction of this species at Strumpshaw is firmly assigned to the decreased salinity of Strumpshaw Fen (see "Invertebrates other than insects Red Data Book", JNCC 1991). This snail is RDB 1 and has recently been upgraded to the Priority List of Biodiversity Action Plan species (Species and Habitat Review Report 2007).

This is by no means the only Mid-Yare species associated with the conditions found in the extreme upper tidal areas of river systems. There are a range of species that probably relied on exposed mud at low tide, and those which required saline conditions. The halophilus element of the fauna is important and includes the following species the shrimp *Corophium multisetosum* (N), the shore bug *Saldula opacula* (N), the flecked general *Stratiomys singularior* - (N), the hoverfly *Lejogaster splendida* (N), the ground beetle *Dromius longiceps* (N/a) and the crane fly *Limonia danica* (RDB 3). In total there are at least 22 species that are coastal or saline in their usual habitus, some may be casuals, but the majority are likely to be long term residents of the valley.

The Mid-Yare was a heathland!

Alright, the valley floor has been a wetland for a long time, but it was in the not too distant past a wetland on sandy glacial till surrounded on both sides by heather heathland. The dates when the heathland was converted into farmland have not been clarified. Much of the area was probably already farmland by 1800. Heather was once dominant on the sandy slopes to the south of Surlingham, and there are references in Ted Ellis's files that suggest that areas of heathland survived on the scarp to the south of Wheatfen until perhaps the

1930s. What is known is that in the 1960s heather (*Calluna vulgaris*) survived as a few plants at Wheatfen until the last plant was recorded on the edge of Alder Carr fen in 1968. It seems likely that the heather in the wet areas of the valley were a sink population and once the supply of seeds dried up from the surrounding slopes it was just a matter of time before the plant died out on the wet areas. However, it is also possible that about two hundred years ago the fens were much more acidic and low nutrient than the habitats we know today. Indeed, were it not for the eutrophication from the burgeoning city of Norwich perhaps the ecological characteristics of the Mid-Yare would be more similar to the more acidic communities found in the Northern Ant and Thurne Broads.

Associated with the loss of the heathland influence is the most remarkable change in the invertebrate fauna during the last 100 years. Once the larger heathlands had gone under the plough the heath/fen ecotone started to deteriorate. Of the fifteen species of Mid-Yare invertebrate identified as being heathland associated eight have not been seen since 1950 and as several of these are *Calluna* feeders they are unlikely to be just overlooked! The Silver studded blue was lost in 1928, the Forester moth was last seen in 1944, and the Heath bumblebee (*Bombus jonellus*) managed to survive until the 1970s. There are still a few remnant heathland species left on the site such as the Heather ladybird (*Chilcorus bipustulatus*), which does not actually need heather to survive. It is possible that other species survive in certain areas. In particular the sand cliff at Strumpshaw may contain important remnant Hymenoptera species. This feature has already yielded the heathland associated ground beetle *Metabletus foveatus*.

It may seem surprising to the casual visitor but there are a few species associated with sandy rivers in the Mid-Yare. Particularly the little Nationally Scarce ground beetle *Bembidion litorale* (last seen in 1940) and the RDB 3 crane fly *Nephrotoma lunulicornis* (seen in 1989).

Glyceria is great!

The *Glyceria* communities in the valley are very important. Until the 1930s most of Rockland Broad was a giant floating *Glyceria* bed. This has since almost completely died away leaving remnant patches of *Glyceria* bed in the less disturbed and polluted parts of the valley. There are several species of rare invertebrate which rely on the *Glyceria* on the site most notably the hoverflies *Anasimyia interpunctata* (RDB 3) and *Neoascia geniculata* (Nb). *Glyceria* is also an important habitat for the incredibly important Mid-Yare snail fauna.

Some old growth reed is very good.

There should be a firm resolution to conserve some areas of old growth reed and manage areas on a seven year or more wale. There are a large number of species recorded from the area which occur in small, highly localised, highly immobile colonies. These include the larvae of the stonefly *Nemoura dubitans* (N), the bug *Adelphocoris tincinensis* (N/a) and meniscus midge *Dixella serotina* (N). Colonies of these larvae would be destroyed by repeated disturbance. There are also a number of species which only occupy old reeds. The Cigar gall fly (*Lipara similis*) causes galls on common reed, but requires the plant to be under some stress from partial shade or drier conditions. When these have been vacated by the flies and are a year or more old they will often be occupied by nests of the bee *Hylaeus (Prosopis) pectoralis* which is in turn parasitized by a number of other species including the wasp *Passaloecus clypealis* (RDB 3). There are also a number of reedbed moths that are thought to prefer old growth.

Greater tussock sedge is not just pretty

Good stands of Greater tussock sedge (*Carex paniculata*) will benefit the Nationally scarce fly *Anagnota bicolor* as well as the beetle *Galerucella tenella*. The habitat structure provides a wonderful site for invertebrates to escape floods and the worse excesses of winter. It is probably no coincident that most glow worm records are associated with the tussocks.

By a similar dint piles of reed have been the source of several interesting invertebrate records of the years and the decaying mass supports scarce species as well as a great abundance of commoner animals.

Is Buckenham Carr the most ancient Broadland wood?

Looking at Faden's map of Norfolk of 1797 and Bryant's map of 1836 it would seem that there were only very small areas of woodland in the Norfolk Broads. Indeed in the whole of the Mid-Yare there is only one woodland shown on both maps that is still in existence now. Buckenham Carr was not included in the inventory of ancient woodland for Norfolk. It is not clear why it was excluded. It seems to be on all the known maps. Perhaps some records exist to suggest that the area was not wooded 400 years ago. Perhaps because all the other Broadland carr and wood is of recent origin it was assumed that this was recent as well.

Buckenham Carr is almost certainly the oldest wet wood in the Broads, as such it deserve more ecological attention than it has had to date, could this area be as near to primeval swamp woodland as you can get in the UK?

Summary of the Invertebrate Fauna of the Mid-Yare Valley 1889-1994

Records were found for 2700 species, these are summarised below with additional notes on those species of particular conservation concern.

Efforts were made to check the data by circulating draft lists to national recorders, however not all responded and over time changes in taxonomy and ecological understanding introduce new errors. Hence the list cannot be taken to be 100% correct.

Porifera (sponges)

2 species recorded.

Hydrozoa (hydra)

1 species recorded.

Turbellaria (flatworms)

11 species recorded.

Trematoda (flukes)

4 species recorded from snails, including 2 recorded nowhere else in Britain.

Rotifera

1 species recorded.

Aquatic Oligochaeta (aquatic worms)

8 species recorded.

Lumbricidae (earthworms)

7 species recorded.

Hirudinoidea (leeches)

8 species recorded.

	<i>coleoptrata</i>		
a fly	<i>Elachiptera uniseta</i>	N	?
a fly	<i>Cordilura aemula</i>	RDB 3	Infrequent.
a dung-fly	<i>Scathophaga tinctinervis</i>	RDB 2	Rare.
a fly	<i>Lispe uliginosa</i>	N	Uncommon.

Siphonaptera (fleas)

12 species recorded.

Trichoptera (caddisflies)

23 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
a caddisfly	<i>Grammotaulius nitidus</i>	RDB 1	Extinct.
a caddisfly	<i>Anabolia brevipennis</i>	N	Extinct ? Last record 1946.

Butterflies

39 species recorded, of which 33 have been resident (some only temporarily), two of these were failed introductions.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
Swallowtail	<i>Papilio machaon</i>	RDB 2	Frequent.
Large copper	<i>Lycaena dispar</i>	Extinct	Failed introduction 1949.
Silver-studded blue	<i>Plebejus argus</i>	N/b	Extinct 1928.
Large tortoiseshell	<i>Nymphalis polychloros</i>	RDB 1	Extinct 1945.
Marsh fritillary	<i>Eurodryas aurinia</i>	N/b	Failed introduction 1986.
High brown fritillary	<i>Arginnis aglaja</i>	RDB 2	1949 one record, probably a vagrant

Moths

608 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
Goat moth	<i>Cossus cossus</i>	N/b	Occasional and local.
Forester	<i>Adscita stactices</i>	N/b	Extinct 1944.
Festoon	<i>Apoda limacodes</i>	N/b	Rare.
Tapestry moth	<i>Trichophaga tapetzella</i>	N/b	Extinct ? last record 1939.
Hornet moth	<i>Sesia apiformis</i>	N/b	Occasional and local.
Large red-belted clearwing	<i>Synanthedon culiciformis</i>	N/b	Occasional.

a dance fly	<i>Platypalpus niger</i>	N	Uncommon.
a dance fly	<i>Symbalophthalmus dissimilis</i>	N	Uncommon.
a dance fly	<i>Trichina pallipes</i>	N	Uncommon.
a dance fly	<i>Oedalea tibialis</i>	N	Uncommon.
a dance fly	<i>Microphorus anomalus</i>	N	Frequent.
a dance fly	<i>Rhamphomyia (=Holoclera) caliginosa</i>	N	Uncommon.
a dance fly	<i>Hilara clypeata</i>	N	Uncommon.
a long-legged fly	<i>Hercostomus chalybeus</i>	N	Common.
a long-legged fly	<i>Poecilobothrus principalis</i>	N	Uncommon.
a long-legged fly	<i>Raphium nasutum</i>	N	Uncommon.
a long-legged fly	<i>Achalcus melanotrichus</i>	N	Rare.
a long-legged fly	<i>Lamprochromus elegans</i>	N	Frequent.
a pointed-wing fly	<i>Lonchoptera scutellata</i>	N	Uncommon.
a big-headed fly	<i>Cephalops perspicuus</i>	RDB 2	Uncommon.
a big-headed fly	<i>Eudorylas inferus</i>	N	Uncommon.
a hoverfly	<i>Melangyna (=Meligramma) guttata</i>	N	Uncommon.
a hoverfly	<i>Xanthandrus comtus</i>	N	Uncommon.
a hoverfly	<i>Ferdinandea ruficornis</i>	N	Rare.
a hoverfly	<i>Lejogaster splendida</i>	N	Uncommon.
a hoverfly	<i>Neoscia geniculata</i>	N	Uncommon.
a hoverfly	<i>Xylota abiens</i>	N	Frequent.
a hoverfly	<i>Anasimyia interpuncta</i>	RDB 3	Frequent.
a hoverfly	<i>Anasimyia lunulata</i>	N	Uncommon.
a hoverfly	<i>Lejops vittata</i>	RDB 2	Extinct? 1938 record may have been of a vagrant.
a snail-killing fly	<i>Colobaea bifasciella</i>	N	Strumpshaw, common in reedbed.
a snail-killing fly	<i>Colobaea distincta</i>	N	Rare.
a snail-killing fly	<i>Pherbellia nana</i>	N	Uncommon.
a snail-killing fly	<i>Sciomyza dryomyzina</i>	RDB 2	Uncommon.
a snail-killing fly	<i>Sciomyza simplex</i>	N	Frequent.
a snail-killing fly	<i>Antichaeta brevipennis</i>	RDB 2	Uncommon.
a snail-killing fly	<i>Psacadina verbekei</i>	N	Frequent.
a snail-killing fly	<i>Tetanocera freyi</i>	RDB 3	Uncommon.
a fly	<i>Lonchaea laxa</i>	N	Uncommon.
a shore fly	<i>Ochthera manicata</i>	RDB 3	Uncommon.
a fruit fly	<i>Steganina (=Stegana)</i>	N	?

Diptera (flies)

586 species recorded. One species of fungus gnat (*Rymosia sp.*) recently found new to Britain.

There are no RDB designations for moth flies (Psychodidae) but the site is of great importance for this group. *Clytocerus rivosus* is only known from one other British site. *Telmatoscopus ellisi* was described as new to science from alder carr in the valley and is only known from four UK sites.

Telmatoscopus maynei is only known from one other British site, and *Telmatoscopus vaillantii* is only known from two other British sites.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
a crane fly	<i>Nephrotoma crocata</i>	RDB 3	Extinct. Last recorded in 1949.
a crane fly	<i>Nephrotoma unicornis</i>	N	Uncommon.
a crane fly	<i>Tipula peliostigma</i>	N	Rare ? Last recorded in 1936.
a crane fly	<i>Limonia danica</i>	RDB 3	Frequent.
a crane fly	<i>Pilaria scutellata</i>	N	Uncommon.
a crane fly	<i>Gnophomyia viridipennis</i>	N	Rare ? Last recorded 1951.
a meniscus midge	<i>Dixella serotina</i>	N	Extinct ? Habitat of single known colony destroyed in 1989 by scrape excavation.
a fungus gnat	<i>Mycomya britteni</i>	RDB 2	Rare.
a fungus gnat	<i>Leia longiseta</i>	RDB 2	Frequent.
a fungus gnat	<i>Exechia pseudofestiva</i>	N	Uncommon.
a fungus gnat	<i>Pseudexechia parallela</i>	RDB 1	Occasional.
a fungus gnat	<i>Allodia barbata</i>	N	Occasional.
a fungus gnat	<i>Allodia embla</i>	RDB 3	Uncommon.
a fungus gnat	<i>Allodia silvatica</i>	N	Frequent on south side of river.
a fungus gnat	<i>Trichonta icenica</i>	RDB 3	Rare.
a fungus gnat	<i>Mycetophila confusa</i>	RDB 3	Uncommon.
a fungus gnat	<i>Sceptonia costata</i>	N	Rare.
a fungus gnat	<i>Epicyptha limnophila</i>	N	Frequent.
Scarce orange legionnaire	<i>Beris clavipes</i>	N	Extinct? Last recorded in 1936.
Long-horned soldier	<i>Vanoyia tenuicornis</i>	N	Rare.
Silver colonel	<i>Odontomyia argentata</i>	RDB 2	Last recorded in 1939 then rediscovered in 2000.
Black colonel	<i>Odontomyia tigrina</i>	N	Uncommon.
Flecked general	<i>Stratiomys singularior</i>	N	Frequent.
Banded general	<i>Stratiomys potamida</i>	N	Uncommon.
Broadland horsefly	<i>Hybomitra muhlfeldi</i>	RDB 3	Frequent on south side of Yare.
a dance fly	<i>Drapetis simulans</i>	N	Uncommon.

Hymenoptera (ants, bees and wasps).

215 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
a potter wasp	<i>Ancistrocerus antilope</i>	RDB 3	Extinct. Last recorded 1939.
a digger wasp	<i>Crossoceras vagabundus</i>	RDB 1	Extinct. Last recorded 1936.
a digger wasp	<i>Passaloecus clypealis</i>	RDB 3	Rare.
a mining bee	<i>Andrena varians</i>	N/b	Extinct ? Last recorded 1938.
a mining bee	<i>Andrena rosae</i>	RDB 2	Extinct ? 1936 record requires confirmation.
Fen bee	<i>Macropis europaea</i>	N/a	Scarce.
a cuckoo bee	<i>Nomada lathburiana</i>	RDB 3	Extinct ? last recorded in 1939.
Large garden bumblebee	<i>Bombus ruderatus</i>	N/b	Extinct. last recorded in 1943.
Shrill carder bumblebee	<i>Bombus sylvarum</i>	N/b	Extinct. last recorded in 1957.
Hill cuckoo bee	<i>Psithyrus rupestris</i>	N/b	Extinct. last recorded in 1937.

Raphidiidae (snakeflies)

1 species recorded.

Neuroptera (lacewings and spongeflies)

14 species recorded.

Megaloptera (alderflies)

1 species recorded.

Mecoptera (scorpionflies)

2 species recorded.

beetle			
a false soldier beetle	<i>Malachius marginellus</i>	N/b	Rare ? Last recorded 1944.
a false soldier beetle	<i>Cerapheles terminatus</i>	N/a	Frequent ? Last recorded 1978.
a sap beetle	<i>Cryptarcha strigata</i>	N/b	Rare ? Last recorded 1937.
a beetle	<i>Pediacus depressus</i>	N/a	Rare ?
13-spot ladybird	<i>Hippodamia tredecimpunctata</i>	RDB K	Extinct. Record requires confirmation.
Adonis' ladybird	<i>Adonia variegata</i>	N/b	Extinct. Last recorded in 1940.
a false darking beetle	<i>Melandrya caraboides</i>	N/b	Extinct ? Last recorded in 1937.
a false darking beetle	<i>Conopalpus testaceus</i>	N/b	Extinct ? Last recorded in 1936.
a beetle	<i>Oedemera viriscens</i>	RDB 2	Extinct ? No recent Norfolk records.
sawyer beetle	<i>Prionus coriarius</i>	N/a	Rare.
willow borer	<i>Saperda carcharias</i>	N/a	Rare ?
a leaf beetle	<i>Donacia clavipes</i>	N/b	Extinct ? Last recorded 1947.
a leaf beetle	<i>Donacia thalassina</i>	N/b	Rare ?
a leaf beetle	<i>Plateumaris braccata</i>	N/a	Infrequent ?
a flea beetle	<i>Phyllotetra cruciferae</i>	N/b	Rare ? Last recorded 1945.
a flea beetle	<i>Longitarsus brunneus</i>	N/b	Rare ? Last recorded in 1964.
a flea beetle	<i>Mantura obtusata</i>	N/b	Rare ? last recorded 1938.
a primitive weevil	<i>Byctiscus betulae</i>	N/b	Rare ?
a weevil	<i>Apion vicinum</i>	N/b	Rare ? Last recorded in 1938.
a weevil	<i>Apion varipes</i>	N/b	Rare ? Last recorded in 1937.
a weevil	<i>Polydrusus confluens</i>	N/b	Rare ? Last recorded in 1936.
a weevil	<i>Tanymecus palliatus</i>	N/b	Rare. Last recorded in 1942.
a weevil	<i>Sitona macularius</i>	N/b	Rare ? Last recorded in 1940.
a weevil	<i>Alophus triguttatus</i>	N/b	Rare ? Last recorded in 1939.
a weevil	<i>Magdalis cerasi</i>	N/b	Rare ? Last recorded in 1942.
a weevil	<i>Cryptorhynchus lapathi</i>	N/b	Rare ? Last recorded in 1961.
a weevil	<i>Hydronomus alismatis</i>	N/b	Rare ? Last recorded in 1978.
a weevil	<i>Ceutorhynchus viduatus</i>	N/b	Rare ? Last recorded in 1960.
a weevil	<i>Tapinotus sellatus</i>	N/a	Rare ? Last recorded in 1977.
a weevil	<i>Curculio villosus</i>	N/b	Rare ? Last recorded in 1941.
a weevil	<i>Acalyptus carpini</i>	N/b	Rare ? Last recorded in 1978.
a weevil	<i>Gymnetron villosum</i>	N/b	Rare ? Last recorded in 1946.

Coleoptera (beetles)

660 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
a ground beetle	<i>Blethisia multipunctata</i>	N/b	Uncommon ?
a ground beetle	<i>Bembidion gilvipes</i>	N/b	Local in pasture.
a ground beetle	<i>Bembidion clarki</i>	N/b	Last recorded 1939.
a ground beetle	<i>Pterostichus gracilis</i>	N/b	Frequent.
a ground beetle	<i>Oodes helopioides</i>	N/b	Common.
a ground beetle	<i>Odacantha melanura</i>	N/b	Frequent.
a ground beetle	<i>Demetrialis imperialis</i>	N/b	Scarce and localised.
a ground beetle	<i>Demetrialis monostigma</i>	N/b	Last recorded 1939.
a ground beetle	<i>Dromius longiceps</i>	N/a	Uncommon.
a water beetle	<i>Noterus crassicornis</i>	N/b	Common.
a water beetle	<i>Hydroglyphus pusillus</i>	N/b	Scarce.
a water beetle	<i>Scarodytes halensis</i>	N/b	Uncommon.
a water beetle	<i>Ilybius guttiger</i>	N/b	Uncommon.
a water beetle	<i>Rhantus frontalis</i>	N/b	Extinct ? last recorded in 1932.
a water beetle	<i>Helophorus dorsalis</i>	RDB 3	Extinct ? last recorded in 1939.
a beetle	<i>Cercyon tristis</i>	N/b	Local.
a water beetle	<i>Cercyon ustulatus</i>	N/b	Last recorded in 1939.
a water beetle	<i>Helochaeres lividus</i>	N/b	Local.
a water beetle	<i>Chaetarthria seminulum</i>	N/b	Uncommon.
Great-silver diving-beetle	<i>Hydrophilus piceus</i>	RDB 3	Recorded 1893 at Brundall Marsh and then in 1996 at Strumpshaw.
a water beetle	<i>Hydraena testacea</i>	N/b	Uncommon.
a rove beetle	<i>Oxytelus fulvipes.</i>	N/a	Uncommon ?
a rove beetle	<i>Stenus nigritulus</i>	N/b	Last recorded 1938.
a rove beetle	<i>Rugilus fragilis</i>	N/b	Uncommon.
a rove beetle	<i>Rugilus similis</i>	N	Uncommon.
a rove beetle	<i>Philonthus mannerheimi</i>	N/b	Rare, last recorded 1937.
a rove beetle	<i>Heterothrops dissimilis</i>	RDB K	Uncommon, last recorded 1967.
a rove beetle	<i>Mycetoporus longicornis</i>	N/b	Uncommon, last recorded 1967.
a rove beetle	<i>Sepedophilus testaceus</i>	N/b	Localised but frequent ? Last recorded 1967.
a rove beetle	<i>Cypha discoidea</i>	N/b	Uncommon.
a saltatory beetle	<i>Hydrocyphon deflexicollis</i>	N/b	Uncommon.
a water beetle	<i>Dryops anglicanus</i>	RDB 3	Rare.
a soldier beetle	<i>Silis ruficollis</i>	N/b	Frequent.
a net-winged	<i>Platycis minutus</i>	N/b	Rare ?

Blattaria (cockroaches)

1 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
a cockroach	<i>Ectobius sp.</i>	N/b	A single nymph in 1937, probably the tawny cockroach (<i>Ectobius pallidus</i>).

Dermaptera (earwigs)

2 species recorded.

Psocoptera (book, bark and dust lice)

9 species recorded.

Homoptera (bugs without membranous forewing tips).

101 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
a leaf hopper	<i>Stroggylocephalus livens</i>	N/b	First recorded in 1889, still frequent.
a leaf hopper	<i>Paralimnium phragmitis</i>	N/b	Infrequent ?
a leaf hopper	<i>Macrostelus fieberi</i>	N/b	Last recorded 1938.

Heteroptera (bugs with membranous forewing tips).

68 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
a ground bug	<i>Megalonotus praetextatus</i>	N/b	A single specimen, may never have been resident.
a capsid bug	<i>Adelphocoris seticornis</i>	N/a	Occurs in small localised colonies. Last recorded in 1960.
a capsid bug	<i>Adelphocoris tincinensis</i>	N/b	Last recorded in 1944.
a shore bug	<i>Saldula opacula</i>	N/b	Infrequent.
a water cricket	<i>Microvelia umbricola</i>	RDB 3	Probably extinct, last recorded in 1940.

Acariformes (ticks and mites)

23 species recorded.

Tardigrada (water bears)

1 species recorded.

Diplopoda (millipedes)

9 species recorded.

Chilopoda (centipedes)

6 species recorded.

Collembola (springtails)

2 species recorded.

Odonata (dragonflies)

21 species recorded. *Pyrhosoma nymphula* is probably extinct and *Aeshna juncea* is unlikely to have bred on the site.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
Variable damselfly	<i>Coenagrion pulchellum</i>	N/b	Common in some areas.
Hairy dragonfly	<i>Brachytron pratense</i>	N/b	More frequent north of the Yare.
Norfolk hawkler	<i>Aeshna isosceles</i>	RDB 1	Local, frequent in suitable dykes.
Scarce chaser	<i>Libellula fulva</i>	RDB 3	Not recorded south of the Yare, and restricted to the area around Buckenham Carr, first recorded in 1987.
Ruddy darter	<i>Sympetrum sanguineum</i>	N/b	Scarce.

Ephemoptera (mayflies)

3 species recorded.

Plecoptera (stoneflies)

3 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
a stonefly	<i>Nemoura dubitans</i>	N	Very localised but frequent where colonies located.

Orthoptera (grasshoppers and crickets)

11 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
a corophium	<i>Corophium multisetosum</i>	N/b	Uncommon.

Terrestrial Crustacea (woodlice)

15 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
Rough pygmy-woodlouse	<i>Trichoniscoides albidus</i>	N	? last recorded 1941.

Araneae (spiders)

170 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
Pale running-spider	<i>Philodromus albidus</i>	N/b	Local and rare.
Reed jumper	<i>Marpissa radiata</i>	N/a	Very rare.
Striped stretch-spider	<i>Tetragnatha striata</i>	N/b	Rare, not recorded since 1936.
Ray spider	<i>Theridiosoma gemmosum</i>	N/b	Frequent.
Omitted perfect-head	<i>Entelecara omissa</i>	N/a	Frequent.
Tawny knob-head	<i>Hypomma fulvum</i>	N/a	Frequent.
Pallid long-palp	<i>Donacochara speciosa</i>	N/a	Common.
Swamp carol-rita	<i>Carorita paludosa</i>	RDB 2	Local but frequent where encountered.
Carr maro	<i>Maro sublestus</i>	N/b	Scarce and local.
Sedge tongue-spider	<i>Centomerus incultus</i> (=semiater)	RDB 2	Rare.

Pseudoscorpiones

5 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
Dimple-clawed chthonid	<i>Cthonius tetrachelatus</i>	N	?

Opiliones (harvestmen)

14 species recorded.

Mollusca

100 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
Large-mouthed valve snail	<i>Valvata macrostoma</i>	RDB 2	Frequent.
Swollen spire snail	<i>Pseudamnicola confusa</i>	RDB 1	Last recorded at Strumpshaw in 1977, isolation of the fen from the river and the associated changes to the salinity, tides and water quality probably caused its local extinction. In the late 1990s was found to be widespread in suitable tidally inundated channels in Surlingham -- Rockland area.
Slender amber snail	<i>Oxyloma sarsi</i>	RDB 2	Common, south of R.Yare.
Desmoulin's whorl snail	<i>Vertigo moulinsiana</i>	RDB 3	Uncommon, associated with <i>Carex paniculata</i> ? Requires water levels at the soil surface and long vegetation.
Marsh slug	<i>Deroceras agreste</i>	N/b	Uncommon.
Little whirlpool ram's horn snail	<i>Anisus vorticulus</i>	RDB 2	Extinct, last recorded 1939.
Shining ram's horn snail	<i>Segmentina nitida</i>	RDB 1	Endangered.
Depressed river mussel	<i>Pseudanodonta complanata</i>	N/b	Two known colonies.
Iridescent pea mussel	<i>Pisidium pulchellum</i>	N/b	Extinct? last recorded in 1940.

Bryozoa (moss animals)

9 species recorded.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
Crystalline moss animal	<i>Lophopus crystallinus</i>	RDB 3	Extinct, once abundant, but last record was in 1943.

Aquatic Crustacea

44 species recorded.

A tortricid	<i>Epiblema turbidana</i>	N/b	Occasional ?
A tortricid	<i>Olethruetes olivana</i>	N/b	Occasional ?
A micro-moth	<i>Phalonidia manniana</i>	N/b	?
Gigantic water veneer	<i>Schoenobius gigantella</i>	N/b	Frequent.
Orange rayed pearl	<i>Nascia ciliaris</i>	N/a	Common.
A pyralid	<i>Oncocera formosa</i>	N/b	Uncommon ?
Large clouded knot-horn	<i>Homoeosoma nebulella</i>	N/b	Uncommon ?
Sundew plume moth	<i>Buckleria paludum</i>	RDB 3	Accidental and unsuccessful introduction in 1966.
Small eggar	<i>Eriogaster lanestris</i>	N/b	Local and rare.
Small grass emerald	<i>Chlorissa viridata</i>	N/a	Possibly extinct, last recorded 1976.
Purple-bordered gold	<i>Idea muricata</i>	N/a	Uncommon, last record 1986.
Balsam carpet	<i>Xanthorhoe biriviata</i>	N/a	Common, recent addition to fauna.
Marsh carpet	<i>Perizoma sagittata</i>	N/a	Uncommon.
Valerian pug	<i>Eupithecia valerianata</i>	N/b	Frequent.
Dentated pug	<i>Anticollix sparsata</i>	N/a	Common.
Alder kitten	<i>Furcula bicuspis</i>	N/b	Rare.
Scarce vapourer	<i>Orygia recens</i>	RDB 3	Uncommon.
Dotted footman	<i>Pelosia muscerda</i>	RDB 3	Extinct, last record 1899.
Water ermine	<i>Spilosoma urticae</i>	N/b	Rare or extinct ?
Square-spotted clay	<i>Xestia rhomboidea</i>	N/b	Uncommon.
Silvery arches	<i>Polia hepatica</i>	N/b	Rare.
White speck	<i>Mythimna unipuncta</i>	Migrant	Single larval record.
Flame wainscot	<i>Senta flammea</i>	N/a	Common.
Sword grass	<i>Xylena exsoleta</i>	N/b	Extinct, last recorded 1938.
Reed dagger	<i>Simyra albovenosa</i>	N/b	Frequent.
Fenn's wainscot	<i>Photodes brevilinea</i>	RDB 3	Rare.
Webb's wainscot	<i>Archanara sparganii</i>	N/b	Uncommon.
Rush wainscot	<i>Archanara algae</i>	RDB 3	Rare, record requires confirmation.
Silky wainscot	<i>Chilcodes maritimus</i>	N/b	Abundant in most years.
Cream-bordered green pea	<i>Earias clorana</i>	N/b	Common.
Buttoned snout	<i>Hypena rostralis</i>	N/b	Extinct ? last recorded in 1938.
Common fan-foot	<i>Pechipogo strigilata</i>	N/a	Extinct, last recorded in 1938.
Dotted fan-foot	<i>Macrochilo cribrumalis</i>	N/b	Abundant.

INTERNATIONAL IMPORTANCE

In addition to the above rarity lists, the following species (two of which are extinct) are of international importance.

<i>Ashfordia granulata</i> (Ashford's hairy snail)	Near endemic
<i>Vertigo moulinsiana</i> (Desmoulins' whorl-snail)	EC Habitats Directive
<i>Oxyloma sarsi</i> (Slender amber snail)	Internationally vulnerable
<i>Segmentina nitida</i> (Shining ram's horn snail)	EC Habitats Directive
<i>Pseudanodonta complanata</i> (Depressed river-mussel)	IUCN Red List
	Bern Convention
<i>Lophopus crystallinus</i> (Crystalline moss animal)	Mentioned in the IUCN RDB (Extinct in Mid Yare?)
<i>Polydesmus coriaceus</i> (Gallic flat-back millipede)	Near endemic
<i>Vanoyia tenuicornis</i> (Long-horned soldier)	Internationally Threatened
<i>Scathophaga tinctinervis</i> (a dung fly)	Otherwise only known from a handful of sites in Scotland and Finland
<i>Papilio machaon</i> (Swallowtail butterfly)	Endemic ssp.
<i>Senta flammea</i> (Flame wainscot)	Internationally Threatened
<i>Photedes brevilinea</i> (Fenn's wainscot)	Internationally Threatened

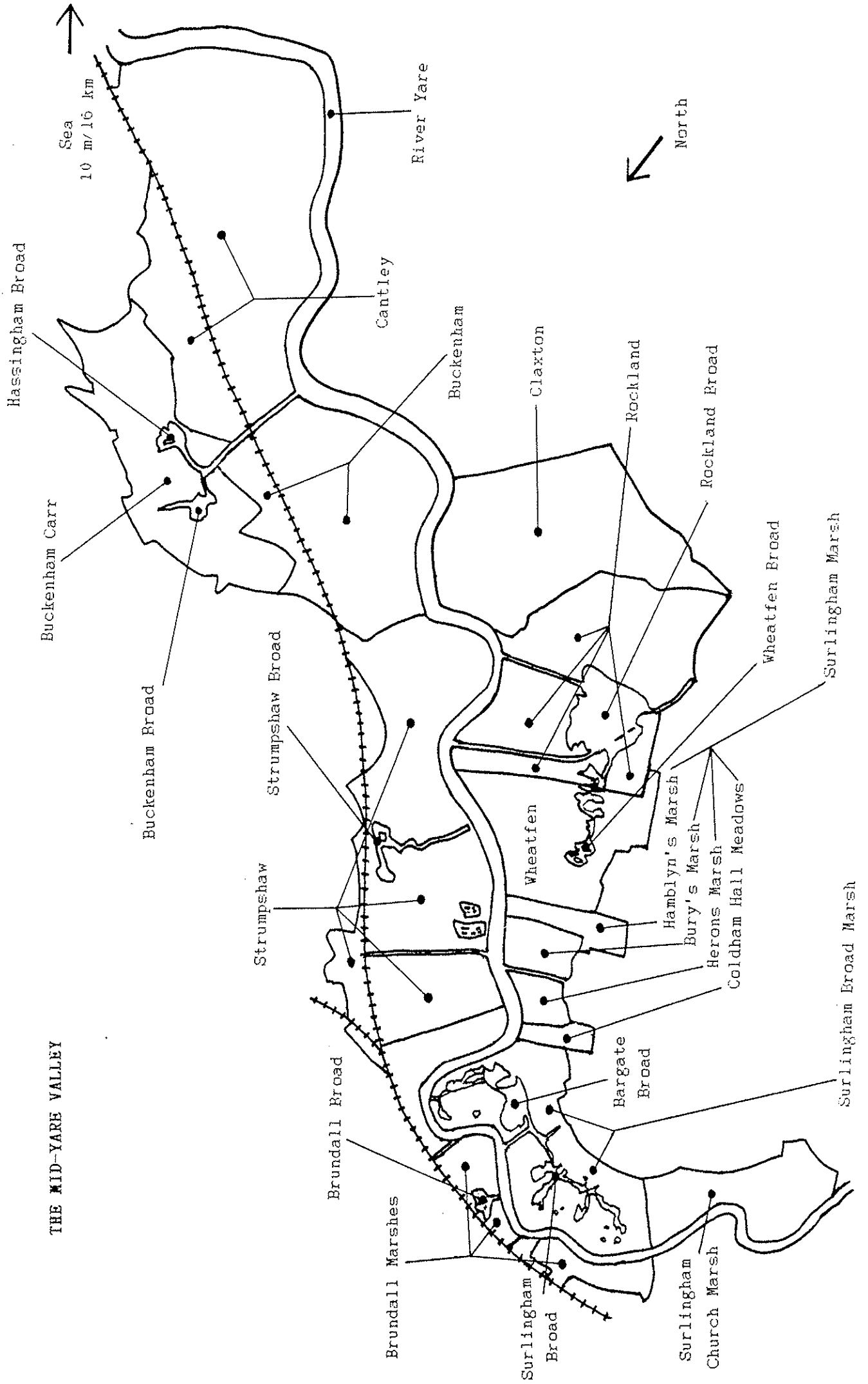
Biodiversity Action Plan Invertebrates

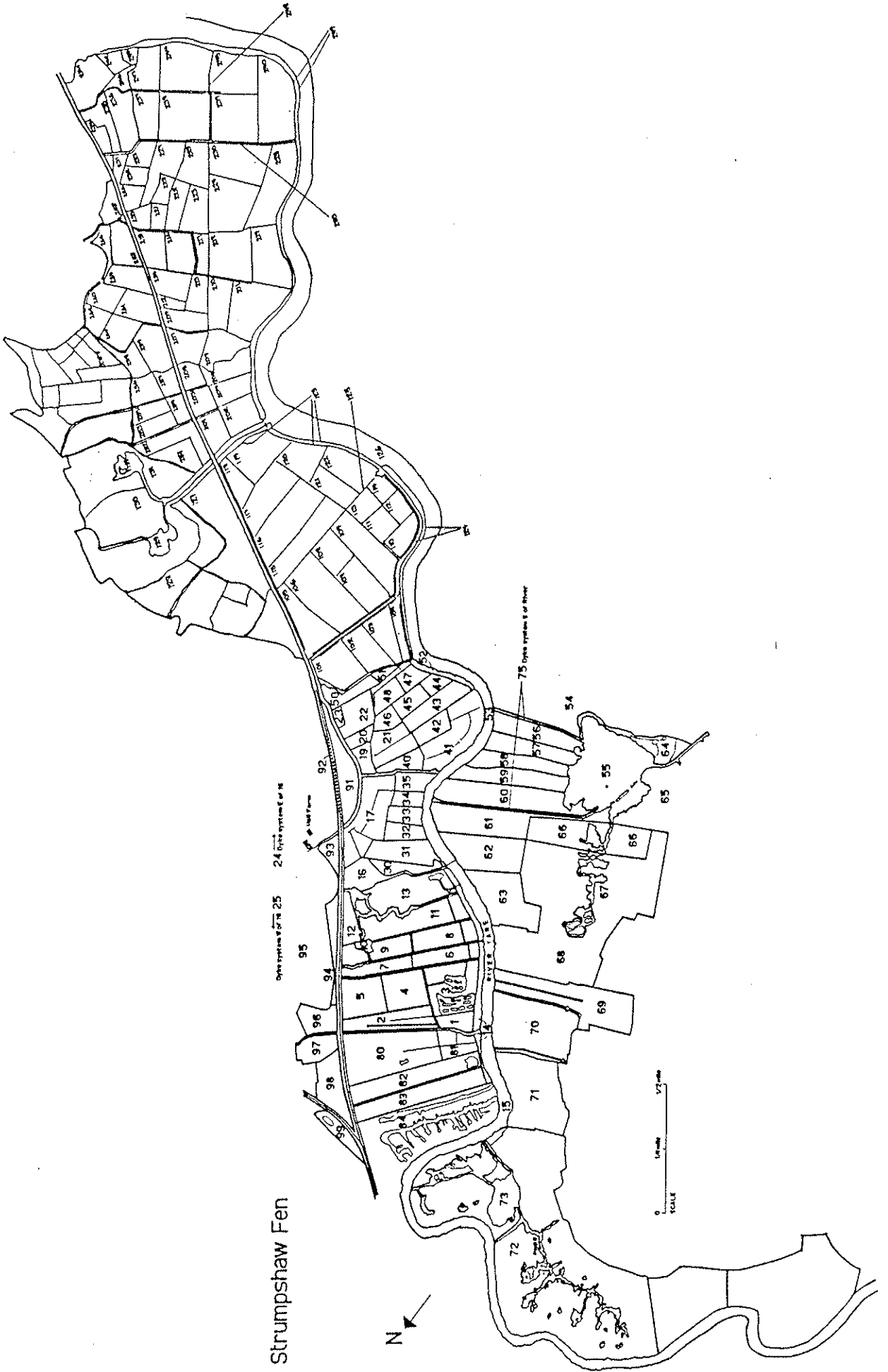
The species below are included in "Biodiversity: The UK Steering Group Report" (1995) HMSO, London and subsequent documents. Those with Species Action Plans are printed in bold.

SPECIES NAME	SCIENTIFIC NAME	NATIONAL STATUS	MID-YARE STATUS
Large garden bumblebee	<i>Bombus ruderatus</i>	N/b	Extinct. last recorded in 1943.
Shrill carder bumblebee	<i>Bombus sylvarum</i>	N/b	Extinct. last recorded in 1957.
Hill cuckoo bee	<i>Psithyrus rupestris</i>	N/b	Extinct. last recorded in 1937.
Great-silver diving-beetle	<i>Hydrophilus piceus</i>	RDB 3	Recorded 1893 at Brundall Marsh and then in 1996 at Strumpshaw.
Silver-washed fritillary	<i>Argynnis paphia</i>	Local	Extinct. Last record 1949
Marsh fritillary	<i>Eurodryas aurinia</i>	N/b	Failed introduction 1986.
Swallowtail	<i>Papilio machaon</i>	RDB 2	Frequent.
Silver-studded blue	<i>Plebejus argus</i>	N/b	Extinct 1928.
Large copper	<i>Lycaena dispar</i>	Extinct	Failed introduction 1949.
Norfolk hawker	<i>Aeshna isosceles</i>	RDB 1	Local, frequent in suitable dykes.
Scarce chaser	<i>Libellula fulva</i>	RDB 3	Not recorded south of the Yare, first recorded in 1987.
a hoverfly	<i>Lejops vittata</i>	RDB 2	Extinct? 1938 record may have been of a vagrant.
Silver colonel	<i>Odontomyia argentata</i>	RDB 2	Last recorded in 1939 then rediscovered in 2000
Gallic flat-back millipede	<i>Polydesmus coriaceus</i>	Local	Frequent ? Not recorded since 1958.
Little whirlpool ram's horn snail	<i>Anisus vorticulus</i>	RDB 2	Extinct, last recorded 1939.
Ashford's hairy snail	<i>Ashfordia granulata</i>	Local	Frequent
Slender amber snail	<i>Oxyloma sarsi</i>	RDB 2	Common, south of R.Yare.
Swollen spire snail	<i>Pseudamnicola confusa</i>	RDB 1	Last recorded at Strumpshaw in 1977, isolation of the fen from the river and the associated

			changes to the salinity, tides and water quality probably caused its local extinction. In the late 1990s was found to be widespread in suitable tidally inundated channels in Surlingham – Rockland area.
Depressed river mussel	<i>Pseudanodonta complanata</i>	N/b	Two known colonies.
Shining ram's horn snail	<i>Segmentina nitida</i>	RDB 1	Endangered.
Large-mouthed valve snail	<i>Valvata macrostoma</i>	RDB 2	Frequent.
Desmoulin's whorl snail	<i>Vertigo moulinsiana</i>	RDB 3	Uncommon, associated with <i>Carex paniculata</i> ?
Forester	<i>Adscita staites</i>	N/b	Extinct 1944.
Rush wainscot	<i>Archanara algae</i>	RDB 3	Rare, record requires confirmation.
Festoon	<i>Apoda limacodes</i>	N/b	Rare.
Goat moth	<i>Cossus cossus</i>	N/b	Occasional and local.
Buttoned snout	<i>Hypena rostralis</i>	N/b	Extinct ? last recorded in 1938.
Scarce vapourer	<i>Orygia recens</i>	RDB 3	Uncommon.
Common fan-foot	<i>Pechipogo strigilata</i>	N/a	Extinct, last recorded in 1938.
Dotted footman	<i>Pelosia muscerda</i>	RDB 3	Extinct, last record 1899.
Marsh carpet	<i>Perizoma sagittata</i>	N/a	Uncommon.
Fenn's wainscot	<i>Photedes brevilinea</i>	RDB 3	Rare.
Water ermine	<i>Spilosoma urticae</i>	N/b	Rare or extinct ?
Square-spotted clay	<i>Xestia rhomboidea</i>	N/b	Uncommon.
Sword grass	<i>Xylena exsoleta</i>	N/b	Extinct, last recorded 1938.
Chrystalline moss animal	<i>Lophopus crystallinus</i>	RDB 3	Extinct, once abundant but last record was in 1943.
a digger wasp	<i>Crossoceras vagabundus</i>	RDB 1	Extinct. Last recorded 1936.

THE MID-YARE VALLEY





Strumpshaw Fen

Collectors, recorders and determiners.

A.B.D. = A.B. Drane
A.C.W. = A.C. Warne
A.E.E. = Arthur Ellis
A.E.M. = A.E. Mahood
A.E.S. = A.E. Stubbs
A.G.B.R. = ?
A.G.I. = Dr. Tony Irwin
A.H.N. = Dr. A. Newton
A.H.T. = A.H. Turner
A.J.W. = A.J. Whitehouse
A.M. = A. Mayfield
A.M.E. = A.M. Emmet
A.M.M. = A.M. Masee
A.N.B. = A. Norman Braugham
A.P.F. = Andy Foster
A.R.B. = Tony Baker
A.R.J. = Dr. A.R. Jackson
A.R.R.S. = A.R. Russell-Smith
A.W. = A.J. White
A.Y. = A. Yaxley
B.D. = Bassett Digby
B.M.N.H. = British Museum (Natural History)
B.P. = B. Peterek
B.P.U. = Dr. B.P. Uvarov
B.R.L. = Dr. B.R. Laurence
B.W. = Dr. Bernard Watts
C.F.M. = C.F. Mason
C.H. = Colin Hart
C.J. = C. Johnson
C.M. = Claude Morley
C.M.D. = Dr. Martin Drake
C.M.D. et al. = C.M.D., K.P., A.E.S., E.K.G. + R.C.
C.N.M. = C.N. Moorhouse
C.P. = C. Paul
C.R. = Chris Regan
C.W.P. = C.W. Plant
D.A.P. = Deborah Procter
D.A.S. = Dr. D.A. Sheppard
D.A.S. et al. = D.A.S., S.G.B. + B.P.
D.H. = Derek Howlett
D.I.R. = D.I. Richmond
D.J.P.M. = Dave Miller
D.L. = Dave Lester
D.M.R. = D.M. Reid
D.N.S. = D.N. Smith
D.R. = Dave Rees
D.T.H. = D.T. Holyoak
E.A.E. = Dr. Ted Ellis
E.C.B. = E.C. Bedwell
E.D. = Dr. Eric Duffey
E.K.G. = Dr. E.K. Goldie-Smith

E.M.E.M. = Mrs. Gordon MacDonnell
E.N.B. = Rev. E.N. Bloomfield
E.S.B. = E.S. Brown
E.T.D. = Ernest Daniels
E.W.A. = E.W. Aubrook
F.D.B. = F.D. Buck
G.C. = Dr. Geoff Cleveland
G.E.D. = Dr. G.E. Deacon
G.M.C. = Garth Coupland
G.M.H. = Gerry Haggett
G.M.T. = ?
G.N.F. = G.N. Foster
G.R. = Gareth Rondel
G.W.M. = G.W. Maybury
G.W.T. = ?
H.C. = ?
H.D.J. = H.D. Jones
H.E.H. = H.E. Hurrell
H.E.J.B. = H.E.J. Biggs
H.F. = ?
H.R.P.C. = H.R.P. Collett
H.W. = Hugh Watson
I.J.K. = Dr. I.J. Killeen
I.P. = Ivan Perry
J.A. = ?
J.A.R. = J.A. Riley
J.B. = John Bratton
J.B.B. = J.B. Bridgman
J.C. = Joe Cullum
J.C.F.F. = J.C.F. Fryer
J.E. = J. Edwards
J.E.G. = J.E. Gaffney
J.G. = J. Gray
J.G.G. = John Goldsmith
J.L.M. = J.L. Moore
J.M. = Julie Mayer
J.V. = J. Valentine
J.V.G. = J.V. Gane
J.W.I. = J.W. Ismay
J.W.S. = J.W. Saunt
J.W.W. = J.W. Ward
K.C.D. = Ken Durrant
K.G.B. = K.G. Blair
K.G.S. = Ken Saul
K.H. = Kieron Huston
K.P. = Dr. K. Porter
K.L. = K. Lord
L.E. = Lillian Evans
M.A. = Malcolm Ausden
M.B. = Mike Blackburn
M.B.S. = Matt Shears
M.C. = Martin Collier
M.E.A.S. = Matthew Shardlow

M.E.L.N. = ?
M.G. = Martin George
M.I.W. = M.I. Walker
M.J. = Mark Johnson
M.J.D.C. = Captain M. Cockle
M.J.M. = M.J. Morgan
M.K.D. = M.K. Dithogo
M.N.P. = M.N. Pugh
M.P. = M. Porter
M.P.K. = Dr. M.P. Kerney
M.T. = Mark Telfer
N.C.M. = N.C. Morgan
N.D.R. = N.D. Riley
N.M. = N. Moorhouse
N.M.M. = Norfolk Moth Meeting
P.D.O. = P.D. Orton
P.D.W. = P.D. Willis
P.H. = P. Heath
P.J.C. = P.J. Chandler
P.J.M. = P.J. Milford
P.K. = Dr. P. Kirby
P.S. = P. Sharpe
P.W. = Paul Waring
R.A.C. = R.A. Crowson
R.A.W. = R.A. Watson
R.B. = Dr. Roy Baker
R.C. = R. Crossley
R.C.D. = R.C. Dyson
R.C.P. = R.C. Plowright
R.D. = R. Duffey
R.E. = Reg Evans
R.E.J. = R.E. Jones
R.G. = R. Gurney
R.G.P. = R.G. Pointer
R.H. = Robert Harvey
R.H.B. = R.H. Britton
R.J.B. = R.J. Bryant
R.J.D. = Rob Driscoll
R.K. = Roger Kendrick
R.L. = R. Land
R.L.C. = R.L. Coe
R.M. = R. Malloy
R.S. = Russell Sewell
R.S.G. = Dr. R.S. George
R.S.M. = Royal Scottish Museum
R.S.M.B. = Roul Brown
S.B. = S. Barnett
S.G.B. = Dr. Stuart Ball
S.G.B. et al = S.G.B., D.A.S. + B.P.
S.J.F. = S.J. Falk
S.P. = S. Plant
S.R.W. = S.R. Ward
S.S.P. = S.S. Pearce

T.N.D.P. = Dr. Tim Peet
W.H.T. = W.H. Thorpe
W.J.O.H. = W.J.O. Holmes
W.M.W. = W.M. Webb
W.R. = W. Russell

Numbered References in the Inventory.

- 1 Wheatfen card file kept by Capt. M. Cockle and later Ted Ellis. Now deposited in the Castle Museum, Norwich.
- 2 Ellis, E. A., 1935. Wheatfen broad, Surlingham. Trans. Norfolk Norwich Nat. Soc. 13(5), 422-451.
- 3 Various lists and notes made by Ted Ellis, now kept in files, note books and annotated books kept at the Castle Museum, Norwich.
- 4 Durrant, K. C., 1985. Norfolk Lacewings (Neuroptera, Planipennia). Trans. Norfolk Norwich Nat. Soc. 27(1), 73-76.
- 5 Driscoll, R. J., 1976. Distribution maps of aquatic vertebrates and invertebrates recorded in drainage dykes in Broadland 1972-74. Unpublished NCC report.
- 6 Willis, P. D., 1980. A macro-invertebrate survey of some drainage dykes at Strumpshaw Fen, with particular reference to discovering the effect of dyke management on macro-invertebrate diversity and density. Unpublished 3rd year dissertation, ENV, UEA, Norwich.
- 7 Dithogo, M. K., 1988. The effects of management by burning on the invertebrates of reed beds. Unpublished 3rd year dissertation, BIO, UEA, Norwich.
- 8 Biggs, H. E. J., 1951. Diptera of East Anglia -some additions. Entomologist's Monthly Magazine 87 237-238.
- 9 Withers, P., 1987. *Telmatoscopus ellisi*, a further new species of moth fly (Diptera, Psychodidae) from Norfolk. Trans. Norfolk Norwich Nat. Soc. 27(5), 381-383.
- 10 Ismay, J. W., 1976. A note on *Compromyza pedestris* MG. (Diptera, Sphaeroceridae. Trans. Norfolk Norwich Nat. Soc. 23(5), 271.
- 11 Edwards, J., 1889. Hemiptera. Trans. Norfolk Norwich Nat. Soc. 4(5), 702-711.
- 12 Whitehouse, A. J., 1991. Strumpshaw Fen moth report. Unpublished reserve report.
- 13 Records kept by the Norfolk Moth Survey of their field meetings.
- 14 RSPB, reserve records, kept on site.
- 15 Pointer, R. G. and Miller, D. J. P., 1986. Strumpshaw Fen moth report. Unpublished reserve report.
- 16 Bloomfield, E. N., 1903. Norfolk Diptera. Trans. Norfolk Norwich Nat. Soc. 7(4), 541-551.

- 17 Morley, C. and Atmore, E. A., 1915. The Diptera of Norfolk and Suffolk. Trans. Norfolk Norwich Nat. Soc. 10 (Supplement).
- 18 English Nature site files, 60 Bracondale, Norwich.
- 19 Driscoll, R. J., 1994. Changes in the aquatic Molluscan fauna of Wheatfen Broad, Norfolk. Journal of Conchology. In press.
- 20 Howlett, D., 1992. Checklist of the land Mollusca of the Rockland Broad area, Rockland St. Mary, Norfolk. Checklist of the freshwater Mollusca Rockland Broad, Rockland St. Mary, Norfolk. Checklist of the freshwater Mollusca of Church Marsh RSPB reserve, Surlingham, Norfolk. Checklist of the land Mollusca of Church Marsh RSPB reserve, Surlingham, Norfolk. The land and freshwater Mollusca of Rockland Broad and the surrounding area. Unpublished reports in RSPB reserve records.
- 21 Mayfield, A., 1909. The non-marine Mollusca of Norfolk. Trans. Norfolk Norwich Nat. Soc. 8(5), 783-808.
- 22 Ellis, E. A., 1951. The introduction of the large copper butterfly (*Lycaena dispar batavus*) at Wheatfen Broad, Norfolk. Trans. Norfolk Norwich Nat. Soc. 17(2), 84-89.
- 23 Irwin, A. G., 1990. *Trocheta bykowskii* a leach new to East Anglia. Trans. Norfolk Norwich Nat. Soc. 28(5), 355.
- 24 Ellis, A. E., 1942. The natural history of Wheatfen Broad, Surlingham. Part 4. Trans. Norfolk Norwich Nat. Soc. 15(3), 291-300.
- 25 Edwards, J., 1914. Fauna and flora of Norfolk, Coleoptera, 5th list. Trans. Norfolk Norwich Nat. Soc. 9(5), 804-811.
- 26 Edwards, J., 1893. Fauna and flora of Norfolk, Coleoptera. Trans. Norfolk Norwich Nat. Soc. 5(4), 427-508.
- 27 Surlingham and Rockland RSPB annual reserve reports.
- 28 Ellis, E. A., 1951. Fauna and flora of Norfolk. Trans. Norfolk Norwich Nat. Soc. 17(2), 136-143.
- 29 Ellis, E. A., 1944. Fauna and flora of Norfolk. Trans. Norfolk Norwich Nat. Soc. 15(5), 423-440.
- 30 Bloomfield, E. N., 1902. Miscellaneous notes and observations. Trans. Norfolk Norwich Nat. Soc. 7 423-428.
- 31 Bloomfield, E. N., 1909. Phytophagous Hymenoptera, Fauna and flora of Norfolk part 12. Trans. Norfolk Norwich Nat. Soc. 8(5), 810-820.

- 32 Bridgman, J. B., 1888. Phytophagous Hymenoptera, Fauna and flora of Norfolk part 12. Trans. Norfolk Norwich Nat. Soc. 4(4), 523-536.
- 33 Morley, C. 1913. Ichneumons, Fauna and flora of Norfolk part 13. Trans. Norfolk Norwich Nat. Soc. 9(4), 558-603.
- 34 Bridgman, J. B., 1894. Ichneumons, Fauna and flora of Norfolk part 13. Trans. Norfolk Norwich Nat. Soc. 5(5), 603-632.
- 35 Plowright, R. C., 1967. List of bumble bees recorded in Norfolk since 1939. Trans. Norfolk Norwich Nat. Soc. 21(1), 48-88.
- 36 Driscoll, R. J., 1982. The aquatic vertebrate and invertebrate fauna and aquatic flora of the lower reaches of the Rivers Bure and Yare, Braydon water, and Strumpshaw, Surlingham, Rockland and Wheatfen Broads. Unpublished report, English Nature, 60 Bracondale, Norwich.
- 37 Mason, C. F. and Bryant, R. J., 1975. Changes in the ecology of the Norfolk Broads. Freshwater Biology 5 257-270.
- 38 Mayfield, A., 1896. The Mollusca of Norfolk. Trans. Norfolk Norwich Nat. Soc. 6(2), 185-189.
- 39 Ellis, A. E., 1941. The Mollusca of a Norfolk Broad. Journal of Conchology 21(8) 224-243.
- 40 Morgan, N. C. and Britton, R. H., 1969. Reserve review. Interim report. English Nature, 60 Bracondale, Norwich.
- 41 Hurrell, H. E., 1911. Distribution of the polyzoa in Norfolk waters. Trans. Norfolk Norwich Nat. Soc. 9(2) 197-205.
- 42 Hurrell, H. E., 1943. Pond life. Trans. Norfolk Norwich Nat. Soc. 15(4) 319-331.
- 43 Gurney, R., 1904. The fresh and brackish water crustacea of East Norfolk. Trans. Norfolk Norwich Nat. Soc. 7(5), 637-660.
- 44 Norfolk and Suffolk Wildlife, 1933-38. A series of articles in the Evening News, edited by E.A. Ellis.
- 45 Ellis, E. A., 1945. Fauna and flora of Norfolk, miscellaneous observations. Trans. Norfolk Norwich Nat. Soc. 16(1) 75-91.
- 46 Field notes of E.T. Daniels, copies at English Nature, 60 Bracondale, Norwich.
- 47 Records kept by the Ted Ellis Trust at Wheatfen.
- 48 Ellis, E. A., 1948. Fauna and flora of Norfolk. Trans. Norfolk Norwich Nat. Soc. 16(4) 328-333.

- 49 Ellis, E. A., 1949. Fauna and flora of Norfolk, miscellaneous observations. Trans. Norfolk Norwich Nat. Soc. 16(5) 336-390.
- 50 Records kept by John Bratton.
- 51 Foster, A. P. and Procter, D. A., East Anglian Fen Invertebrate Survey. NCC commissioned research project. In preparation.
- 52 Strumpshaw Fen annual RSPB reserve reports.
- 53 Records kept by the Rockland and St. Mary District Naturalists Group.
- 54 Records kept by Dr. Roy Baker.
- 55 Records kept by Reg Evans.
- 56 Peet, T. N. D., 1975. Notes on the moths of Hickling and Wheatfen Broads, with a systematic list of the species. Trans. Norfolk Norwich Nat. Soc. 23(3), 156-166.
- 57 Records held by the Biological Records Centre, Monks Wood, Huntingdon.
- 58 Records held by the Norfolk Moth Survey.
- 59 Lord, K. 1983. Strumpshaw moths. Unpublished report in RSPB reserve files.
- 60 Anon., 1993. Report of Wheatfen visit. British Butterfly Conservation Society, Norfolk Branch Newsletter 40.
- 61 Records from the 1993 Dipterists' summer field meeting. Held by the JNCC, Monkstone House, Peterborough.
- 62 Records held on the Invertebrate Site Register database. JNCC, Monkstone House, Peterborough.
- 63 Records kept by Phil Withers.
- 64 Ellis, E. A., 1965. The Broads. Collins, New Naturalist.
- 65 Records kept by Ken Durrant.
- 66 Records held by the Spider Recording Scheme.
- 67 Collett, H. R. P., 1932. Some Norfolk Coleoptera. Entomologist's Monthly Magazine 68(June).
- 68 Hipperson, D., 1991. Immigrant moths in Norfolk during 1990. Trans. Norfolk Norwich Nat. Soc. 29(1).
- 69 Cleveland, G. P., 1988. Studies of Digenean parasites of the East Anglian wetlands. Unpublished PhD thesis, BIO, UEA, Norwich.

- 70 Irwin, A. G., 1991. Uncommon earwigs in Norfolk and Suffolk.
Trans. Norfolk Norwich Nat. Soc. 29(1), 76-77.
- 71 Records kept by Dr. Eric Duffey.
- 71 Cadbury, C. J., 1990. Macrolepidoptera on RSPB reserves.
Unpublished report, RSPB, Sandy, Bedfordshire.
- 73 Records held on the copy of the Recorder database kept at the
Castle Museum, Norwich.
- 74 Records kept by Martin Collier.
- 75 Records kept by R.W. Martin.
- 76 Records kept by Dr. Garth Foster.
- 77 Records kept by P. Twinn.
- 78 Records kept by Paul Waring.
- 79 1936. Miscellaneous notes. Trans. Norfolk Norwich Nat. Soc. 14(1),
106-108.
- 80 Records kept by Rex Hancy.
- 81 Records kept by Dr.G. Legg.

KINGDOM ANIMALIA

PHYLUM PORIFERA (Sponges).

Family SPONGILLIDAE

Spongilla lacustris Local

Rockland M. E. A. S. + R. J. D. 1987

A single specimen of this large, branched sponge was collected by D. Howlett in the Short Dyke. It appears to be rare in the Broads, the only other known record is from the river Yare at Trowse in 1933 (E. A. E. (44)).

Ephydatia fluviatilis Local

Wheatfen E. A. E. 1938 (1)

E. A. E. 1943 (1)

A freshwater sponge.

PHYLUM CNIDARIA (Jellyfish and allies).

SUB-PHYLUM MEDUSOZOA

Class Hydrozoa

Hydra oligactis (Brown hydra)
Wheatfen R. B. 1994 (54)

Hydra sp. (Brown hydra)
Wheatfen M. J. D. C. pre. 1946 (1)

PHYLUM PLATYHELMINTHES (Flatworms).

Class Turbellaria

Order Rhabdocoela

<i>Mesostoma ehrenbergii</i>					
	Buckenham	R. J. D.	1974	(5)	
	Cantley	R. J. D.	1974	(5)	
<i>Mesostoma tetragonum</i>					
	Wheatfen	E. A. E.	1934	(2)	

Order Seriata

Family DUGESIIDAE

<i>Dugesia polychroa</i>					Common
	Buckenham	R. J. D.	1974	(5)	
	Cantley	R. J. D.	1974	(5)	
<i>Dugesia lugubris</i>					Unknown
	Buckenham	R. J. D.	1974	(5)	
	Strumpshaw	P. D. W.	1979	(6)	
	Wheatfen	R. B.	1994	(54)	
<i>Dugesia tigrina</i>					Naturalised
	Rockland Broad	R. J. D.	1977	(36)	
	Strumpshaw	M. J.	1987	(14)	
	An introduction from North America.				

Family PLANARIIDAE

<i>Planaria torva</i>					Naturalised
	Buckenham	R. J. D.	1974	(5)	
	Cantley	R. J. D.	1974	(5)	
	An introduction from Scandinavia.				
<i>Phagocata vitta</i>					Local
	Wheatfen	E. A. E.	1938	(1)	

<i>Polycelis nigra</i>					Common
	Buckenham	R. J. D.	1974	(5)	
	Cantley	R. J. D.	1974	(5)	
	Strumpshaw	P. D. W.	1974	(6)	

<i>Polycelis tenuis</i>					Common
	Buckenham	R. J. D.	1974	(5)	
	Cantley	R. J. D.	1974	(5)	
	Wheatfen	R. J. D.	1977	(36)	
		R. B.	1994	(54)	

Family DENDROCOELIDAE

<i>Dendrocoelum lacteum</i>					Common
	Buckenham	R. J. D.	1974	(5)	
	Strumpshaw	P. D. W.	1979	(6)	

Family RHYNCHODEMIDAE

<i>Microplana terrestris</i>					Local
	Wheatfen	H. D. J.	1994		

Britains commonest terrestrial flatworm.

Class Trematoda (Flukes).

Sub-class Digenea

Several species of digenean parasites were collected from aquatic snails at Strumpshaw by G. Cleveland in 1986. None have specific names yet. In addition to those listed below, tetracotyle cysts were found in the following snails *Bithynia tentaculata*, *Lymnaea peregra* and *Lymnaea stagnalis*; psilostome cysts in *Bithynia tentaculata* and *Planorbis carinatus*; and an unknown metacercarial cyst in *Bithynia tentaculata*.

<i>Cercaria IX</i>					
	Strumpshaw	G. C.	1986	(69)	

First british record. Primary host *Bithynia tentaculata* (Mollusca), secondary host unknown.

Cercaria X
Strumpshaw G.C. 1986 (69)
First british record. Primary host *Bithynia tentaculata* (Mollusca), secondary host caddis flies (Trichoptera).

Cercaria XI
Strumpshaw G.C. 1986 (69)
Primary host *Bithynia tentaculata* (Mollusca), secondary host *Bithynia tentaculata* (Mollusca).

Order Malacocotylea

Distomum macrostomum
Wheatfen M.J.D.C. 1939 (1)
E.A.E. 1947 (48)
A parasite of *Succinea putris* which then passes on to an avian host if the snail or its swollen cyst-filled tentacles are consumed.

PHYLUM ROTIFERA

Order Monogononata

Family BRACHIONIDAE

Colurella compressa
Wheatfen E.A.E. 1943 (1)

PHYLUM NEMATODA

Despite being universally abundant in the valley there are no species of nematode recorded.

PHYLUM NEMATOMORPHA

Order Gordioida (Gordian worms).

Gordius aquaticus has been recorded from the Broads but not specifically from the Mid-Yare (Ellis (18)).

PHYLUM ANNELIDA (Segmented worms).

Class Clitellata

Sub-class Oligochaeta (Earthworms and allies).

Order Haplotaxida

Family NAIDIDAE

Rockland Broad	R.J.D.	1977	(36)
Strumpshaw	M.J.	1987	(14)
Strump. Broad	R.J.D.	1977	(36)
Surl. Broad	R.J.D.	1977	(36)
Wheatfen Broad	R.J.D.	1977	(36)

Nais elinguis

Surl. Broad	C.F.M.+R.J.B.	1973	(37)
-------------	---------------	------	------

A benthic species.

Nais variabilis

Rockland Broad	R.A.W.	1978	(75)
----------------	--------	------	------

Stylaria lacustris

Rockland Broad	C.F.M.+R.J.B.	1973	(37)
----------------	---------------	------	------

A benthic species.

Family TUBIFICIDAE

Surl. Broad	R.J.D.	1977	(36)
-------------	--------	------	------

Potamothrix bavaricus

Rockland Broad	R.A.W.	1978	(75)
----------------	--------	------	------

Potamothrix hammoniensis

Buck. Broad	M.Ladle	1973	(37)
Rockland Broad	M.Ladle	1973	(37)
Surl. Broad	M.Ladle	1973	(37)

A benthic species.

Potamothrix heuscheri

Rockland Broad	R.A.W.	1978	(75)
----------------	--------	------	------

A rare species.

<i>Limnodrilus hoifmeisteri</i>				
	Buck. Broad	M. Ladle	1973	(37)
	Rockland Broad	M. Ladle	1973	(37)
	Surl. Broad	M. Ladle	1973	(37)

A benthic species.

<i>Limnodrilus udekemianus</i>				
	Rockland Broad	R. A. W.	1978	(75)

Family LUMBRICIDAE (Square-tailed worms).

Nomenclature and taxonomy follows Sims and Gerard (1985).

<i>Allolobophora chlorotica</i>				
	Buckenham	M. A.	1993	
	Strumpshaw	M. A.	1994	
<i>Aporrectodea caliginosa</i>				
	Buckenham	M. A.	1993	
<i>Aporrectodea longa</i>				
	Buckenham	M. A.	1993	
<i>Aporrectodea rosea</i>				
	Buckenham	M. A.	1993	
<i>Eiseniella tetraedra</i>				
	Strumpshaw	M. A.	1992	
		M. A.	1994	
	Wheatien	E. A. E.	1934	(2)
A semi-aquatic earthworm.				
<i>Lumbricus castaneus</i>				
	Buckenham	M. A.	1993	
<i>Lumbricus rubellus</i>				
	Buckenham	M. A.	1993	
	Strumpshaw	M. A.	1994	

Sub-class Hirudinoida (Leeches).

Order Rhynchobdella (Leeches with a proboscis).

Family RHYNCHOBDELLAE

<i>Piscicola geometra</i> (Fish leech).				Common
Strumpshaw	M. J.	1987	(14)	

Family GLOSSIPHONIIDAE

<i>Theromyzon tessulatum</i>				Common
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Strumpshaw	P. D. W.	1979	(6)	
	M. J.	1987	(14)	
Wheatfen	M. J. D. C.	1933	(1)	
	E. A. E.	1950	(28)	

Fish parasite.

<i>Hemiclepsis marginata</i>				Local
Buckenham	R. J. D.	1974	(5)	

Fish parasite.

<i>Glossiphonia heteroclita</i>				Local
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Strumpshaw	P. D. W.	1979	(6)	
Wheatfen	R. J. D.	1977	(36)	

Water snail parasite.

<i>Glossiphonia complanata</i>				Common
Buckenham	R. J. D.	1974	(5)	
Strumpshaw	E. A. E.	1933	(44)	
Surl. Broad	R. J. D.	1977	(36)	
Wheatfen	R. B.	1994	(54)	
Wheatfen Broad	R. B.	1972	(57)	

Water snail parasite.

<i>Helobdella stagnalis</i>				Common
Buckenham	R. J. D.	1974	(5)	
Rockland Broad	R. J. D.	1977	(36)	
Strumpshaw	P. D. W.	1979	(6)	
Strump. Broad	R. J. D.	1977	(36)	
	M. J.	1987	(14)	
Surl. Broad	R. J. D.	1977	(36)	
Wheatfen	R. J. D.	1977	(36)	
	R. B.	1994	(54)	
Wheatfen Broad	R. B.	1972	(57)	
	R. J. D.	1977	(36)	

Predator of small invertebrates.

Order Pharyngobdellae

Family ERPOBDELLIDAE (Jawed leeches).

<i>Erpobdella octoculata</i>				Common
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	R. J. D.	1977	(36)	
Strumpshaw	E. A. E.	1933	(44)	
	M. K. D.	1988	(7)	
Strump. Broad	R. J. D.	1977	(36)	
Wheatfen	M. J. D. C.	1937	(36)	
	R. B.	1994	(54)	

Predator of small invertebrates. There is a record of *Erpobdella testacea* made by P. Willis at Strumpshaw in 1979 (6). However this record probably refers to a pale *E. octoculata*, as *E. testacea* is almost unknown in the Broads (R. Driscoll pers. comm.).

<i>Trocheta bykowskii</i>				Local
Wheatfen	A. G. I.	1989	(23)	

Predator of small invertebrates. First Norfolk record.

PHYLUM MOLLUSCA (Squids, snails, clams and allies).

As terrestrial and aquatic molluscs tend to be treated separately and a combined systematic list is not widely available, the order Euthyneura has been split into terrestrial and aquatic groups. The taxonomy follows Walden (1976) and Kerney (1976).

Records marked with a Ⓚ are from a bed of dead shells of unknown age found in Surlingham Broad and identified by Ted Ellis and Capt. Cockle in 1933.

Class Gastropoda (Slugs, snails and allies).

Order Prosobranchia

Family NERITIDAE (Nerites).

<i>Theodoxus fluviatilis</i> (Freshwater nerite).					Local
	Surlingham	S.S.P.	1909	(21)	
	Wheatfen	M.J.D.C.	1940	(1)	
Prefers moving water including wave-wash zones.					
Probably extinct in this area (Howlett, 1992).					

Family VIVIPARIDAE (River snails).

<i>Viviparus viviparus</i> (River snail).					Local
	Rockland Broad	D.H.	1992	(20)	
	Surlingham	S.S.P.	1909	(21)	
	Surl. Broad	E.A.E.+M.J.D.C.	1933	(18)	Ⓚ
	Wheatfen	E.A.E.	1933	(1)	
		A.E.E.	1940	(1)	
Slow moving water. No longer present in the Yare, and numbers appear to be declining in the Rockland area (Howlett, 1992).					

<i>Viviparus contectus</i> (=fasciatus) (Lister's river snail).					Local
	Buckenham	R.J.D.	1974	(5)	
	Cantley	R.J.D.	1974	(5)	
	Rockland Broad	E.A.E.	1971	(3)	
		D.H.	1992	(20)	
	Strumpshaw	P.D.W.	1979	(6)	
	Surlingham	S.S.P.	1909	(21)	
	Surl. Broad	E.A.E.+M.J.D.C.	1933	(18)	Ⓚ
	Wheatfen	A.E.E.	1931	(1)	
		M.J.D.C.	1944	(1)	
Same habitat but less common than <i>V. viviparus</i> and					

with a south-eastern distribution in GB. Infrequent in Broads (5).

Family VALVATIDAE (Valve snails).

<i>Valvata cristata</i> (Flat valve snail).				Local
Rockland Broad	R. J. D.	1977	(36)	
	D. H.	1992	(20)	
Strumpshaw	M. J.	1987	(14)	
Strump. Broad	R. J. D.	1977	(36)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	A. E. E.	1931	(1)	
	R. B.	1994	(54)	
Wheatfen Broad	R. J. D.	1977	(36)	

Favours weedbeds in slow flowing and stagnant waters with a muddy substrate.

<i>Valvata macrostoma</i> (Large-mouthed valve snail).				RDB 2
Strumpshaw	P. D. W.	1979	(6)	
	M. J.	1987	(14)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
Wheatfen	A. E. E.	1931	(1)	
	R. B.	1994	(54)	

Very local in lowland southern marshes. Found in well oxygenated, richly vegetated dykes. Colonies tend to be limited to short stretches of dyke. Vulnerable to agricultural intensification and non-rotational dyke management. Also recorded at Wheatfen by Arthur Ellis in 1940 and D. T. Holyoak in 1976 (62).

<i>Valvata (=Concinna) piscinalis</i> (Common valve snail).				Local
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	C. F. M. + R. J. B.	1973	(37)	
	D. H.	1992	(20)	
Strumpshaw	P. D. W.	1979	(6)	
	M. J.	1987	(14)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
	R. J. D.	1977	(36)	
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	A. E. E.	1931	(1)	
	R. B.	1994	(54)	

Prefers running water.

Family HYDROBIIDAE (Spire snails).

Pseudamnicola confusa (Swollen spire snail).

RDB 1

Strump. Broad R.J.D. 1977 (36)

A small snail found on slightly brackish mud in reed beds. It has a very local south-eastern distribution. The species has undergone a dramatic decline probably due to falling water quality. The site where the single specimen was taken at Strumpshaw has since been destroyed during the enlargement of the Broad. Ted Ellis recorded the species from the river Yare in 1944, but it is unlikely to have survived there due to deteriorations in water quality. This species has a very narrow ecological niche and may be detrimentally affected by changes in salinity and tidal influences.

Potamopyrgus jenkinsi (Jenkin's spire snail).

Naturalized

Buckenham	R. J. D.	1974	(5)
Cantley	R. J. D.	1974	(5)
Rockland Broad	R. J. D.	1977	(36)
	D. H.	1992	(20)
Strumpshaw	P. D. W.	1979	(6)
	M. J.	1987	(14)
Strump. Broad	R. J. D.	1977	(36)
	M. J.	1987	(14)
Wheatfen	E. A. E.	1954	(1)
	R. B.	1994	(54)
Wheatfen Broad	R. J. D.	1977	(36)

Appears to have invaded freshwater from the sea around the turn of the century. The spread of this snail into the Broads has been a fairly recent event (R. Driscoll pers. comm.). Commonest in brackish and eutrophic dykes (5).

P. jenkinsi (Smooth variety).

Buckenham	R. J. D.	1974	(5)
Cantley	R. J. D.	1974	(5)

P. jenkinsi (Form 'A').

Buckenham	R. J. D.	1974	(5)
Cantley	R. J. D.	1974	(5)

The keeled variety, form 'B' and form 'C' appear to be absent in the Mid-Yare valley.

Family BITHYNIIDAE (Bithynias).

<i>Bithynia tentaculata</i> (Common bithynia).				Common
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	C. F. M. + R. J. B.	1973	(37)	
	D. H.	1992	(20)	
Strumpshaw	P. D. W.	1979	(6)	
	M. J.	1987	(14)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
	R. J. D.	1977	(36)	
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	E. A. E.	1933	(1)	
	R. B.	1994	(54)	

Slow rivers and lakes.

<i>Bithynia leachii</i> (Leach's bithynia).				Local
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	R. J. D.	1977	(36)	
	D. H.	1992	(20)	
Strumpshaw	P. D. W.	1979	(6)	
Strump. Broad	R. J. D.	1977	(36)	
Surlingham	A. M.	1896	(38)	
	S. S. P.	1909	(21)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	E. A. E.	1933	(1)	
	R. B.	1994	(54)	

More local than *Bithynia tentaculata*, its presence usually indicates the presence of a rich molluscan fauna.

Order Euthyneura

Terrestrial.

Family ELLOBIIDAE (Hollow shelled snails).

<i>Carychium minimum</i> (Short-toothed herald snail).				Common
Rockland	D. H.	1992	(20)	
Surlingham	S. S. P.	1909	(21)	
S. Church Marsh	D. H.	1993	(20)	
Wheatfen	E. A. E.	1935	(1)	
	A. E. E.	1940	(1)	

Damp leaf mould, among roots, etc.

<i>Carychium tridentatum</i> (Long-toothed herald snail).				Common
Wheatfen	A. E. E.	1939	(1)	
	R. B.	1973	(54)	

More abundant in drier areas.

Family SUCCINEIDAE (Amber snails).

Members of this family are found on waterside plants.

<i>Succinea putris</i> (Amber snail).				Common
Rockland	D. H.	1992	(20)	
Strumpshaw	I. J. K.	1988-90	(51)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
Wheatfen	A. E. E.	1932	(1)	
	R. B.	1993	(54)	

<i>Oxyloma pfeifferi</i> (Pfeiffer's amber snail).				Common
Rockland	D. H.	1992	(20)	
Strumpshaw	I. J. K.	1988-90	(51)	
S. Church Marsh	D. H.	1993	(20)	
Wheatfen	A. E. E.	1931	(1)	
	D. H.	1994		

<i>Oxyloma sarsi</i> (Slender amber snail).				RDB 2
Rockland	D. H.	1992	(20)	
Surlingham	S. S. P.	1909	(21)	
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	A. E. E.	1931	(1)	
	D. T. H.	1977	(62)	

A semi-aquatic snail, found in very wet areas in Norfolk and Herefordshire, but almost confined to the Broads. Usually found on emergent vegetation. Requires dissection for positive records. Also recorded at Wheatfen by Dr. R. Baker in 1973 (54).

Family COCHLICOPIDAE (Agate snails).

<i>Cochlicopa lubrica</i> (Slippery snail/moss snail).				Common
Rockland	S. S. P.	1909	(21)	
	D. H.	1992	(20)	
Strumpshaw	I. J. K.	1988-90	(51)	
Surlingham	S. S. P.	1909	(21)	
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	E. A. E.	1933	(1)	
	D. H.	1994		

Leaf-mould and other damp to very damp places.

Family VERTIGINIDAE (Whorl snails and chrysalis snails).

Collumella edentula (Toothless chrysalis snail). Common
 Wheatfen A.E.E. 1939 (1)
 Among herbage in damp areas. Rather rare at Wheatfen
 (1).

Vertigo antivertigo (Marsh whorl snail). Local
 Rockland D.H. 1992 (20)
 Strumpshaw I.J.K. 1989 (51)
 S.Church Marsh D.H. 1993 (20)
 Wheatfen E.A.E. 1935 (1)
 R.B. 1973 (54)
 Under stones and among leaf litter in damp places,
 especially at lake margins. Rather local with a
 scattered distribution.

Vertigo substriata (Striated whorl snail). Local
 Wheatfen M.J.D.C. 1933 (1)
 Moss, grass roots, etc. in damp situations. Very
 local and scattered in south-east of GB.

Vertigo pygmaea (Common whorl snail). Local
 Rockland D.H. 1992 (20)
 Wheatfen A.E.E. 1939 (1)
 D.H. 1994

Vertigo moulinsiana (Desmoulin's whorl snail). RDB 3
 Rockland D.H. 1992 (20)
 S.Broad Marsh C.P. 1965 (62)
 S.Church Marsh D.H. 1992 (20)
 Wheatfen A.E.E. 1938 (1)
 R.B. 1973 (54)
 This has always been a rare snail, only found in the
 south east and a single locality at Salop. Now a
 declining wetland species with a very local
 distribution. Presently uncommon where found in the
 valley (20). Possibly associated with greater
 tussock sedge (*Carex paniculata*) at Wheatfen.

Family PUPILLIDAE (Chrysalis snails).

Lauria cylindracea (Chrysalis snail). Common
 Rockland D.H. 1992 (20)
 Wheatfen A.E.E. 1938 (1)
 A.E.E. 1940 (1)
L. cylindracea v. albina
 Wheatfen A.E.E. 1939 (1)
 Woods, hedges and walls.

Family VALLONIIDAE (Grass snails).

<i>Vallonia costata</i> (Ribbed grass snail).				Common
Rockland	D.H.	1992	(20)	
Wheatfen	A.E.E.	1938	(1)	
	A.E.E.	1939	(1)	

Dryish situations.

<i>Vallonia pulchella</i> (Smooth or beautiful grass snail).				Common
Rockland	D.H.	1992	(20)	
Wheatfen	E.A.E.	1935	(1)	
	A.E.E.	1940	(1)	

Slightly damper situations.

<i>Vallonia excentrica</i> (Eccentric grass snail).				Common
Wheatfen	A.E.E.	1939	(1)	

Dry localities.

<i>Acanthinula aculeata</i> (Prickly snail).				Common
Wheatfen	A.E.E.	1939	(1)	
	A.E.E.	1941	(1)	

Family ENIDAE (Bulins).

<i>Ena obscura</i> (Lesser bulin).				Common
Wheatfen	M.J.D.C.	pre. 1946	(1)	

Family ENODONTIDAE (Discus snails).

<i>Punctum pygmaeum</i> (Dwarf snail).				Common
Rockland	D.H.	1992	(20)	
Wheatfen	A.E.E.	1939	(1)	
	A.E.E.	1940	(1)	

<i>Discus rotundatus</i> (Rounded snail).				Common
Rockland	S.S.P.	1909	(21)	
	D.H.	1992	(20)	
S.Church Marsh	D.H.	1993	(20)	
Wheatfen	A.E.E.	1940	(1)	
	D.H.	1994		

Family ARIONIDAE (Roundback slugs).

Changes in the taxonomy of this group mean that all but the most recent records should be treated with caution.

<i>Arion ater</i> (Black slug).				Common
Strumpshaw	W. J. O. H.	1909	(21)	
	I. J. K.	1988-90	(51)	
Wheatfen	M. J. D. C.	1933	(1)	
	R. B.	1990	(54)	

<i>Arion rufus</i> (= <i>A. ater</i> v. <i>rufus</i>) (Red slug).				
Strumpshaw	W. J. O. H.	1909	(21)	
Wheatfen	M. J. D. C.	1939	(1)	
	R. B.	1990	(54)	

Much confused with the last species but probably more southern and local. None of these records are definitely one or the other.

<i>Arion circumscriptus</i>				Common
Wheatfen	A. E. E.	1939	(1)	
	A. E. E.	1940	(1)	

<i>Arion hortensis</i> (Garden slug).				Common
Strumpshaw	W. J. O. H.	1909	(21)	
Wheatfen	A. E. E.	1938	(1)	
	E. A. E.	1957	(3)	

<i>Arion intermedius</i> (Hedgehog slug).				Common
Buckenham	A. M.	1896	(38)	
Wheatfen	A. E. E.	1938	(1)	
	A. E. E.	1942	(1)	

Feeds on fungi in woods and fields.

Family VITRINIDAE (Glass snails).

<i>Vitrina pellucida</i> (Pellucid glass snail).				Common
Rockland	D. H.	1992	(20)	
S. Church Marsh	D. H.	1993	(20)	
Wheatfen	A. E. E.	1939	(1)	

Carnivorous and coprophagous.

Family ZONITIDAE (Glass snails).

<i>Vitrea crystallina</i> (Crystal snail).				Common
Rockland	D.H.	1992	(20)	<i>Handwritten notes:</i> M. J. E. Paul S. Church Marsh Wheatfen A. E. E. 1940
S. Church Marsh	D.H.	1993	(20)	
Wheatfen	A. E. E.	1939	(1)	
	A. E. E.	1940	(1)	
Damp sites.				
<i>Nesovitrea hammonis</i> (=radiatula) (Rayed glass snail).				Common
Surlingham	S. S. P.	1909	(21)	
Wheatfen	A. E. E.	1938	(1)	
	A. E. E.	1940	(1)	
Common in marshy areas.				
<i>Aegopinella pura</i> (Clear glass snail).				Common
Wheatfen	A. E. E.	1939	(1)	
Moist shady places. A single specimen.				
<i>Aegopinella nitidula</i> (Smooth glass snail).				Common
Rockland	S. S. P.	1909	(21)	<i>Handwritten notes:</i> Wheatfen D.H. 1994 <i>Oxychilus dragageur</i>
	D.H.	1992	(20)	
Wheatfen	E. A. E.	1933	(1)	
	D.H.	1994		
<i>Oxychilus cellarius</i> (Cellar glass snail).				Common
Rockland	S. S. P.	1909	(21)	
Wheatfen	A. E. E.	1938	(1)	
	D.H.	1994		
Carnivore and coprophage in damp shady places.				
<i>Oxychilus alliaris</i> (Garlic glass snail).				Common
Wheatfen	A. E. E.	1938	(1)	<i>Handwritten notes:</i> local 1939
	A. E. E.	1939	(1)	
<i>Zonitoides nitidus</i> (Shiny glass snail).				Local
Rockland	D.H.	1992	(20)	
Strumpshaw	I. J. K.	1988	(51)	
	I. J. K.	1989	(51)	
Surlingham	S. S. P.	1909	(21)	
S. Church Marsh	D.H.	1992	(20)	
Wheatfen	A. E. E.	1932	(1)	
	A. E. E.	1940	(1)	
Common in marshy areas and lake and river margins. Feeds on the eggs of other Molluscs.				

Family LIMACIDAE (Keelback slugs).

Limax maximus (Great grey slug). Common
 Strumpshaw W. J. O. H. 1909 (21)
 Wheatfen A. E. E. 1940 (1)
 Woods and hedgerows.

Limax flavus (Yellow slug). Common
 Strumpshaw W. J. O. H. 1909 (21)
 Wheatfen A. E. E. 1944 (1)
 Associated with man. Quite local in East Anglia,
 although frequent in Norwich, including the garden
 of RSPB regional headquarters.

Limax marginatus (Tree slug). Common
 Wheatfen A. E. E. 1939 (1)
 Woodland.

Deroceras laeve (Marsh slug). Common
 Surlingham S. S. P. 1909 (21)
 Wheatfen A. E. E. 1938 (1)
 A. E. E. 1940 (1)
 Common in marshy habitats. Omnivorous.

Deroceras agreste (Field slug). N/b
 Wheatfen H. W. 1941 (1)
 R. B. 1981 (54)
 This was the first confirmed record in GB. A
 northern species known in the south only from the
 Norfolk Broads. Recorded widely from wet meadows in
 Scotland.

Deroceras reticulatum (Netted slug). Common
 Wheatfen A. E. E. 1938 (1)
 E. A. E. 1957 (3)
 Generally abundant.

Family EUCONULIDAE (Glass snails).

Euconulus fulvus (Tawny glass snail). Common
 Surlingham S. S. P. 1909 (21)
 Wheatfen M. J. D. C. 1933 (1)
 A. E. E. 1940 (1)
 Woods and marshes. This record needs confirmation
 (see below).

<i>Euconulus alderi</i> (Marsh glass snail).				Local
Rockland	D.H.	1992	(20)	
Strumpshaw	I. J. K.	1988	(51)	
S. Church Marsh	D.H.	1992	(20)	

These two species have only recently been separated; therefore it is probable that the early records all refer to *E. alderi*. This snail is more local, but more usually encountered on marshes.

Family FERUSSACIIDAE (Spire snails).

<i>Cecilioides acicula</i> (Blind snail).				Local
Rockland	D.H.	1992	(20)	
A subterranean species of calcareous soils.				

Family CLAUSILIIDAE (Door snails).

<i>Clausilia bidentata</i> (Two-toothed door snail).				Common
Rockland	D.H.	1992	(20)	
Wheatfen	D.H.	1994		

Family HELICIDAE (Typical snails).

<i>Candidula gigaxii</i> (Eccentric snail).				Common
Wheatfen	A. E. E.	1939	(1)	
	A. E. E.	1940	(1)	

Rather local with a south-eastern distribution.

<i>Monacha cantiana</i> (Kentish snail).				Common
Rockland	D.H.	1992	(20)	

<i>Ashfordia granulata</i> (Silky snail).				Local
Rockland	D.H.	1992	(20)	
S. Church Marsh	D.H.	1992	(20)	
Wheatfen	A. E. E.	1938	(1)	
	R. B.	1993	(54)	

Virtually endemic.

<i>Trichia striolata</i> (Strawberry snail).				Common
Rockland	D.H.	1992	(20)	
Wheatfen	M. J. D. C.	pre. 1945	(1)	

<i>Trichia hispida</i> (Hairy snail).					Common
	Rockland	D.H.	1992	(20)	
	Wheatfen	E.A.E.	1933	(1)	
		D.H.	1994		
<i>T. hispida v. albida</i>					
	Wheatfen	A.E.E.	1939	(1)	
<i>T. hispida v. nana</i>					
	Wheatfen	John Armitage	1940	(1)	
<i>Arianta arbustorum</i> (Copse snail).					Common
	Rockland	E.A.E.	1933	(44)	
		D.H.	1992	(20)	
	Surlingham	S.S.P.	1909	(21)	
	S.Church Marsh	D.H.	1992	(20)	
	Wheatfen	M.J.D.C.	1933	(1)	
		M.E.A.S.	1994		
<i>A. arbustorum v. flavescens</i>					
	Wheatfen	E.A.E.	1940	(1)	
		E.A.E.	1945	(1)	
Moist habitats.					
<i>Cepaea nemoralis</i> (Grove snail/brown lipped snail).					Common
	Rockland	D.H.	1992	(20)	
	Strumpshaw	I.J.K.	1988-90	(51)	
	S.Church Marsh	D.H.	1992	(20)	
	Wheatfen	E.A.E.	1939	(1)	
		R.B.	1993	(54)	
<i>C. nemoralis v. rubella</i>					
	Wheatfen	A.E.E.	1939	(1)	
<i>C. nemoralis v. libellula</i>					
	Wheatfen	A.E.E.	1939	(1)	
Woods, hedges etc.					
<i>Cepaea hortensis</i> (White lipped snail).					Common
	Rockland	S.S.P.	1909	(21)	
	S.Church Marsh	D.H.	1992	(20)	
<i>Helix aspersa</i> (Garden snail/common snail)					Common
	Wheatfen	E.A.E.	1936	(1)	
		M.E.A.S.	1994		
<i>H. aspersa v. exalbida</i>					
	Wheatfen	E.A.E.	1944	(1)	
<i>H. aspersa v. flammea</i>					
	Wheatfen	A.E.E.	1945	(1)	

Aquatic.

Family PHYSIDAE (Bladder snails).

<i>Physa fontinalis</i> (Bladder snail).				Common
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	D. H.	1992	(20)	
Strumpshaw	P. D. W.	1979	(6)	
	M. J.	1987	(14)	
Strump. Broad	M. J.	1987	(14)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	M. J. D. C.	1932	(1)	
	R. B.	1994	(54)	

Often on weeds in moving water. Appears to have declined in recent years, perhaps linked to a decline in *Lemna minor* (Howlett, 1992).

Family LYMNAEIDAE (Pond snails).

A group typical of slow-moving waters.

<i>Lymnaea</i> (= <i>Glabra</i>) <i>trunculata</i> (Dwarf pond snail).				Common
Rockland Broad	D. H.	1992	(20)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
Wheatfen	A. E. E.	1932	(1)	
	A. E. E.	1940	(1)	

Shallow well aerated waters, amphibious.
Intermediate host of sheep liver-fluke (*Distomum hepaticum*).

<i>Lymnaea</i> (= <i>Stagnicola</i>) <i>palustris</i> (Marsh pond snail).				Common
Buckenham	S. S. P.	1909	(21)	
	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	D. H.	1992	(20)	
Strumpshaw	P. D. W.	1979	(6)	
	I. J. K.	1988-90	(51)	
Strump. Broad	R. J. D.	1977	(36)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	A. E. E.	1939	(1)	
	R. J. D.	1977	(19)	

<i>Lymnaea stagnalis</i> (Great pond snail).				Common
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	D. H.	1992	(20)	
Strumpshaw	G. C.	1986	(14)	
	M. E. A. S.	1994		
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
Wheatfen	A. E. E.	1931	(1)	
	M. E. A. S.	1994		

Omnivore occasionally attacking large prey. Very common in the Broads (5).

<i>Lymnaea (=Radix) auricularia</i> (Ear pond snail).				Local
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	E. A. E.	1934	(54)	
	R. B.	1994	(54)	

<i>Lymnaea (=Radix) peregra</i> (Wandering snail).				Common
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	R. J. D.	1977	(36)	
	D. H.	1992	(20)	
Strumpshaw	J. M.	1978	(14)	
	M. J.	1987	(14)	
Strump. Broad	M. J.	1987	(14)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	M. J. D. C.	1932	(1)	
	R. B.	1994	(54)	

<i>L. peregra v. ovata</i>			
Strumpshaw	J. M.	1978	(14)
Wheatfen	M. J. D. C.	1940	(1)

Abundant in Broadland (5).

Family PLANORBIDAE (Ram's-horn snails).

Most species are found in weedy dykes and ponds.

<i>Planorbis planorbis</i> (Ram's-horn snail).				Common
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	D. H.	1992	(20)	
Strumpshaw	G. C.	1986	(69)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	A. E. E.	1932	(1)	
	R. J. D.	1977	(19)	

<i>Planorbis carinatus</i> (Keeled ram's-horn snail).				Common
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	D. H.	1992	(20)	
Strumpshaw	P. D. W.	1989	(6)	
	M. J.	1987	(14)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	A. E. E.	1931	(1)	
	M. J. D. C.	1939	(1)	

Much less common than the previous species in the Mid-Yare.

<i>Anisus leucostoma</i> (= <i>Planorbis spirorbis</i>).				Common
(White-lipped ram's-horn snail).				
Strumpshaw	J. M.	1978	(6)	
	I. J. K.	1988-90	(51)	
Surlingham	S. S. P.	1909	(21)	
Wheatfen	A. E. E.	1931	(1)	
	E. A. E.	1957	(3)	

Probably extinct in its previous haunts (Howlett, 1992). It does however appear to replace *Anisus vortex* as the dominant ram's-horn snail at Strumpshaw.

<i>Anisus vortex</i> (Whirlpool ram's-horn snail).				Common
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	D. H.	1992	(20)	
Strumpshaw	M. J.	1987	(14)	
Strump. Broad	R. J. D.	1977	(36)	
	M. J.	1987	(14)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	A. E. E.	1931	(1)	
	R. B.	1994	(54)	
Wheatfen Broad	R. J. D.	1977	(36)	

<i>Anisus vorticulus</i> (Little whirlpool ram's-horn snail).				RDB 2
Wheatfen	A. E. E.	1939	(1)	

Very local, most confirmed sites are in East Norfolk, but local even here (5). Probably extinct in the Rockland area at least (Howlett, 1992). Benefits from the rotational clearance of dykes.

<i>Bathyomphalus contortus</i> (Twisted ram's-horn snail).				Local
Buckenham	S.S.P.	1909	(21)	
	R.J.D.	1974	(5)	
Rockland Broad	D.H.	1992	(20)	
Strumpshaw	P.D.W.	1979	(6)	
Strump. Broad	R.J.D.	1977	(36)	
Surlingham	S.S.P.	1909	(21)	
Surl. Broad	E.A.E.+M.J.D.C.	1933	(18)	⊗
S.Church Marsh	D.H.	1992	(20)	
Wheatfen	A.E.E.	1931	(1)	
	J.A.	1943	(1)	
Wheatfen Broad	R.J.D.	1977	(36)	
 <i>Gyraulus albus</i> (White ram's-horn snail).				Local
Buckenham	R.J.D.	1974	(5)	
Cantley	R.J.D.	1974	(5)	
Coldham Hall	S.S.P.	1909	(21)	
Rockland Broad	D.H.	1992	(20)	
Strumpshaw	M.J.	1987	(14)	
Strump. Broad	M.J.	1987	(14)	
Surl. Broad	E.A.E.+M.J.D.C.	1933	(18)	⊗
	R.J.D.	1977	(36)	
S.Church Marsh	D.H.	1992	(20)	
Wheatfen	E.A.E.	1933	(1)	
	R.B.	1994	(54)	
 <i>Armiger crista</i> (Nautilus ram's-horn snail).				Common
Buckenham	R.J.D.	1974	(5)	
Cantley	R.J.D.	1974	(5)	
Claxton	D.H.	1985		
Rockland Broad	D.H.	1992	(20)	
Strump. Broad	M.J.	1987	(14)	
Wheatfen	E.A.E.	1937	(1)	
 <i>Hippeutis (=Segmentina) complanatus</i> (Flat ram's-horn snail).				Local
Buckenham	R.J.D.	1974	(5)	
	J.B.	1993	(50)	
Claxton	D.H.	1985		
Strumpshaw	P.D.W.	1979	(6)	
S.Church Marsh	D.H.	1992	(20)	
Wheatfen	A.E.E.	1931	(1)	
	A.E.E.	1940	(1)	
Wheatfen Broad	R.J.D.	1977	(36)	

Restricted to a few of the richer broadland marshes (5) and rarely abundant. Has a southern distribution in the UK.

<i>Segmentina nitida</i> (Shining ram's-horn snail).				RDB 1
Strump. Broad	M. J.	1987	(14)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
Wheatfen	A. E. E.	1931	(1)	
	M. J. D. C.	1939	(1)	

S. nitida v. albina

Wheatfen	E. A. E.	1933	(1)	
----------	----------	------	-----	--

South eastern in distribution and largely confined to Broadland. Possibly extinct at sites other than Strumpshaw. Once present in tidal and non-tidal dykes at Wheatfen. Has declined nationally since the 1950's. Favours well vegetated dykes. Apparently very sensitive to nutrient enrichment and frequent dyke clearance. May benefit from dykes being cleared only when it becomes necessary.

<i>Planorbarius corneus</i> (= <i>corneum</i>) (Great ram's-horn snail).				Common
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	D. H.	1992	(20)	
Strumpshaw	P. D. W.	1979	(6)	
	G. C.	1986	(14)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	A. E. E.	1931	(1)	
	A. E. E.	1940	(1)	

Family ACROLOXIDAE (Lake limpets).

<i>Acroloxus lacustris</i> (Lake limpet).				Common
Buckenham	R. J. D.	1974	(5)	
Rockland Broad	R. J. D.	1977	(36)	
	D. H.	1993		
Strumpshaw	M. J.	1987	(14)	
Strump. Broad	M. J.	1987	(14)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
	R. J. D.	1977	(36)	
Wheatfen	E. A. E.	1933	(18)	
	R. B.	1994	(54)	

Usually on plants in slow water.

<i>Ancylus fluviatilis</i> (River limpet).				Common
Rockland Broad	D. H.	1993	(53)	

A very unusual record for the Broads as this species is usually found in clean flowing water. About 30 specimens were discovered on the underside of a submerged boat owned by the RSPB, at a mooring station that is possibly affected by an inflowing stream. Even more unusual was that the river limpets

were mixed in among about 80 lake limpets.

Class Bivalvia (Clams and allies).

Order Eulamellibranchiata (True lamellibranchs).

Family UNIONIDAE (River mussels).

<i>Unio pictorum</i> (Painters mussel).				Common
Rockland Broad	A.E.E.	1941	(39)	
	D.H.	1992	(20)	
Surlingham	S.S.P.	1909	(21)	
Surl. Broad	E.A.E.+M.J.D.C.	1933	(18)	⊗
Wheatfen	E.A.E.	1934	(1)	
	R.B.	1994	(54)	

Large bodies of hard water. Much rarer than in the past (D. Howlett pers. comm.).

<i>Anodonta cygnea</i> (Swan mussel).				Local
Rockland Broad	D.H.	1992	(20)	
Surl. Broad	E.A.E.+M.J.D.C.	1933	(18)	⊗
Wheatfen	M.J.D.C.	1939	(1)	
	R.B.	1994	(54)	

Large bodies of hard water. Eliminated by dredging in the larger dykes (Howlett 1992).

<i>Anodonta anatina</i> (Duck mussel).				Common
Rockland Broad	D.H.	1992	(20)	
Wheatfen	A.E.E.	1940	(1)	
	R.B.	1994	(54)	

Prefers a harder substrate than the previous species.

<i>Pseudanodonta complanata</i> (Compressed river mussel).				N/b
Rockland Broad	D.H.	1992	(20)	

Uncommon, one colony in the Short Dyke (20).

Family SPHAERIIDAE (Orb and pea mussels).

A group of small molluscs which are often overlooked, but which have almost certainly suffered due to water pollution. Many do not reach their full size in waterways connected to the Yare, indicating poor living conditions (Howlett 1992). Unidentified *Pisidium* spp. were recorded at Surlingham Broad 1969 (40); Buckenham, Surlingham and Rockland Broads in 1973 (37); Wheatfen,

Strumpshaw, Surlingham, and Rockland Broads in 1977 (36); and at Strumpshaw in 1979 (6) and 1994.

<i>Sphaerium corneum</i> (Horny orb mussel).				Common
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	R. J. D.	1977	(36)	
	D. H.	1992	(20)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
	R. J. D.	1977	(36)	
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	A. E. E.	1931	(1)	
	R. B.	1994	(54)	

<i>Sphaerium</i> (= <i>Musculium</i>) <i>lacustre</i> (Lake orb mussel).				Common
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	D. H.	1992	(20)	
Strumpshaw	M. J.	1987	(14)	
Surlingham	S. S. P.	1909	(21)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
	R. J. D.	1977	(36)	
S. Church Marsh	D. H.	1992	(20)	
Wheatfen	A. E. E.	1932	(1)	
	A. E. E.	1940	(1)	

Often in conditions tolerated by few other species.
Less common than *Sphaerium corneum* in Broadland (5).

<i>Pisidium amnicum</i> (River/giant pea mussel).				Common
Rockland Broad	D. H.	1992	(20)	
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
Wheatfen	A. E. E.	1940	(1)	
	R. B.	1994	(54)	

<i>Pisidium casertanum</i> (= <i>cinereum</i>) (Caserta pea mussel).				Common
Surl. Broad	E. A. E. + M. J. D. C.	1933	(18)	⊗
Wheatfen	E. A. E.	1939	(1)	
<i>P. casertanum</i> v. <i>ponderosa</i>				
Wheatfen	A. E. E.	1940	(1)	

<i>Pisidium personatum</i> (Red-crust ed pea mussel).				Common
Wheatfen	E. A. E.	1939	(1)	
	R. B.	1994	(54)	

Also recorded at Wheatfen by A. E. Ellis in 1940 (1).

<i>Pisidium obtusale</i> (Porous-shelled pea mussel).				Local
S. Church Marsh	M. P. K.	1992	(53)	
Wheatfen	M. J. D. C.	1938	(1)	
	R. B.	1994	(54)	
Uncommon in GB. Also recorded at Wheatfen by A.E.Ellis in 1940 (1).				
<i>Pisidium milium</i> (Quadrangular pea mussel).				Common
S. Church Marsh	M. P. K.	1992	(53)	
Wheatfen	A. E. E.	1939	(1)	
	A. E. E.	1940	(1)	
<i>Pisidium subtruncatum</i> (Short-ended pea mussel).				Common
Rockland Broad	D. H.	1992	(20)	
Surlingham	S. S. P.	1909	(21)	
S. Church Marsh	M. P. K.	1992	(53)	
Wheatfen	M. J. D. C.	1939	(1)	
	R. B.	1994	(54)	
<i>P. subtruncatum v. incrassata</i>				
Wheatfen	A. E. E.	1940	(1)	
<i>Pisidium henslowanum</i> (Henslow's pea mussel).				Common
Claxton	D. H.	1985		
Wheatfen	A. E. E.	1939	(1)	
	A. E. E.	1940	(1)	
<i>Pisidium hibernicum</i> (Globular pea mussel).				Local
Wheatfen	A. E. E.	1940	(1)	
<i>Pisidium nitidum</i> (Shining pea mussel).				Common
Wheatfen	M. J. D. C.	1939	(1)	
	R. B.	1994	(54)	
<i>P. nitidum v. crassa</i>				
Wheatfen	A. E. E.	1940	(1)	
<i>Pisidium pulchellum</i> (Iridescent pea mussel).				N/b
Wheatfen	M. J. D. C.	1938	(1)	
	A. E. E.	1940	(1)	
A very local mussel recorded as being rare at Wheatfen (1).				

Family DREISSENACEA (Zebra mussels).

<i>Dreissena polymorpha</i> (Zebra/wandering mussel).				
Rockland Broad	D. H.	1992	(20)	
This species has been spread around the world from S. Russian ports. Although native thousands of years ago, it has only very recently recolonised the Broads. It appears to be flourishing.				

PHYLUM BRYOZOA (Moss animals)

Aquatic, colonial animals with a superficial resemblance to sponges. This group once typified the water bodies of the Mid-Yare; growing abundantly on submerged plants and roots. Despite searches, there have been no records in the last 50 years. It is quite possible that the deterioration of the water quality in the valley has caused the extinction of all the species.

Class Phylactolaemata

Family FREDERICELLIDAE

<i>Fredericella sultana</i>					Local
	Coldham Hall	H. E. H. + E. A. E.	1934	(3)	
	Rockland Broad	H. E. H.	1943	(42)	
	Surl. Broad	H. E. H.	1943	(42)	
	Wheatfen	H. E. H.	1934	(1)	

Family PLUMATELLIDAE

<i>Hyalinella punctata</i>					Local
	Surl. Broad	H. E. H.	1911	(41)	
	A very local bryozan.				
<i>Plumatella coralloides</i>					Local
	Wheatfen	H. E. H.	1934	(1)	
	Rare but probably under-recorded.				
<i>Plumatella fruticosa</i>					Unknown
	Surl. Broad	H. E. H.	1911	(41)	
<i>Plumatella fungosa</i>					Local
	Coldham Hall	H. E. H. + E. A. E.	1934	(3)	
	Rockland Broad	H. E. H.	1943	(42)	
	Surl. Broad	H. E. H.	1943	(42)	
	Found in tidal dykes at Coldham Hall (3).				
<i>Plumatella repens</i>					Common
	Rockland Broad	H. E. H.	1911	(41)	
	Surl. Broad	H. E. H.	1911	(41)	

Family LOPHOPODIDAE

Lophopus crystallinus

RDB 3

Coldham Hall	H. E. H. + E. A. E.	1934	(3)
Rockland Broad	H. E. H.	1943	(42)
Surl. Broad	H. E. H.	1911	(41)
	H. E. H.	1943	(42)
Wheatfen	H. E. H.	1934	(1)
	E. A. E.	1943	(1)

A very rare bryozan not found in the Mid-Yare in recent years despite searches. Records from four southern counties. Once so abundant in the Yare and associated broads that "a single haul would have filled an ordinary-sized pail" (Hurrell, 1911). Mentioned in the IUCN Invertebrate Red Data Book. Often associated with dykes sheltered by trees, or attached to the submerged parts of emergent plants. Exposure of the marginal mud may stimulate the hatching of eggs.

Family CRISTATELLIDAE

Cristatella mucedo

Common

Coldham Hall	H. E. H. + E. A. E.	1934	(3)
Rockland Broad	H. E. H.	1911	(41)
	H. E. H.	1943	(42)
Surl. Broad	H. E. H.	1943	(42)

Found in clear water.

Class Gymnolaemata

Order Ctenostomata

Paludicella articulata

Local

Rockland Broad	H. E. H.	1911	(41)
	H. E. H.	1943	(42)
Surl. Broad	H. E. H.	1911	(41)
	H. E. H.	1943	(42)

Often found in association with *Fredericella sultana*.

PHYLUM CRUSTACEA (Crabs, woodlice, shrimps and allies).

Class Brachiopoda (Fairy shrimps and water fleas).

Order Cladocera (Water fleas).

	Buckenham	R. J. D.	1974	(5)
	Cantley	R. J. D.	1974	(5)
	Wheatfen	R. J. D.	1977	(36)
<i>Sida crystallina</i>	Rockland Broad	R. G.	1903	(43)
<i>Diaphanosoma brachyurum</i>	Surl. Broad	R. G.	1903	(43)
<i>Daphnia longispina</i>	Rockland Broad	R. G.	1903	(43)
	Surl. Broad	R. G.	1903	(43)
<i>Scapholeberis mucronata</i>	Rockland Broad	R. G.	1903	(43)
	Surl. Broad	R. G.	1903	(43)
<i>Simocephalus vetulus</i>	Rockland Broad	R. G.	1903	(43)
	Surl. Broad	R. G.	1903	(43)
	Wheatfen	E. A. E.	1939	(1)
<i>Ceriodaphnia dubia</i>	Buckenham	R. G.	1903	(43)
<i>Ceriodaphnia reticulata</i>	Rockland Broad	R. G.	1903	(43)
<i>Ceriodaphnia pulchella</i>	Rockland Broad	R. G.	1903	(43)
	Surl. Broad	R. G.	1903	(43)
<i>Ceriodaphnia quadrangula</i>	Surl. Broad	R. G.	1903	(43)
<i>Eurycerus lamellatus</i>	Rockland Broad	R. G.	1903	(43)
	Surl. Broad	R. G.	1903	(43)

<i>Graptoleberis testudinaria</i>			
	Rockland Broad	R.G.	1903 (43)
	Surl. Broad	R.G.	1903 (43)
<i>Acroperus harpae</i>			
	Rockland Broad	R.G.	1903 (43)
	Surl. Broad	R.G.	1903 (43)
<i>Alona rectangula</i>			
	Rockland Broad	R.G.	1903 (43)
<i>Alona affinis</i>			
	Rockland Broad	R.G.	1903 (43)
	Surl. Broad	R.G.	1903 (43)
<i>Alona quadrangularis</i>			
	Rockland Broad	R.G.	1903 (43)
<i>Rhynchotalona rostrata</i>			
	Rockland Broad	R.G.	1903 (43)
<i>Pleuroxus aduncus</i>			
	Rockland Broad	R.G.	1903 (43)
	Surl. Broad	R.G.	1903 (43)
	Wheatfen	M. J. D. C.	pre. 1946 (1)
<i>Pleuroxus unciatus</i>			
	Rockland Broad	R.G.	1903 (43)
	Surl. Broad	R.G.	1903 (43)
<i>Chydorus sphaericus</i>			
	Rockland Broad	R.G.	1903 (43)
	Surl. Broad	R.G.	1903 (43)
	Wheatfen	R. B.	1994 (54)
<i>Polyphemus pediculus</i>			
	Rockland Broad	R.G.	1903 (43)
	Surl. Broad	R.G.	1903 (43)
<i>Bosmina longirostris</i>			
	Wheatfen	R. B.	1994 (54)

Class Ostracoda (Ostracods).

Rockland Broad	R. J. D.	1977	(36)
Strump. Broad	R. J. D.	1977	(36)
Surl. Broad	R. J. D.	1977	(36)
Wheatfen	R. J. D.	1977	(36)
Wheatfen Broad	R. J. D.	1977	(36)

Order Podocopida

Family CYPRIDIDAE

Notodromus monacha

Buckenham	J. B.	1993	(50)
-----------	-------	------	------

Class Copepoda (Copepods).

Buckenham	R. J. D.	1974	(5)
Cantley	R. J. D.	1974	(5)
Strump. Broad	R. J. D.	1977	(36)
Surl. Broad	R. J. D.	1977	(36)
Wheatfen	R. J. D.	1977	(36)

Canthocamptus staphilinus

Rockland Broad	R. G.	1903	(43)
Surl. Broad	R. G.	1903	(43)

Canthocamptus trispinosus

Rockland Broad	R. G.	1903	(43)
Surl. Broad	R. G.	1903	(43)

Cyclops albidus

Rockland Broad	R. G.	1903	(43)
Surl. Broad	R. G.	1903	(43)

Cyclops distinctus

Rockland Broad	R. G.	1903	(43)
----------------	-------	------	------

Cyclops fimbriatus

Rockland Broad	R. G.	1903	(43)
----------------	-------	------	------

Cyclops fuscus

Rockland Broad	R. G.	1903	(43)
Surl. Broad	R. G.	1903	(43)

Cyclops leuckarti

Rockland Broad	R. G.	1903	(43)
Surl. Broad	R. G.	1903	(43)

Cyclops serrulatus

Rockland Broad R.G.	1903	(43)
Surl. Broad R.G.	1903	(43)

This species has since been split into several species and it is unclear to which this record refers.

Cyclops varicans

Rockland Broad R.G.	1903	(43)
---------------------	------	------

Cyclops viridis

Rockland Broad R.G.	1903	(43)
Surl. Broad R.G.	1903	(43)

Eurytemora affinis

Rockland Broad R.G.	1903	(43)
---------------------	------	------

Eurytemora velox

Rockland Broad R.G.	1903	(43)
Surl. Broad R.G.	1903	(43)

Class Branchirua (Fish lice).

Order Arguloida

Family ARGULIDAE

Argulus foliaceus (Carp louse).

Wheatfen	E. A. E.	1937	(1)
----------	----------	------	-----

Class Malacostraca

Order Isopoda (Woodlice and allies).

Family SPHAEROMATIDAE

Sphaeroma serratum

Rockland Broad R.G.	1903	(43)
---------------------	------	------

More likely to be *S. rugicauda*. Both are marine species which do not set up breeding populations in freshwater.

Family ASELLIDAE (Water lice).

<i>Asellus aquaticus</i> (Water-hog louse).				Common
Buckenham	R. J. D.	1974	(5)	
Cantley	R. J. D.	1974	(5)	
Rockland Broad	R. J. D.	1977	(36)	
Strumpshaw	P. D. W.	1979	(6)	
	M. J.	1987	(14)	
Strump. Broad	R. J. D.	1977	(36)	
	M. J.	1987	(14)	
Surl. Broad	R. J. D.	1977	(36)	
Wheatfen	A. E. E.	1941	(24)	
	R. B.	1994	(54)	
Wheatfen Broad	R. J. D.	1977	(36)	

<i>Asellus meridianus</i>				Common
Buckenham	R. J. D.	1974	(5)	
Rockland Broad	R. J. D.	1977	(36)	
Strumpshaw	M. J.	1987	(14)	
Strump. Broad	M. J.	1987	(14)	
Wheatfen	A. E. E.	1941	(24)	

Less resistant than *A. asellus* to saline conditions (5).

Terrestrial isopods.

Family LIGIIDAE

<i>Ligidium hypnorum</i> (Fen woodlouse).				Local
Strumpshaw	M. K. D.	1987	(7)	
	M. E. A. S.	1994		
Wheatfen	A. E. E.	1941	(1)	
	M. E. A. S.	1994		

Although occasionally found in woodlands on clay soils, this species stronghold in the UK is in the Broadland fens. It was first recorded in Norfolk at Wheatfen.

Family ONISCIDAE

<i>Philoscia muscorum</i>				Common
Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	
	M. E. A. S.	1994		
Wheatfen	E. A. E.	1935	(57)	
	M. E. A. S.	1994		

Widespread and abundant.

P. muscorum Yellow form.

Buckenham Carr	M. E. A. S.	1993	
----------------	-------------	------	--

<i>Oniscus asellus</i>					Common
	Strumpshaw	M. E. A. S.	1993		
		M. E. A. S.	1994		
	S. Broad Marsh	E. A. E.	1962	(3)	
	Wheatfen	M. J. D. C.	1937	(1)	
		M. E. A. S.	1994		

Widespread and abundant.

Family PORCELLIONIDAE

<i>Porcellionides pruinosus</i>					Synanthropic
	Wheatfen	A. G. I.	1981	(57)	

Uncommon, usually associated with manure heaps.

<i>Porcellio dilatatus</i>					Local
	Wheatfen	E. A. E.	1937	(1)	

A rare species. Some doubt has been cast over this record (Irwin and Jones, 1984). The specimen (with other Wheatfen woodlice) is deposited in the zoology dept. of the University of Oxford and could be checked.

<i>Porcellio spinicornis</i>					Local
	Wheatfen	E. A. E.	1937	(1)	
		A. E. E.	1942	(1)	

<i>Porcellio scaber</i>					Common
	Strumpshaw	M. E. A. S.	1993		
		M. E. A. S.	1994		
	S. Broad Marsh	E. A. E.	1962	(3)	
	Wheatfen	M. J. D. C.	1937	(1)	
		M. E. A. S.	1994		

Widespread and abundant.

Family ARMADILLIDIIDAE (Pill-woodlice).

<i>Armadillidium vulgare</i> (Common pill-woodlouse).					Common
	Buckenham	M. E. A. S.	1993		
	Strumpshaw	M. E. A. S.	1993		
	Wheatfen	M. J. D. C.	1937	(1)	
		M. E. A. S.	1994		

Common.

Family TRICHONISCIDAE

These are all small soil dwelling woodlice, most of which are very rarely encountered even if present.

<i>Trichoniscoides albidus</i>					N
Wheatfen	A. E. E.	1941	(1)		
A local, synanthropic species.					
<i>Trichoniscoides sarsi</i>					Local
Wheatfen	A. E. E.	1941	(1)		
An uncommon soil species.					
<i>Trichoniscus pusillus</i>					Common
Wheatfen	A. E. E.	1941	(1)		
	M. E. A. S.	1994			
Abundant. A specimen infected with a virus causing vivid purple colouration was found at Wheatfen (1994).					
<i>T. pusillus f. provis</i>					
Wheatfen	A. E. E.	1942	(57)		
<i>Trichoniscus pygmaeus</i>					Common
Wheatfen	A. G. I.	1981	(57)		
	M. E. A. S.	1994			
<i>Haplophthalmus danicus</i>					Local
Wheatfen	A. E. E.	1941	(1)		
	M. E. A. S.	1994			
As well as inhabiting friable soil, this uncommon species is found in rotting ash and elm logs. Also recorded in 1981 and 82 by A.G. Irwin (57).					
<i>Haplophthalmus mengel</i>					Local
Wheatfen	A. E. E.	1941	(1)		
	M. E. A. S.	1994			
This species has recently been revealed as two species. An adult male is needed to confirm the record.					

Order Amphipoda (Shrimps and allies).

Family GAMMARIDAE

<i>Crangonyx pseudogracilis</i>				Naturalised
Buckenham	J.B.	1993	(50)	
Rockland Broad	R.J.D.	1977	(36)	
Strumpshaw	M.J.	1987	(14)	
Strump. Broad	R.J.D.	1977	(36)	
	M.J.	1987	(14)	
Surl. Broad	R.J.D.	1977	(36)	
Wheatfen	R.J.D.	1977	(36)	
Wheatfen Broad	R.J.D.	1977	(36)	

Introduced from N. America, first UK record in 1936.

<i>Gammarus duebeni</i>				Common
Buckenham	R.J.D.	1974	(5)	
Surl. Broad	N.C.M.+R.H.B.	1969	(40)	

Saline resistant.

<i>Gammarus pulex</i>				Common
Buckenham	R.J.D.	1974	(5)	
Strumpshaw	P.D.W.	1979	(6)	
Wheatfen	M.J.D.C.	1938	(1)	
	M.J.D.C.	1939	(1)	

It is now thought that the 1974 and 1979 records refer to *Crangonyx pseudogracilis* and the Wheatfen records almost certainly refer to *G. zaddachi*. *G. pulex* is more sensitive to saline conditions than its relatives, and is unlikely to be encountered in these habitats (R. Driscoll pers. comm.).

<i>Gammarus zaddachi</i>				Common
Buckenham	R.J.D.	1974	(5)	
Rockland Broad	R.J.D.	1977	(36)	
Wheatfen	D.M.R.	1946	(1)	
	R.B.	1994	(54)	

<i>Orchestia cavimana (=bottae)</i>				Naturalised
Rockland Broad	R.G.	1944-65	(64)	
Wheatfen	E.A.E.	1948	(49)	
	E.A.E.	1958	(36)	

<i>Corophium multisetosum</i>				N/b
Surl. Broad	R.J.D.	1977	(36)	

A filter-feeding amphipod, found in weakly brackish stretches of rivers in the south and east of England.

170 species

PHYLUM CHELICERATA (Spiders, scorpions and allies).

Class Arachnida

Order Araneae (Spiders).

Family AMAUROBIIDAE

<i>Amaurobius fenestralis</i>					Common
	Strumpshaw	M. E. A. S.	1994		
<i>Amaurobius similis</i>					Common
	Brundall Marsh	A. W.	1990	(66)	
	Buckenham	M. E. A. S.	1993		
	Cantley	M. E. A. S.	1993		
	Strumpshaw	M. E. A. S.	1993		
	Surlingham	M. E. A. S.	1993		
	Wheatfen	M. J. D. C.	pre. 1946	(1)	
		M. E. A. S.	1994		

Widespread on buildings and tree trunks.

Family DICTYNIDAE

<i>Dictyna arundinacea</i>					Common
	Strumpshaw	A. W.	1990	(66)	
		M. E. A. S.	1994		
	Wheatfen	A. R. J.	1936	(1)	
<i>Dictyna uncinata</i>					Common
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		
<i>Lathys humilis</i>					Local
	Wheatfen	A. R. J.	1936	(1)	

Family OONOPIDAE

<i>Oonops domesticus</i>					Synanthropic
	Wheatfen	E. A. E.	pre. 1987	(3)	

Only found indoors.

Family DYSDERIDAE

<i>Dysdera erythrina</i>	Wheatfen	E. A. E.	pre. 1987	(3)	Common
<i>Dysdera crocata</i>	Wheatfen	E. A. E.	pre. 1987	(3)	Common
		R. E.	1991	(55)	
<i>Harpactea hombergi</i>	Strumpshaw	M. E. A. S.	1993		Local
	Wheatfen	M. E. A. S.	1994		

Family PHOLCIDAE

<i>Pholcus phalangioides</i> (Daddy long-legs spider).					Synanthropic
	Coldham Hall	E. A. E.	1971	(3)	
		E. A. E.	1983	(3)	
	Wheatfen	E. A. E.	pre. 1987	(3)	

This species is closely associated with man and is only found indoors. It has a rather southern distribution and is relatively scarce in Norfolk. The Coldham Hall records all come from the Coldham Hall Inn.

Family GNAPHOSIDAE

<i>Scotophaeus blackwalli</i>	Wheatfen	A. R. J.	1936	(1)	Synanthropic
<i>Micaria pulicaria</i>	Wheatfen	E. A. E.	pre. 1987	(3)	Common

Family CLUBIONIDAE

<i>Clubiona corticalis</i>	Wheatfen	M. E. A. S.	1994		Common
Found under bark on trees.					
<i>Clubiona reclusa</i>	Strumpshaw	D. A. P.	1988-90	(51)	Common
	Wheatfen	R. Hancy	1993	(80)	

<i>Clubiona stagnatilis</i>				Common
	Strumpshaw	D. A. P.	1988-90 (51)	
		M. E. A. S.	1994	
	Wheatfen	M. J. D. C.	pre. 1946 (1)	
		J. G.	1971 (71)	

<i>Clubiona phragmitis</i>				Local
	Strumpshaw	D. A. P.	1988 (51)	
		M. E. A. S.	1993	
	Surlingham	M. E. A. S.	1993	
	Wheatfen	M. J. D. C.	pre. 1946 (1)	
		M. E. A. S.	1994	

Common in and near reed beds.

<i>Clubiona terrestris</i>				Common
	Strumpshaw	M. E. A. S.	1994	

<i>Clubiona lutescens</i>				Common
	Strumpshaw	M. E. A. S.	1994	
	Wheatfen	A. R. J.	1936 (1)	
		M. E. A. S.	1994	

<i>Clubiona brevipes</i>				Common
	Wheatfen	A. R. J.	1936 (1)	
		R. Hancy	1989 (80)	

<i>Clubiona subtilis</i>				Local
	Strumpshaw	D. A. P.	1988 (51)	
		A. W.	1990 (66)	
	Wheatfen	M. J. D. C.	pre. 1946 (1)	

Local in wet habitats in S. England.

<i>Cheiracanthium erraticum</i>				Common
	Coldham Hall	M. E. A. S.	1993	
	Wheatfen	A. R. J.	1936 (1)	

Found on gorse (*Ulex spp.*) at Coldham Hall.

<i>Phrurolithus festivus</i>				Common
	Strumpshaw	M. E. A. S.	1994	
	Wheatfen	E. A. E.	1957 (3)	

Family ZORIDAE

<i>Zora spinimana</i>				Common
	Strumpshaw	M. E. A. S.	1994	

Family ANYPHAENIDAE

Anyphaena accentuata (The buzzing spider)
 Strumpshaw A.W. 1990 (66) Common
 A rarely encountered arboreal species.

Family THOMISIDAE (Crab spiders).

Diaea dorsata Wheatfen A.R.J. 1936 (1) Local

Misumena vatia Wheatfen A.R.J. 1936 (1) Common
 E.A.E. 1962 (3)

Xysticus cristatus Strumpshaw A.W. 1990 (66) Common
 Wheatfen A.R.J. 1936 (1)
 J.G. 1971 (71)

Xysticus lanio Wheatfen A.R.J. 1936 (1) Common

Xysticus ulmi Strumpshaw M.E.A.S. 1993 Local
 Wheatfen M.J.D.C. pre.1946 (1)
 M.E.A.S. 1994
 Common in fens and wet meadows.

Ozyptila trux Strumpshaw D.A.P. 1988-90 (51) Common
 M.E.A.S. 1994
 Wheatfen M.J.D.C. pre.1946 (1)

Ozyptila brevipes Wheatfen M.J.D.C. pre.1946 (1) Local

Family PHILODROMIDAE (Crab spiders).

Philodromus dispar Wheatfen A.R.J. 1936 (1) Common

Philodromus aureolus Wheatfen A.R.J. 1936 (1) Common

Philodromus albidus Wheatfen R.Hancy 1989 (80) N/b
 A southern species found on bushes and the lower

branches of trees. Recorded as *P. rufus*, but this species has since been found not to be British and all records are thought to refer to *P. albidus*.

Family SALTICIDAE (Jumping spiders).

<i>Salticus scenicus</i> (Zebra spider).				Common
	Strumpshaw	M. E. A. S.	1993	
	Surlingham	M. E. A. S.	1993	
	Wheatfen	M. J. D. C.	1937	(1)
		M. E. A. S.	1994	
<i>Salticus cingulatus</i>				Common
	Wheatfen	A. R. J.	1936	(1)
<i>Helophanus cupreus</i>				Common
	Strumpshaw	G. M. C.	1993	
<i>Marpissa radiata</i>				N/a
	Wheatfen	E. D.	pre.1965	(64)
A large, brown jumping spider. Found in fens, where it lays its egg sac in the flower-heads of <i>Phragmites</i> . Most records are from East Anglia and the south west.				

Family LYCOSIDAE (Wolf spiders).

<i>Pardosa palustris</i>				Common
	Buckenham	M. E. A. S.	1993	
	Wheatfen	A. R. J.	1936	(1)
<i>Pardosa pullata</i>				Common
	Buckenham	M. E. A. S.	1993	
	Strumpshaw	D. A. P.	1988-90	(51)
		M. E. A. S.	1994	
	Wheatfen	A. R. J.	1936	(1)
		M. E. A. S.	1994	
<i>Pardosa prativaga</i>				Common
	Buckenham	M. E. A. S.	1993	
	Strumpshaw	D. A. P.	1988-90	(51)
		M. E. A. S.	1994	
	Wheatfen	A. R. J.	1936	(1)
		M. E. A. S.	1994	

<i>Pardosa amentata</i>				Common
	Buckenham	M. E. A. S.	1993	
	Strumpshaw	D. A. P.	1988-90 (51)	
		M. E. A. S.	1994	
	Wheatfen	M. J. D. C.	pre. 1946 (1)	
		M. E. A. S.	1994	

<i>Alopecosa pulverulenta</i>				Common
	Buckenham	M. E. A. S.	1993	
	Strumpshaw	M. E. A. S.	1994	
	Wheatfen	A. R. J.	1937 (1)	

<i>Trochosa ruricola</i>				Common
	Wheatfen	A. R. J.	1936 (1)	

<i>Trochosa terricola</i>				Common
	Strumpshaw	D. A. P.	1988-90 (51)	
	Wheatfen	A. R. J.	1936 (1)	

<i>Trochosa spinipalpis</i>				Local
	Strumpshaw	D. A. P.	1988 (51)	
		M. E. A. S.	1994	
	Wheatfen	A. R. J.	1936 (1)	
		R. D.	1971 (71)	

A large wolf spider found in dry places in S. England.

<i>Arctosa leopardus</i>				Local
	Buckenham	M. E. A. S.	1993	
	Strumpshaw	D. A. P.	1988 (51)	
		M. E. A. S.	1994	
	Wheatfen	A. R. J.	1936 (1)	

A large wolf spider, found among moss and detritus in marshy areas.

<i>Pirata piraticus</i>				Local
	Buckenham	M. E. A. S.	1993	
	Strumpshaw	D. A. P.	1988 (51)	
		M. E. A. S.	1994	
	Wheatfen	A. R. R. S.	1971 (71)	
		M. E. A. S.	1994	

Found in marshy areas, in common with most members of this genus.

<i>Pirata tenuitaris</i>				Local
	Strumpshaw	D. A. P.	1988 (51)	

Typically found in association with *Sphagnum* mosses.

Pirata piraticus/tenuitaris

Wheatfen A.R.J. 1936 (1)

These two species had not been separated at the time of this record.

Pirata hygrophilus

Strumpshaw D.A.P. 1988-90 (51)
M.E.A.S. 1994

Common

Pirata hygrophilus/ulginosus

Wheatfen M.J.D.C. pre.1946 (1)

These two species had not been separated at the time of this record.

Pirata latitans

Strumpshaw D.A.P. 1988 (51)
M.E.A.S. 1994

Local

A marshland wolf spider. Common in cpt.30.

Pirata piscatorius

Strumpshaw D.A.P. 1988 (51)
Wheatfen A.R.J. 1936 (1)

Local

The rarest member of this wetland genus, and never found in abundance.

Family PISAURIDAE

Pisaura mirabilis

Strumpshaw A.W. 1990 (66)
M.E.A.S. 1993
Surlingham M.E.A.S. 1993
Wheatfen A.R.J. 1936 (1)
M.E.A.S. 1994

Common

Family ARGYRONETIDAE (Water spiders).

Argyroneta aquatica (Water spider).

Buckenham R.J.D. 1974 (5)
J.B. 1993 (50)
Cantley R.J.D. 1974 (5)
Strumpshaw P.D.W. 1979 (6)
M.K.D. 1987 (7)
Wheatfen A.R.J. 1936 (1)

Local

Britains' only fully aquatic spider. Builds a submerged, silken air tent, from which it preys on aquatic invertebrates.

Family AGELENIDAE

<i>Agelena labrinthica</i>					Common
	Wheatfen	M. J. D. C.	1944	(1)	
<i>Tegenaria domestica</i>					Common
	Wheatfen	E. A. E.	pre.1987	(3)	
An indoor species.					

Family HAHNIIDAE

<i>Antistea elegans</i>					Local
	Strumpshaw	D. A. P.	1988	(51)	
		M. E. A. S.	1994		
	Wheatfen	A. R. J.	1936	(1)	
		E. D.	1971	(71)	
A small sheet web-building spider of damp areas.					
<i>Hahnia montana</i>					Common
	Wheatfen	A. R. J.	1936	(1)	

Family MIMETIDAE

<i>Ero cambridgei</i>					Common
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		

Family THERIDIIDAE

<i>Episinus angulatus</i>					Local
	Strumpshaw	A. W.	1990	(66)	
		G. M. C.	1993		
	Wheatfen	E. A. E.	pre.1987	(3)	
Recorded as <i>Episinus maculipes</i> by Ted Ellis, but almost certainly this species. <i>E. maculipes</i> is a rare spider of southern coastal cliffs.					
<i>Steatoda bipunctata</i>					Common
	Wheatfen	A. R. J.	1936	(1)	
<i>Anelosimus vittatus</i>					Common
	Wheatfen	A. R. J.	1936	(1)	
<i>Achaearanea lunata</i>					Local
	Wheatfen	A. R. J.	1936	(1)	

<i>Theridion sisyphium</i>					Common
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	A. R. J.	1936	(1)	
<i>Theridion pictum</i>					Local
	Wheatfen	A. R. J.	1936	(1)	
<i>Theridion pallens</i>					Common
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	E. A. E.	pre. 1987	(3)	
<i>Rugathodes (=Theridion) instabilis</i>					Local
	Strumpshaw	D. A. P.	1988	(51)	
	A rare marshland species.				
<i>Enoplognatha ovata</i>					Common
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	R. Hancy	1989	(80)	
<i>Enoplognatha ovata/latimana</i>					
	Wheatfen	A. R. J.	1936	(1)	
<i>Robertus lividus</i>					Common
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	A. R. J.	1936	(1)	
Family TETRAGNATHIDAE					
<i>Tetragnatha extensa</i>					Common
	Wheatfen	A. R. J.	1936	(1)	
<i>Tetragnatha montana</i>					Local
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		
<i>Tetragnatha striata</i>					N/b
	Wheatfen	A. R. J.	1936	(1)	
	Occurs on plants near water. Only known from about 20 localities.				
<i>Pachygnatha clercki</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
		M. E. A. S.	1994		
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		

<i>Pachygnatha degeeri</i>				Common
	Buckenham	M. E. A. S.	1993	
	Coldham Hall	M. E. A. S.	1993	
	Strumpshaw	D. A. P.	1988-90	(51)
		M. E. A. S.	1994	
	Wheatfen	A. R. J.	1936	(1)
Family METIDAE (Orb-web builders).				
<i>Metellina (=Meta) segmentata</i>				Common
	Strumpshaw	A. W.	1990	(66)
		M. E. A. S.	1993	
	Surlingham	M. E. A. S.	1993	
	Wheatfen	A. R. J.	1936	(1)
		R. Hancy	1989	(80)
<i>Metellina (=Meta) mengei</i>				Common
	Wheatfen	R. Hancy	1993	(80)
<i>Metellina (=Meta) merianae</i>				Local
	Strumpshaw	M. E. A. S.	1994	
	Wheatfen	A. R. J.	1936	(1)
		M. E. A. S.	1994	
<i>M. merianae</i> var. <i>celata</i>				
	Strumpshaw	M. E. A. S.	1993	
<i>Zygiella x-notata</i>				Common
	Buckenham	M. E. A. S.	1993	
	Cantley	M. E. A. S.	1993	
	Strumpshaw	M. E. A. S.	1993	
	Surlingham	M. E. A. S.	1993	
	Wheatfen	A. R. J.	1936	(1)
		M. E. A. S.	1994	
Common around buildings.				
<i>Zygiella atrica</i>				Common
	Wheatfen	A. R. J.	1936	(1)
Family ARANEIDAE (Orb-web builders).				
<i>Araneus diadematus</i> (Garden-cross spider).				Common
	Buckenham	M. E. A. S.	1993	
	Cantley	M. E. A. S.	1993	
	Coldham Hall	M. E. A. S.	1993	
	Strumpshaw	M. E. A. S.	1993	
	Wheatfen	M. J. D. C.	1937	(1)

<i>Araneus quadratus</i>					Common
	Coldham Hall	M. E. A. S.	1993		
	Wheatfen	M. J. D. C.	pre. 1946	(1)	
<i>Araneus marmoreus</i> var. <i>pyramidatus</i> (= <i>raji</i> s. <i>betulae</i>)					Local
	Coldham Hall	M. E. A. S.	1993		
	Wheatfen	E. A. E.	1936	(1)	
		E. A. E.	1957	(1)	
<i>Larinioides</i> (= <i>Nuctenea</i>) <i>cornutus</i>					Common
	Coldham Hall	M. E. A. S.	1993		
	Strumpshaw	M. E. A. S.	1993		
	Wheatfen	E. A. E.	1939	(1)	
		M. E. A. S.	1994		
<i>Larinioides</i> (= <i>Nuctenea</i>) <i>sclopetarius</i>					Local
	Buckenham	M. E. A. S.	1993		
	Rockland Broad	G. M. C.	1992		
	Strumpshaw	G. M. C.	1994		
An uncommon and visually impressive spider, usually found on old buildings near water. Recorded from around Buckenham water-pump, under a bridge over the Lackford Run at Strumpshaw and, in what must be its natural habitat, on dead, partially submerged willows (<i>Salix</i> spp.) at Rockland.					
<i>Larinioides</i> (= <i>Nuctenea</i>) <i>patagiatus</i>					Local
	Wheatfen	A. R. J.	1936	(1)	
<i>Nuctenea umbratica</i>					Common
	Brundall Marsh	A. W.	1990	(66)	
	Wheatfen	M. J. D. C.	1942	(1)	
		M. E. A. S.	1994		
<i>Araniella cucurbitina</i>					Common
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	A. R. J.	1937	(1)	
		E. A. E.	1945	(1)	
<i>Cyclosa conica</i>					Local
	Wheatfen	E. A. E.	1944	(1)	
		E. A. E.	1945	(1)	

Family THERIDIOSOMATIDAE

<i>Theridiosoma gemmosum</i>					N/b
	Strumpshaw	D. A. P.	1988	(51)	
The only British member of this family. Found in wet areas of S. Britain, where it builds a small orb-web in low vegetation.					

Family LINYPHIIDAE (Money spiders).

<i>Ceratinella brevipes</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
		M. E. A. S.	1994		
	Wheatfen	M. E. A. S.	1994		
<i>Walkenaeria acuminata</i>					Common
	Wheatfen	A. R. J.	1936	(1)	
<i>Walkenaeria antica</i>					Common
	Strumpshaw	A. W.	1990	(66)	
<i>Walkenaeria alticeps</i>					Local
	Strumpshaw	D. A. P.	1989	(51)	
<i>Walkenaeria nodosa</i>					Local
	Strumpshaw	D. A. P.	1989	(51)	
		M. E. A. S.	1992		
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		
Restricted to marshes and damp areas.					
<i>Walkenaeria atrotibialis</i>					Local
	Strumpshaw	D. A. P.	1988	(51)	
		M. E. A. S.	1994		
<i>Walkenaeria nudipalpis</i>					Common
	Wheatfen	J. G.	1971	(71)	
		M. E. A. S.	1994		
<i>Walkenaeria unicornis</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
		M. E. A. S.	1992		
	Wheatfen	A. R. J.	1936	(1)	
		E. D.	1971	(71)	
<i>Walkenaeria kochi</i>					Local
	Wheatfen	J. G.	1971	(71)	
		M. E. A. S.	1994		

<i>Walkenaeria vigilax</i>					Local
	Strumpshaw	D. A. P.	1989	(51)	
	Usually found in moss and grass in wet, open areas.				
<i>Dicymbium nigrum</i>					Local
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	A. R. J.	1936	(1)	
<i>Entelecara erythropus</i>					Local
	Wheatfen	M. E. A. S.	1994		
<i>Entelecara omissa</i>					N/a
	Strumpshaw	D. A. P.	1988	(51)	
	Wheatfen	R. D.	1971	(71)	
	Found in tussock sedge (<i>Carex paniculata</i>) and leaf litter. A fenland money spider, with most records coming from East Anglia.				
<i>Hylyphantes graminicola</i>					Local
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	E. A. E.	pre. 1987	(3)	
<i>Gnathonarium dentatum</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
		M. E. A. S.	1992		
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		
<i>Gongylidium rufipes</i>					Common
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	A. R. J.	1937	(1)	
		M. E. A. S.	1994		
<i>Hypomma bituberculatum</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
	Wheatfen	E. D.	1971	(71)	
		M. E. A. S.	1994		
<i>Hypomma fulvum</i>					N/a
	Strumpshaw	D. A. P.	1988	(51)	
		D. A. P.	1989	(51)	
	Wheatfen	A. R. J.	1936	(1)	
	First British record was at Wheatfen in 1936. A money spider of eastern wetlands which lays its egg sacs in the flower heads of <i>Phragmites</i> . Bright orange cephalothorax (head) and open fen habitat are quite distinctive.				

<i>Baryphyma trifons</i>					Local
	Strumpshaw	D. A. P.	1988	(51)	
		D. A. P.	1989	(51)	
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		

A small wetland spider, commoner in Northern UK.

<i>Maso sundevalli</i>					Common
	Strumpshaw	A. W.	1990	(66)	

<i>Podicnemis pumila</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	

<i>Podicnemis juncea</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
		M. E. A. S.	1994		

<i>OEdothorax gibbosus</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
	Wheatfen	E. A. E.	pre. 1987	(3)	
		M. E. A. S.	1994		

<i>OE. gibbosus f. tuberosus</i>					
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	R. D.	1971	(71)	
		M. E. A. S.	1994		

<i>OEdothorax fuscus</i>					Common
	Buckenham	M. E. A. S.	1993		
	Strumpshaw	D. A. P.	1988-90	(51)	
		M. E. A. S.	1994		
	Wheatfen	R. Hancy	1989	(80)	
		M. E. A. S.	1994		

<i>OEdothorax retusus</i>					Common
	Buckenham	M. E. A. S.	1993		
	Strumpshaw	D. A. P.	1988-90	(51)	
		M. E. A. S.	1994		
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		

<i>Silometopus elegans</i>					Local
	Strumpshaw	D. A. P.	1988	(51)	
		M. E. A. S.	1994		
	Wheatfen	J. G.	1971	(71)	
		M. E. A. S.	1994		

A rare wetland spider. Widespread at low density in the Valley.

<i>Cnephalocotes obscurus</i>					Local
	Strumpshaw	D. A. P.	1988	(51)	
	Wheatfen	A. R. J.	1936	(1)	
<i>Tapinocyba insecta</i>					Local
	Strumpshaw	D. A. P.	1988	(51)	
A very local southern species.					
<i>Lophomma punctatum</i>					Local
	Strumpshaw	D. A. P.	1989	(51)	
		M. E. A. S.	1992		
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		
A wetland species.					
<i>Gongylidiellum vivum</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
		M. E. A. S.	1992		
	Wheatfen	J. G.	1971	(71)	
<i>Micrargus herbigradus</i>					Common
	Wheatfen	M. E. A. S.	1994		
<i>Erigonella heimalis</i>					Common
	Wheatfen	A. R. J.	1936	(1)	
<i>Savignia frontata</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
		A. W.	1990	(66)	
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		
<i>Diplocephalus cristatus</i>					Common
	Buckenham	M. E. A. S.	1994		
<i>Diplocephalus permixtus</i>					Common
	Wheatfen	E. D.	1971	(71)	
		M. E. A. S.	1994		
<i>Diplocephalus latifrons</i>					Common
	Wheatfen	A. R. J.	1936	(1)	
<i>Diplocephalus picinus</i>					Common
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	M. E. A. S.	1994		

<i>Erigone dentipalpis</i>				Common
	Strumpshaw	M. E. A. S.	1994	
	Wheatfen	A. R. J.	1936	(1)
		M. E. A. S.	1994	

Appears to occur only in the dryer areas of the Valley.

<i>Erigone atra</i>				Common
	Buckenham	M. E. A. S.	1993	
	Strumpshaw	D. A. P.	1988-90	(51)
		M. E. A. S.	1992	
	Wheatfen	A. R. J.	1936	(1)
		M. E. A. S.	1994	

<i>Donacochara speciosa</i>				N/a
	Strumpshaw	D. A. P.	1988	(51)
		D. A. P.	1989	(51)
	Wheatfen	A. R. J.	1936	(1)
		J. G.	1971	(71)

Restricted to eastern fens.

<i>Leptarhoptrum robustum</i>				Common
	Strumpshaw	D. A. P.	1988-90	(51)
	Wheatfen	E. D.	1971	(71)

<i>Drepanotylus uncatu</i>				Local
	Wheatfen	A. R. J.	1936	(1)
		E. D.	1971	(71)

<i>Carorita paludosa</i>				RDB 2
	Wheatfen	E. D.	1971	(3)
		M. E. A. S.	1994	

An very rare money spider from bogs and marshes. First described by Duffey in 1971 from a site in Ireland. It is known at five additional sites, Hickling, Woodbastwick, Sutton and How Hill in Broadland, and a site in Somerset (Deborah Procter pers. comm.). Duffey and his party recorded 21 specimens of the species on Alder Carr Marsh in an area of *Juncus subnodulosus* on 17.9.71. The record appears to have been subsequently overlooked.

<i>Aphileta misera</i>				Local
	Strumpshaw	D. A. P.	1989	(51)

A wetland spider.

<i>Porrhomma pygmaeum</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
		M. E. A. S.	1994		
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		
<i>Porrhomma convexum</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
		M. E. A. S.	1992		
	Wheatfen	M. E. A. S.	1992		
		M. E. A. S.	1994		
<i>Porrhomma pallidum</i>					Local
	Strumpshaw	M. E. A. S.	1992		
<i>Porrhomma microphthalmum</i>					Local
	Buckenham	M. E. A. S.	1993		
<i>Porrhomma egeria</i>					Local
	Wheatfen	A. R. R. S.	1971	(71)	
<i>Agyneta decora</i>					Local
	Strumpshaw	D. A. P.	1988	(51)	
		D. A. P.	1989	(51)	
<i>Meioneta saxatilis</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
<i>Maro sublestus</i>					N/a
	Wheatfen	M. E. A. S.	1994		
	First Norfolk record. A single female was taken during May in a pitfall trap amongst alders (<i>Alnus glutinosa</i>) on Alder Carr Fen. Known from only eight sites and usually only by single specimens. Its habitat is litter in wet woodland.				
<i>Centromerus sylvaticus</i>					Common
	Wheatfen	M. E. A. S.	1994		
<i>Centromerus incultus</i>					RDB 2
	Wheatfen	E. D.	1971	(71)	
	Found in fen litter, habitat piles and sedge beds. Occurs in carr but not closed canopy woodland. Management should include rotational mowing of fens, and the creation of habitat piles with the resulting cut vegetation.				
<i>Tallusia experta</i>					Common
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		

<i>Saaristoa abnormis</i>					Common
	Wheatfen	A. R. J.	1936	(1)	
<i>Macrargus rufus</i>					Common
	Wheatfen	A. R. J.	1936	(1)	
<i>Bathyphantes approximatus</i>					Local
	Strumpshaw	D. A. P.	1988	(51)	
		D. A. P.	1989	(51)	
	Wheatfen	M. J. D. C.	pre. 1946	(1)	
		M. E. A. S.	1994		
A wetland species.					
<i>Bathyphantes gracilis</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
		M. E. A. S.	1992		
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		
<i>Bathyphantes parvulus</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
		M. E. A. S.	1994		
<i>Kaestneria dorsalis</i>					Common
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		
<i>Kaestneria pullata</i>					Common
	Strumpshaw	D. A. P.	1988-90	(51)	
		A. W.	1990	(66)	
<i>Diplostyla concolor</i>					Common
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		
<i>Drapetisca socialis</i>					Common
	Wheatfen	A. R. J.	1936	(1)	
		R. Hancy	1988	(80)	
<i>Floronia bucculenta</i>					Local
	Strumpshaw	D. A. P.	1989	(51)	
	Wheatfen	A. R. J.	1936	(1)	
Found in marshy situations.					

<i>Taraxacum setosus</i>					Local
	Strumpshaw	D. A. P.	1988	(51)	
		D. A. P.	1989	(51)	
	Wheatfen	E. D.	1971	(71)	
Associated with wetlands.					
<i>Lepthyphantes minutus</i>					Common
	Brundall Marsh	A. W.	1990	(66)	
	Wheatfen	A. R. J.	1936	(1)	
<i>Lepthyphantes alacris</i>					Common
	Strumpshaw	A. W.	1990	(66)	
<i>Lepthyphantes obscurus</i>					Local
	Wheatfen	R. Hancy	1989	(80)	
<i>Lepthyphantes tenuis</i>					Common
	Brundall Marsh	A. W.	1990	(66)	
	Buckenham	M. E. A. S.	1993		
	Strumpshaw	D. A. P.	1988-90	(51)	
		M. E. A. S.	1992		
	Wheatfen	A. R. J.	1936	(1)	
		M. E. A. S.	1994		
<i>Lepthyphantes zimmermanni</i>					Common
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	A. R. J.	1936	(1)	
<i>Lepthyphantes flavipes</i>					Common
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	A. R. J.	1936	(1)	
<i>Lepthyphantes pallidus</i>					Local
	Strumpshaw	M. E. A. S.	1994		
<i>Helophora insignis</i>					Common
	Wheatfen	E. A. E.	pre. 1987	(3)	
<i>Linyphia triangularis</i>					Common
	Buckenham	M. E. A. S.	1993		
	Coldham Hall	M. E. A. S.	1993		
	Strumpshaw	M. E. A. S.	1993		
	Wheatfen	A. R. J.	1936	(1)	
		R. Hancy	1989	(80)	
<i>Linyphia hortensis</i>					Common
	Wheatfen	M. E. A. S.	1994		

<i>Linyphia (Neriene) montana</i>					Common
Wheatfen	M. J. D. C.	pre. 1946	(1)		
	R. Hancy	1989	(80)		
<i>Linyphia (Neriene) clathrata</i>					Common
Strumpshaw	A. W.	1990	(66)		
	M. E. A. S.	1994			
Wheatfen	A. R. J.	1936	(1)		
<i>Linyphia (Neriene) peltata</i>					Common
Strumpshaw	A. W.	1990	(66)		
	M. E. A. S.	1994			
Wheatfen	A. R. J.	1936	(1)		
	R. Hancy	1989	(80)		
<i>Microlinyphia impigra</i>					Local
Strumpshaw	D. A. P.	1989	(51)		
Wheatfen	J. G.	1971	(71)		
Found on heathlands and wetlands, currently extending its range.					
<i>Allomengea vidua</i>					Local
Strumpshaw	D. A. P.	1988	(51)		
	M. E. A. S.	1992			
Wheatfen	A. R. J.	1936	(1)		
	E. D.	1971	(71)		
Usually found in wet habitats.					

Order Pseudoscorpiones (Pseudo-scorpions).

Taxonomy follows G. Legg and R.E. Jones (1988).

Family CHTHONIIDAE

<i>Cthonius tetrachelatus</i>					N
Wheatfen	A. E. E.	1941	(1)		
<i>Cthonius ischnochelus</i>					Common
Wheatfen	A. E. E.	1940	(1)		
	A. E. E.	1942	(1)		
A southern species.					

Family CHERNETIDAE

<i>Lamprochernes nodosus</i>					Unknown
Wheatfen	E. A. E.	1971	(81)		
Recorded from a dunghill.					
<i>Pselaphochernes scorpioides</i>					Local
Wheatfen	E. A. E.	1946	(48)		
This pseudo-scorpion has a scattered distribution.					
<i>Chernes cimicoides</i>					Local
Wheatfen	A. E. E.	1940	(1)		
	A. E. E.	1942	(1)		
A woodland species.					

Order Opiliones (Harvestmen).

The original harvestman record cards are missing from the Wheatfen records held in the Castle Museum. As a result many records are taken from A.E. Ellis 1942.

Family NEMASTOMATIDAE

<i>Nemastoma bimaculatum</i>					Common
	Rockland	E. T. D.	1936	(44)	
	Strumpshaw	D. A. P.	1989	(57)	
		M. E. A. S.	1994		
	Wheatfen	A. E. E.	1941	(24)	
		M. E. A. S.	1994		

<i>Mitostoma chrysomelas</i>					Common
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	A. E. E.	1941	(24)	

Family LEIOBUNIIDAE

<i>Leiobunum rotundum</i>					Common
	Wheatfen	A. E. E.	1941	(24)	

<i>Leiobunum blackwallii</i>					Common
	Wheatfen	A. E. E.	1941	(24)	
		D. A. P.	1989	(57)	

Family PHALANGIIDAE

<i>Oligolophus tridens</i>					Common
	Strumpshaw	D. A. P.	1988	(57)	
		D. A. P.	1989	(57)	
	Wheatfen	A. E. E.	1941	(24)	

<i>Paroligolopus (=Oligolopus) agrestis</i>					Common
	Strumpshaw	D. A. P.	1989	(57)	
	Wheatfen	A. E. E.	1941	(24)	

<i>Lacinius ephippiatus</i>					Common
	Strumpshaw	D. A. P.	1988	(57)	
		D. A. P.	1989	(57)	
	Wheatfen	A. E. E.	1941	(24)	

<i>Mitopus morio</i>					Common
	Strumpshaw	D. A. P.	1988	(57)	
		D. A. P.	1989	(57)	
	Wheatfen	A. E. E.	1941	(24)	

<i>Phalangium opilio</i>					Common
	Wheatfen	A. E. E.	1941	(24)	
<i>Opilio parietinus</i>					Common
	Wheatfen	P. Withers	1986	(63)	
<i>Opilio saxatilis</i>					Common
	Wheatfen	A. E. E.	1941	(24)	
	The identification of this harvestman was confirmed. It was rather rare at Wheatfen.				
<i>Megabunus diadema</i>					Common
	Wheatfen	A. R. J.	1941	(24)	
	Rare at Wheatfen in the woodland. A rather uncommon species.				
<i>Riaena (=Platybunus) triangularis</i>					Common
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	A. E. E.	1941	(24)	
		M. E. A. S.	1994		
<i>Lophopilio palpinalis</i>					Common
	Strumpshaw	D. A. P.	1988	(57)	
	Wheatfen	A. E. E.	1941	(24)	

Order Acariformes (Ticks and mites).

Taxonomy follows Turk (1953).

Sub-order Parasitiformes

Family Parasitidae

<i>Pergamasus crassipes</i>	Wheatfen	E. A. E.	1944	(1)
-----------------------------	----------	----------	------	-----

Sub-order Trombidiformes

Family TETRANYCHIDAE

<i>Bryobia praetiosa</i>	Wheatfen	E. A. E.	1939	(1)
		E. A. E.	1943	(1)

Family EYLAIIDAE

<i>Eylais rimosa</i>	Wheatfen	M. J. D. C.	1935	(1)
A water mite.				

Family LIMNESIIDAE

<i>Limnesia fulgida</i>	Wheatfen	M. J. D. C.	1935	(1)
A water mite.				

Sub-order Sarcoptiformes

Family BELBIDAE

<i>Damaeus clavipes</i>	Wheatfen	E. A. E.	1938	(1)
<i>Damaeus onustus</i>	Wheatfen	E. A. E.	1938	(1)

Sub-order Tetrápodili (Gall mites).

Family BRIOPHYIDAE

<i>Eriophyes loevis</i>	Wheatfen	M. J. D. C.	1936	(1)
Galls on alder (<i>Alnus glutinosa</i>).				
<i>Cecidophyes convoluens</i>	Wheatfen	M. J. D. C.	pre. 1946	(1)
Galls on spindle (<i>Euonymus europaeus</i>).				
<i>Cecidophyes tetanothrix</i>	Wheatfen	M. J. D. C.	1938	(1)
		E. A. E.	1939	(1)
Galls on goat sallow (<i>Salix caprea</i>).				
<i>Phyllocoptes fraxini</i>	Wheatfen	E. A. E.	1939	(1)
Galls on ash (<i>Fraxinus excelsior</i>).				

The status of the following as species was described as uncertain by Turk (1953).

<i>Eriophyes crataegi</i>	Wheatfen	M. J. D. C.	1936	(1)
		M. J. D. C.	1938	(1)
Galls on hawthorn (<i>Crataegus monogyna</i>).				
<i>Phyllocoptes acericola</i>	Wheatfen	M. J. D. C.	1936	(1)
		E. A. E.	1937	(1)
Galls on sycamore (<i>Acer pseudoplatanus</i>).				

No attempt has been made to arrange the following mites in taxonomic order.

<i>Aceria pseudoplatani</i>	Wheatfen	L. E.	1991	(55)
<i>Eriophyes avellanae</i>	Wheatfen	L. E.	1991	(55)
<i>Eriophyes gallii</i>	Wheatfen	L. E.	1989	(55)

<i>Eriophyes convolvens</i>	Wheatfen	L. E.	1991	(55)
<i>Eriophyes laevis inangulis</i>	Wheatfen	L. E.	1991	(55)
<i>Eriophyes goniothorax typicus</i>	Wheatfen	L. E.	1991	(55)
<i>Eriophyes macrorhyncus</i>	Wheatfen	L. E.	1991	(55)
<i>Eriophyes nervisequus v. maculifera</i>	Wheatfen	L. E.	1991	(55)
<i>Eriophyes pyri</i>	Wheatfen	L. E.	1989	(55)
<i>Eriophyes pustulatum</i>	Wheatfen	M. J. D. C.	?	(3)
	Galls on aspen (<i>Populus tremula</i>).			
<i>Eriophyes ulmi</i>	Wheatfen	E. A. E.	1984	(3)
	Galls on english elm (<i>Ulmus procera</i>).			

PHYLUM TARDIGRADA (Water-bears).

Order Eutardigrada

Family MILNESIIDAE

<i>Milnesium tardigradum</i>	Wheatfen	E. A. E.	1943	(1)
------------------------------	----------	----------	------	-----

PHYLUM UNIRAMIA (Insects, centipedes, millipedes and allies).

SUB-PHYLUM MYRIAPODA (Centipedes, millipedes and allies).

The classes Symphyla and Pauropoda are probably present, but have never been recorded.

Class Diplopoda (Millipedes).

Taxonomy follows Millipedes J.G. Blower (1985).

Order Polyxenida

Family POLYXENIDAE

<i>Polyxenus lagurus</i> (Hairy millipede)				Local
Buckenham	M.E.A.S.	1993		
	M.E.A.S.	1994		
Wheatfen	E.A.E.	?	(3)	

Order Glomerida

Family GLOMERIDAE

<i>Glomeris marginata</i> (Pill millipede).				Common
Strumpshaw	M.E.A.S.	1994		
Wheatfen	M.J.D.C.	1937	(1)	
	M.E.A.S.	1994		

Order Chordeumatida

Family CRASPEDOSOMATIDAE

<i>Craspedosoma rawlinsii</i>				Local
Wheatfen	R.E.J.	1994		

A rare animal in England. Usually found in woods and moist places, often near a water course. This appears to be the first Broadland record. At Wheatfen it is to be associated with trees in sallow and alder carr.

Order Julida

Family JULIDAE

<i>Tachypodoiulus niger</i>					Common
	Wheatfen	E. A. E.	1968	(3)	
<i>Cylindroiulus punctatus</i>					Common
	Wheatfen	?	1954	(57)	
		R. E. J.	1994		
<i>Ophiulus pilosus</i>					Common
	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	

Order Polydesmida

Family POLYDESMIDAE

<i>Polydesmus angustus</i>					Common
	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	
	Wheatfen	?	1953	(57)	
		E. A. E.	1979	(3)	
<i>Polydesmus inconstans (=coriaceus)</i>					Common
	Wheatfen	E. A. E.	1958	(3)	
	Uncommon, associated with disturbed soil.				
<i>Brachydesmus superus</i>					Common
	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	
	Wheatfen	R. E. J.	1994		

Class Chilopoda (Centipedes).

Taxonomy follows Eason (1964).

Order Geophilomorpha

Family GEOPHILIDAE

<i>Strigamia acuminata</i>					Local
Wheatfen	R. E. J.	1994			
A woodland species.					
<i>Geophilus carpophagus</i>					Common
Wheatfen	E. A. E.	1937	(1)		
	E. A. E.	1976	(3)		
A luminous woodland centipede.					
<i>Brachygeophilus truncarum</i>					Common
Wheatfen	R. E. J.	1994			

Order Lithobiomorpha

Family LITHOBIIDAE

<i>Lithobius forficatus</i>					Common
Wheatfen	E. A. E.	1971	(3)		
	R. E. J.	1994			
<i>Lithobius melanops</i>					Common
Wheatfen	R. E. J.	1994			
<i>Lithobius crassipes</i>					Common
Wheatfen	R. E. J.	1994			

SUB-PHYLUM HEXAPODA (Insects).

Class Diplurata (Two-tailed bristletails).

Although this group of small, soil dwelling insects have not been recorded in the Valley they are almost certainly present.

Class Oligoentoma (Springtails and allies).

Order Collembola (Springtails).

Family PODURIDAE

Podura aquatica

Wheatfen	M. J. D. C.	1937	(1)
	E. A. E.	1941	(1)

Family SMINTHURIDAE

Sminthurus aquaticus

Wheatfen	M. J. D. C.	1937	(1)
	E. A. E.	1941	(1)

Class Pterygota (Winged insects and allies).

Order Odonata (Dragonflies and damselflies).

Taxonomy follows Hammond (1985).

Family COENAGRIIDAE (Damselflies).

Red-eyed damselfly (<i>Erythronma najas</i>)				Local
Rockland	C. M.	1901	(18)	
	E. T. D.	1938	(18)	
Strumpshaw	D. J. P. M.	1986	(57)	
	M. B.	1989	(52)	
Wheatfen	E. T. D.	1940	(46)	

Quite common at Strumpshaw in some years. Otherwise scarce in the Mid-Yare.

Azure damselfly (<i>Coenagrion puella</i>).				Common
Cantley	R. J. D.	1974	(5)	
Coldham Hall	A. R. B.	1986	(27)	
Rockland	E. T. D.	1937	(3)	
	A. R. B.	1988	(27)	
Strumpshaw	K. G. S.	1982	(18)	
	M. E. A. S.	1994		
Surlingham	A. R. B.	1989	(14)	
S. Church Marsh	M. I. W.	1985	(27)	
	A. R. B.	1988	(27)	
Surl. Broad	R. J. D.	1977	(36)	
Wheatfen	M. J. D. C.	1934	(1)	
	A. R. B.	1987	(14)	

Variable damselfly (<i>Coenagrion pulchellum</i>).				N/b
Buckenham Carr	M. B.	1990	(52)	
Coldham Hall	A. R. B.	1986	(27)	
Rockland	C. M.	1901	(18)	
	E. T. D.	1937	(3)	
Strumpshaw	K. G. S.	1982	(18)	
	M. B.	1990	(14)	
Surlingham	A. R. B.	1987	(27)	
	A. R. B.	1988	(27)	
S. Church Marsh	A. R. B.	1986	(57)	
Wheatfen	M. J. D. C.	1934	(1)	
	M. J. D. C.	1939	(1)	

Less common than the preceding species in the Mid-Yare. Perhaps commonest around Buckenham Carr although the Odonata of this area is under-recorded. Prefers dykes sheltered by bushes or tall vegetation.

Common blue damselfly (<i>Enallagma cyathigerum</i>).				Common
Coldham Hall	A.R.B.	1988	(27)	
Rockland	A.R.B.	1987	(14)	
	A.R.B.	1988	(27)	
Strumpshaw	K.G.S.	1982	(18)	
	M.B.	1991	(52)	
Surlingham	A.R.B.	1989	(14)	
S.Church Marsh	M.I.W.	1985	(27)	
	A.R.B.	1988	(27)	
Wheatfen	M.J.D.C.	1935	(1)	
	M.J.D.C.	1937	(1)	

Large red damselfly (<i>Pyrrhosoma nymphula</i>).				Common
Rockland	E.T.D.	1937	(3)	
Strumpshaw	P.D.W.	1979	(6)	
	M.B.	1989	(52)	
Wheatfen	M.J.D.C.	1934	(1)	
	E.A.E.	1946	(1)	

Generally scarce in the Mid-Yare with only a handful of adult records. Some of the larvae records from Strumpshaw may be the result of misidentifications.

Blue-tailed damselfly (<i>Ischnura elegans</i>).				Common
Brundall Marsh	S.P.	1987	(57)	
Buckenham	R.J.D.	1974	(5)	
	M.E.A.S.	1993		
Cantley	J.B.	1993	(50)	
Coldham Hall	A.R.B.	1986	(27)	
	A.R.B.	1988	(27)	
Rockland	C.M.	1901	(18)	
	A.R.B.	1988	(27)	
Rockland Broad	E.T.D.	1937	(3)	
	A.R.B.	1987	(14)	
Strumpshaw	M.B.	1980	(52)	
	M.E.A.S.	1994		
Surlingham	A.R.B.	1989	(14)	
Surl. Broad	D.A.S.+S.G.B.	1993	(61)	
S.Church Marsh	M.I.W.	1985	(27)	
	S.G.B. et al.	1993	(61)	
Wheatfen	M.J.D.C.	1934	(1)	
	R.B.	1994	(54)	

<i>I. elegans f. rufescens</i>				
Rockland	E.T.D.	1937	(3)	
Strumpshaw	K.G.S.	1982	(18)	
	K.G.S.	1984	(18)	

<i>I. elegans f. infuscans</i>				
Strumpshaw	K.G.S.	1982	(18)	

<i>I. elegans f. violacea</i>				
Strumpshaw	K.G.S.	1983	(18)	

Abundant in Mid-Yare.

Family LESTIDAE (Damselflies).

Emerald damselfly (<i>Lestes sponsa</i>).				Common
Buckenham	R. J. D.	1974	(5)	
	J. B.	1993	(50)	
Cantley	J. B.	1993	(50)	
Rockland	A. R. B.	1986	(27)	
	A. R. B.	1987	(27)	
Strumpshaw	K. G. S.	1982	(18)	
	M. B.	1991	(52)	
Surlingham	A. R. B.	1989	(14)	
S. Church Marsh	M. I. W.	1985	(27)	
	S. G. B. et al.	1993	(61)	
Wheatfen	E. A. E.	1934	(1)	
	A. R. B.	1988	(27)	

This species is much commoner in the Mid-Yare than once was the case. The Wheatfen card file, which covers the period of 1933 to 1945, contains only one record of this damselfly.

Family CALOPTERYGIDAE (Demoiselles).

Banded agrion (<i>Calopteryx splendens</i>).				Local
Strumpshaw	M. B.	1985	(52)	
	M. B.	1989	(52)	Dr 1985
Surlingham	A. R. B.	1989	(14)	
S. Church Marsh	M. I. W.	1985	(27)	
	A. R. B.	1988	(27)	
Wheatfen	R. S.	1940	(1)	
	R. S.	1943	(1)	

Family AESHNIDAE (Hawker dragonflies).

Hairy dragonfly (<i>Brachytron pratense</i>).				N/b
Coldham Hall	A. R. B.	1988	(27)	
Rockland	E. T. D.	1948	(46)	
	A. R. B.	1987	(27)	
Strumpshaw	K. G. S.	1982	(18)	
	M. B.	1991	(52)	Dr 1985
Surlingham	A. R. B.	1989	(14)	
S. Church Marsh	A. R. B.	1988	(27)	
Wheatfen	M. J. D. C.	1936	(1)	
	M. E. A. S.	1994		

Single specimens usually recorded in recent years on the south side of the river, but commoner on the north side. A Broadland speciality, although also found in lowland areas of the south west.

Southern hawker (<i>Aeshna cyanea</i>).				Common
Brundall Marsh	S.P.	1987	(57)	
Coldham Hall	A.R.B.	1986	(27)	
	A.R.B.	1988	(27)	
Rockland	D.L.	1987	(57)	
Strumpshaw	K.G.S.	1982	(18)	
	M.B.	1991	(52)	
Surlingham	A.R.B.	1986	(27)	
	A.R.B.	1989	(14)	
S.Church Marsh	M.I.W.	1985	(27)	
	A.R.B.	1988	(27)	
Wheatfen	M.J.D.C.	1936	(1)	
	A.R.B.	1987	(14)	

Rather uncommon at Surlingham in recent years.

Brown hawker (<i>Aeshna grandis</i>).				Common
Brundall Marsh	S.P.	1987	(57)	
Buckenham	R.J.D.	1974	(5)	
Coldham Hall	A.R.B.	1987	(27)	
	A.R.B.	1988	(27)	
Rockland	D.L.	1987	(57)	
	A.R.B.	1988	(27)	
Strumpshaw	M.B.	1980	(52)	
	M.B.	1991	(52)	
Surlingham	A.R.B.	1986	(27)	
	A.R.B.	1989	(14)	
S.Church Marsh	M.I.W.	1985	(27)	
	A.R.B.	1988	(27)	
Wheatfen	M.J.D.C.	1935	(1)	
	A.R.B.	1987	(14)	

Norfolk hawker (<i>Aeshna isosceles</i>)				RDB 1
Rockland	A.R.B.	1987	(27)	
Strumpshaw	M.B.	1980	(52)	
	D.R.	1994		
Surlingham	A.R.B.	1989	(14)	
S.Church Marsh	A.R.B.	1988	(27)	

Rare and confined in this country to the Broadland area. Generally recorded as single specimens. Protected under Schedule 5 of the Wildlife and Countryside Act 1981. Appears to be strongly associated with a high density of water soldier (*Stratiotes aloides*). Long rotation dyke management and unpolluted water will benefit both species (see text for more details).

Common hawker (<i>Aeshna juncea</i>)				Common
Strumpshaw	M.B.	1980	(52)	

A dragonfly with a western distribution. This record requires confirmation.

Migrant hawker (<i>Aeshna mixta</i>).				Local
Buckenham	M.E.A.S.	1993		
Coldham Hall	A.R.B.	1988	(27)	
Rockland	A.R.B.	1986	(27)	
	D.L.	1987	(57)	
Strumpshaw	K.G.S.	1982	(18)	
	M.E.A.S.	1993		
Surlingham	A.R.B.	1987	(27)	
	A.R.B.	1989	(14)	
S.Church Marsh	M.I.W.	1985	(27)	
	A.R.B.	1988	(27)	
Wheatfen	R.S.	1937	(1)	
	M.J.D.C.	1944	(1)	

At the time of the first records at Wheatfen this was the rarest dragonfly found on the reserve, and was also the most northerly record for this species. Since that time it has extended its range and has become widely common.

Emperor dragonfly (<i>Anax imperator</i>).				Common
Strumpshaw	N.M.	1986	(52)	
	M.B.	1987	(52)	

Records of this species from the Broadland are rare. The species was also recorded at Strumpshaw in 1986 by D.Miller (57).

Family LIBELLULIDAE (Darter dragonflies).

Black-tailed skimmer (<i>Orthetrum cancellatum</i>).				Local
Buckenham	J.B.	1993	(50)	
Coldham Hall	A.R.B.	1986	(27)	
	A.R.B.	1988	(27)	
Rockland	A.R.B.	1986	(27)	
	A.R.B.	1987	(27)	
Strumpshaw	K.G.S.	1982	(18)	
	M.B.	1991	(52)	
Surlingham	A.R.B.	1986	(27)	
	A.R.B.	1989	(14)	
Surl. Broad	D.A.S.+S.G.B.	1993	(61)	
S.Church Marsh	M.I.W.	1985	(27)	
	A.R.B.	1988	(27)	
Wheatfen	A.R.B.	1987	(14)	
	A.R.B.	1988	(27)	

A southern dragonfly, usually found around large water bodies.

Broad-bodied chaser (<i>Libellula depressa</i>).				Common
Rockland	E. T. D.	1937	(3)	
Strumpshaw	M. B.	1989	(52)	
Wheatfen	M. J. D. C.	1938	(1)	
	M. J. D. C.	1945	(1)	

Scarce in Mid-Yare and possibly extinct as a breeding species.

Scarce chaser (<i>Libellula fulva</i>).				RDB 3
Buckenham	M. B.	1988	(52)	
Buckenham Carr	P. J. M.	1988	(57)	
	J. C.	1994		
Strumpshaw	K. G. S.	1987	(57)	
	M. B.	1988	(52)	

North of the river 1988 appears to have been a particularly good year for this rare species. Adults forage over emergent vegetation and rough grassland. High water quality, macrophyte dominated dykes and the maintenance of areas of rough grassland will benefit this species.

Four-spotted chaser (<i>Libellula quadrimaculata</i>).				Common
Rockland	E. T. D.	1937	(3)	
	A. R. B.	1987	(27)	
Strumpshaw	K. G. S.	1982	(18)	
	M. E. A. S.	1993		
Surlingham	A. R. B.	1986	(27)	
Wheatfen	M. J. D. C.	1937	(1)	
	M. J. D. C.	1945	(1)	

Ruddy darter (<i>Sympetrum sanguineum</i>).				N/b
Strumpshaw	S. P.	1987	(57)	
	M. B.	1991	(52)	
Rockland	D. L.	1987	(57)	
Wheatfen	E. A. E.	1937	(57)	
	M. J. D. C.	1944	(1)	

Scarce and usually only recorded singularly.

Common darter (<i>Sympetrum striolatum</i>).				Common
Coldham Hall	A. R. B.	1987	(27)	
	A. R. B.	1988	(27)	
Rockland	A. R. B.	1986	(27)	
	A. R. B.	1987	(27)	
Strumpshaw	M. B.	1980	(52)	
	M. B.	1991	(52)	
Surlingham	A. R. B.	1989	(14)	
S. Church Marsh	M. I. W.	1985	(27)	
	A. R. B.	1988	(27)	
Wheatfen	E. T. D.	1936	(46)	
	B. B. C. S.	1993	(60)	

Order Ephemeroptera (Mayflies).

Family CAENIS

<i>Caenis horaria</i>	Buckenham	C. F. M. + R. J. B.	1973	(37)	Common
<i>Caenis robusta</i>	Strumpshaw	M. J.	1987	(14)	Local
	Strump. Broad	M. J.	1987	(14)	
	Wheatfen	R. B.	1994	(54)	

Uncommon and restricted to the south-east.

Family BAETIDAE

<i>Cloeon dipterum</i>	Buckenham	R. J. D.	1974	(5)	Common
	Cantley	R. J. D.	1974	(5)	
	Rockland Broad	R. J. D.	1977	(36)	
	Strumpshaw	J. M.	1979	(14)	
	Surl. Broad	R. J. D.	1977	(36)	
	Wheatfen	E. A. E.	1969	(3)	
		R. B.	1994	(54)	

Order Plectoptera (Stoneflies).

Family NEMOURIDAE

<i>Nemurella inconspicua</i> (= <i>Nemoura pictetii</i>)					Common
	Strumpshaw	J. B.	1989	(18)	

<i>Nemoura cinerea</i>					Common
	Wheatfen	M. J. D. C.	1936	(1)	
		R. S.	1939	(1)	
Common around the Yare broads in spring (E. A. Ellis (18)).					

<i>Nemoura dubitans</i>					N
	Strumpshaw	J. B.	1989	(18)	
	Wheatfen	E. A. E.	1957	(3)	
		E. A. E.	1958	(3)	

This is the only rare member of this order found in East Anglia. It breeds in shallow water in wet reedbeds, apparently forming small isolated colonies. A falling water table and scrub encroachment are the major threats to the presence of this stonefly. If the positions of colonies were known, they could be managed sensitively.

Order Orthoptera (Grasshoppers and allies).

Family CONOCEPHALIDAE (Cone-heads).

<i>Conocephalus dorsalis</i> (Short-winged cone-head).				Local
Wheatfen	E. A. E.	1937	(1)	
	M. J. D. C.	1943	(1)	

Family MECONEMATIDAE (Bush crickets)

<i>Mecanema thalassinum</i> (Oak bush-cricket).				Common
Strumpshaw	M. B.	1985	(52)	
Wheatfen	E. A. E.	1975	(1)	
	R. E.	1993	(55)	

Family TETTIGONIIDAE (Bush-crickets).

<i>Pholidoptera griseoptera</i> (Dark bush-cricket)				Common
Claxton	R. L.	1990	(57)	
Coldham Hall	M. E. A. S.	1993		
Surlingham	P. H.	1989	(57)	
Wheatfen	E. A. E.	1936	(1)	
	B. B. C. S.	1993	(60)	

Apparently confined to the south side of the river.

Family PHANEROPTERIDAE (Bush-crickets).

<i>Leptophyes punctatissima</i> (Speckled bush-cricket).				Common
Strumpshaw	M. B.	1985	(52)	
Wheatfen	E. A. E.	1970	(1)	
	E. A. E.	1975	(1)	

Family GRYLLIDAE (True crickets).

<i>Acheta domestica</i> (House cricket).				Synanthropic
Brundall	E. A. E.	1938	(18)	
Wheatfen	E. A. E.	pre. 1987	(1)	

Both records are from moored boats.

Family TETRIGIDAE (Ground-hoppers).

<i>Tetrix ceperoi</i> (Cepero's ground-hopper).					N/a
Wheatfen	B.P.U.	1943	(2)		
This record, one of the first in the country, requires confirmation as it is very similar to <i>T. subulata</i> . All confirmed sites are within 15 miles of the south coast. See text for more details.					
<i>Tetrix subulata</i> (Slender ground-hopper).					Local
Strumpshaw	A.G.I.	1990	(57)		
Wheatfen	A.E.E.	1937	(1)		
	A.G.I.	1990	(57)		
<i>Tetrix undulata</i> (Common ground-hopper).					Common
Wheatfen	A.E.E.	1937	(1)		
	A.E.E.	1944	(1)		

Family ACRIDIDAE (Grasshoppers).

<i>Omocestus viridulus</i> (Common green grasshopper).					Common
Claxton	R.L.	1990	(57)		
Strumpshaw	M.B.	1985	(52)		
	D.I.R.	1992	(57)		
Surlingham	?	1920	(57)		
Wheatfen	A.E.E.	1937	(1)		
	E.A.E.	1944	(1)		
<i>Chorthippus albomarginatus</i> (Lesser marsh grasshopper).					Local
Buckenham	D.I.R.	1992	(57)		
Strumpshaw	M.B.	1985	(52)		
	D.I.R.	1992	(57)		
<i>Chorthippus brunneus</i> (Common field grasshopper).					Common
Buckenham	D.I.R.	1992	(57)		
Strumpshaw	M.B.	1985	(52)		
	D.I.R.	1992	(57)		
Wheatfen	A.E.E.	1937	(1)		
	E.A.E.	1944	(1)		
<i>Chorthippus parallelus</i> (Meadow grasshopper).					Common
Strumpshaw	M.B.	1985	(52)		
Wheatfen	M.J.D.C.	1937	(1)		

Order Blattaria (Cockroaches).

Family Blattidae

Ectobius sp.

Wheatfen M.J.D.C. 1937 (1)

N/b

None of the native cockroaches are common in natural habitats. The single specimen taken in this instance was a nymph with unusual markings. The specimen was sent to Dr. Hanitsch in Germany for expert opinion but was lost when Dr. Hanitsch died.

Order Dermaptera (Earwigs).

Family LABIIDAE

Labia minor (Lesser earwig).

Wheatfen E.A.E. 1937 (1)
E.A.E. 1982 (70)

Local

Family FORFICULIDAE

Forficula auricularia (Common earwig).

Buckenham M.E.A.S. 1993
Strumpshaw J.B. 1989 (18)
A.G.I. 1990 (57)
Wheatfen M.J.D.C. 1937 (1)
M.E.A.S. 1994

Common

Order Psocoptera (Booklice, barklice and dustlice).

This group is understudied and status designations have not been allocated .

Family PSOCIDAE

Loensia (=Trichadenotecnum) fasciata
Wheatfen P. Withers 1990 (63)

Family MESOPSOCIDAE

Elipsocus hyalinus
Wheatfen P. Withers 1990 (63)

Elipsocus westwoodi
Wheatfen P. Withers 1989 (63)

Family PSEUDOCAECILIIDAE

Peripsocus didymus
Wheatfen P. Withers 1989 (63)

Ectopsocus petersi
Wheatfen P. Withers 1988 (63)
P. Withers 1990 (63)

Family POLYPSOCIDAE

Stenopsocus immaculatus
Wheatfen P. Withers 1988 (63)

Stenopsocus stigmaticus
Wheatfen P. Withers 1989 (63)

Graphopsocus cruciatus
Wheatfen P. Withers 1989 (63)
P. Withers 1990 (63)

Caecilius atricornis
Wheatfen P. Withers 1989 (63)

Order Malloplaga (Biting lice).

Although this group has not been recorded in the Mid-Yare Valley, several species are almost certain to be present on the avian fauna.

Order Anoplura (Sucking lice).

Almost certainly present on mammalian hosts in the Valley.

Order Thysanoptera (Thrips).

Strumpshaw	M.K.D.	1987	(7)
	M.E.A.S.	1993	
Wheatfen	E.A.E.	1957	(3)
	M.E.A.S.	1994	

Abundant in the Valley but there are no species records.

Order Homoptera (Bugs without membranous forewing tips).

Status follows Kirby (1992).

Family CERCOPIDAE (Frog hoppers).

Ceropsis vulnerata

Wheatfen M. E. A. S. 1994

A large black and red frog hopper. Larvae form gregarious underground colonies.

Aphrophora alni

Common

Surl. Broad D. A. S. + S. G. B. 1993 (61)
Wheatfen M. J. D. C. 1936 (1)
M. J. D. C. 1939 (1)

Aphrophora forneri (= *costalis*)

Wheatfen E. A. E. 1938 (1)
E. A. E. 1941 (1)

Aphrophora major (= *alpina*)

Wheatfen M. J. D. C. 1937 (1)
E. A. E. 1939 (1)

Aphrophora salicina

Wheatfen E. A. E. 1941 (1)
E. A. E. 1943 (1)

Philaenus spumarius

Common

Strumpshaw P. K. 1988-90 (51)
Surl. Broad D. A. S. + S. G. B. 1993 (61)
Wheatfen M. J. D. C. 1941 (1)

Neophilaenus exclamationis

Wheatfen M. J. D. C. 1939 (1)

Neophilaenus lineatus

Common

Strumpshaw P. K. 1988-90 (51)
Wheatfen M. J. D. C. 1939 (1)

Family MEMBRACIDAE (Tree hoppers).

Centrotus cornutus

Wheatfen A. H. T. 1944 (1)

Family CICADELLIDAE (Leaf hoppers).

<i>Megophthalmus scabripennis</i>					
	Wheatfen	E.A.E.	pre.1965	(64)	
	Recorded from sedge fen containing bog myrtle (<i>Myrica gale</i>).				
<i>Megophthalmus scanicus</i>					Common
	Strumpshaw	P.K.	1988-90	(51)	
<i>Cicadella viridis</i>					Common
	Strumpshaw	P.K.	1988-90	(51)	
	Wheatfen	M.J.D.C.	1936	(1)	
		M.J.D.C.	1941	(1)	
<i>Evacanthus acuminatus</i>					Common
	Strumpshaw	P.K.	1988-90	(51)	
<i>Evacanthus interruptus</i>					Common
	Strumpshaw	P.K.	1988-90	(51)	
<i>Idiocerus albicans</i>					
	Wheatfen	M.J.D.C.	1937	(1)	
		M.J.D.C.	1939	(1)	
<i>Idiocerus confusus</i>					
	Wheatfen	M.J.D.C.	1939	(1)	
<i>Idiocerus fulgidus</i>					N/a
	Wheatfen	M.J.D.C.	1937	(1)	
		M.J.D.C.	1940	(1)	
	Ted Ellis records this species as being very common, mainly on poplars (Ellis, 1965 (64)). However Kirby (1992) refers to only a single British record of a specimen taken from a lombardy poplar (<i>Populus nigra</i> <i>var. italica</i>) at Costessy in the last century by J.Edwards. Without a voucher specimen this record must be suspect, an on site investigation may throw some light on this record. There are no known specimens of the native <i>Populus nigra var.</i> <i>betulifolia</i> in the Mid-Yare.				
<i>Idiocerus lituratus</i>					
	Wheatfen	M.J.D.C.	1939	(1)	
		M.J.D.C.	1941	(1)	
<i>Idiocerus populi</i>					
	Wheatfen	M.J.D.C.	1939	(1)	

<i>Idiocerus stigmatalis</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Iassus lanius</i>	Wheatfen	M. J. D. C.	1939	(1)	
		M. J. D. C.	1941	(1)	
<i>Oncopsis alni</i>	Wheatfen	M. J. D. C.	1937	(1)	
On alder (<i>Alnus glutinosa</i>).					
<i>Macropsis prasina</i>	Strumpshaw	P. K.	1989	(51)	Local
Feeds on goat willow (<i>Salix caprea</i>) and grey willow (<i>Salix cinerea</i>). Absent from the north of the country.					
<i>Agallia ribauti</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Aphrodes albifrons</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Aphrodes bicinctus</i>	Wheatfen	M. J. D. C.	1938	(1)	
		E. A. E.	1939	(1)	
<i>A. bicinctus s. aestuarinus</i> (= <i>A. aestuarinus</i>)	Wheatfen	M. J. D. C.	1938	(1)	
		E. A. E.	1939	(1)	
Now regarded as two species <i>A. bicincta</i> and <i>A. makorovi</i> . Most old records are considered to be <i>A. makorovi</i> which appears to be commoner (A. Helden pers. comm.). <i>A. bicinctus s. aestuarinus</i> is also now considered to be a separate species.					
<i>Aphrodes makorovi</i>	Strumpshaw	P. K.	1988-90	(51)	Common
<i>Aphrodes bifasciatus</i>	Strumpshaw	P. K.	1988-90	(51)	Common
<i>Aphrodes flavostriatus</i>	Strumpshaw	P. K.	1988-90	(51)	Common
	Wheatfen	M. J. D. C.	1938	(1)	
<i>Stroggylocephalus agrestis</i>	Strumpshaw	P. K.	1989	(51)	Local
		P. K.	1990	(51)	
Found in marshy places.					

<i>Stroggylocephalus livens</i>					N/b
	Strumpshaw	P.K.	1989	(51)	
		P.K.	1990	(51)	
	Surlingham	J. Edwards	1889	(11)	
Only known from three English counties outside East Anglia. Found in marshy places. Food plant unknown. May benefit from the increase in water quality associated with isolation.					
<i>Deltocephalus maculiceps</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Errastunus (=Adarrus) ocellaris</i>	Strumpshaw	P.K.	1988-90	(51)	Common
<i>Arthaldeus pascuellus</i>	Strumpshaw	P.K.	1988-90	(51)	Common
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Psammotettix cephalotes</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Paralimnus phragmitis</i>	Strumpshaw	P.K.	1989	(51)	N/b
		P.K.	1990	(51)	
Found in marshes, feeds on <i>Phragmites</i> .					
<i>Allygus mixtus</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Euscelis (=Conosanus) obsoletus</i>	Strumpshaw	P.K.	1988-90	(51)	Common
	Wheatfen	M. J. D. C.	1937	(1)	
		E. A. E.	1939	(1)	
<i>Euscelis plebejus (=incisus)</i>	Strumpshaw	P.K.	1988-90	(51)	Common
<i>Streptanus aemulans</i>	Strumpshaw	P.K.	1988-90	(51)	Common
	Wheatfen	M. J. D. C.	1938	(1)	
		M. J. D. C.	1939	(1)	
<i>Streptanus sordidus</i>	Strumpshaw	P.K.	1988-90	(51)	Common
<i>Macustus griseoscens</i>	Strumpshaw	P.K.	1988-90	(51)	Common
	Wheatfen	M. J. D. C.	1937	(1)	
		E. A. E.	1939	(1)	

<i>Thamnotettix dilutior</i>					
Wheatfen	M. J. D. C.	1939	(1)		
	M. J. D. C.	1941	(1)		
<i>Speudotettix subfuscus</i>					
Wheatfen	M. J. D. C.	1939	(1)		
<i>Lamprotettix octopunctatus</i> (=nitidulus)					
Wheatfen	M. J. D. C.	1939	(1)		
<i>Cicadula aurantipes</i>					
Wheatfen	M. J. D. C.	1938	(1)		
	M. J. D. C.	1939	(1)		
<i>Cicadula frontalis</i>					Common
Strumpshaw	P. K.	1988-90	(51)		
Wheatfen	E. A. E.	1939	(1)		
<i>Cicadula persimilis</i>					
Wheatfen	M. J. D. C.	1939	(1)		
<i>Cicadula quadrinotata</i>					Common
Strumpshaw	P. K.	1988-90	(51)		
Wheatfen	M. J. D. C.	1938	(1)		
	E. A. E.	1939	(1)		
<i>Cicadula saturata</i>					Local
Strumpshaw	P. K.	1989	(51)		
A wetland leafhopper.					
<i>Macrosteles fieberi</i>					N/b
Wheatfen	M. J. D. C.	1938	(1)		
A wetland species sometimes associated with clubrush (<i>Scirpus spp.</i>), but foodplant unknown.					
<i>Macrosteles septemnotatus</i>					Local
Strumpshaw	P. K.	1988	(51)		
	P. K.	1989	(51)		
Wheatfen	M. J. D. C.	1939	(1)		
Feeds on <i>Spiraea ulmaria</i> .					
<i>Macrosteles sexnotatus</i>					Common
Strumpshaw	P. K.	1988-90	(51)		
Wheatfen	M. J. D. C.	1939	(1)		
<i>Alebra albostriella</i>					
Wheatfen	M. J. D. C.	1937	(1)		
	M. J. D. C.	1941	(1)		

<i>Notus flavipennis</i>	Strumpshaw	P.K.	1988-90	(51)	Common
<i>Dicranoneura (=Forcipata) citrinella</i>	Strumpshaw	P.K.	1988-90	(51)	Common
	Wheatfen	M.J.D.C.	1939	(1)	
<i>Empoasca decipiens</i>	Wheatfen	M.J.D.C.	1938	(1)	Common
<i>Eupteryx aurata</i>	Wheatfen	M.J.D.C.	1939	(1)	
		M.J.D.C.	1941	(1)	
<i>Eupteryx cyclops</i>	Wheatfen	M.J.D.C.	1939	(1)	
<i>Eupteryx melissae</i>	Strumpshaw	P.K.	1988-90	(51)	Common
<i>Eupteryx signatipennis</i>	Strumpshaw	P.K.	1988	(51)	Local
	Associated with meadowsweet (<i>Filipendula ulmaria</i>).				
<i>Eupteryx stachydearum</i>	Wheatfen	M.J.D.C.	1939	(1)	
<i>Eupteryx urticae</i>	Wheatfen	M.J.D.C.	1939	(1)	Common
	On nettles (<i>Urtica spp.</i>).				
<i>Eupteryx vittata</i>	Wheatfen	M.J.D.C.	1939	(1)	
<i>Youngiada (=Lindbergina) aurovittata</i>	Wheatfen	M.J.D.C.	1939	(1)	
<i>Erythroneura (=Zygina) tilae</i>	Wheatfen	M.J.D.C.	1939	(1)	
<i>Zygina (=Zyginidia) scutellaris</i>	Strumpshaw	P.K.	1988-90	(51)	Common
Family CIXIIDAE (Plant hoppers with large membranous wings).					
<i>Cixius (=Tachycixius) pilosus</i>	Wheatfen	M.J.D.C.	1939	(1)	

<i>Cixius nervosus</i>	Wheatfen	M. J. D. C.	1938	(1)
		M. J. D. C.	1941	(1)
<i>C. nervosus ab. obscurus</i>	Wheatfen	M. J. D. C.	1941	(1)

Family DELPHACIDAE (Plant hoppers).

<i>Delphax pulchellus</i>					Common
	Strumpshaw	P. K.	1988-90	(51)	
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Kelisia vittipennis</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Stenocranus longipennis</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Stenocranus major</i>	Strumpshaw	P. K.	1989	(51)	Local
	Associated with reed canary-grass (<i>Phalaris arundinacea</i>).				
<i>Chloriona smaragdula</i>	Strumpshaw	P. K.	1988-90	(51)	Common
<i>Chloriona unicolor</i>	Strumpshaw	P. K.	1988-90	(51)	Common
<i>Euconomelus lepidus</i>	Surlingham	J. E.	1889	(11)	
<i>Conomelus anceps</i>	Wheatfen	M. J. D. C.	1937	(1)	
<i>Euides speciosa</i>	Strumpshaw	P. K.	1988-90	(51)	Common
<i>Eurysa lineata</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Megamelodes quadrimaculatus</i>	Strumpshaw	P. K.	1989	(51)	Local
	A local wetland plant hopper.				
<i>Muellerianella brevipennis</i>	Wheatfen	M. J. D. C.	1939	(1)	

<i>Javesella dubia</i>	Strumpshaw	P. K.	1988-90	(51)	Common
<i>Javesella pellucida</i>	Strumpshaw	P. K.	1988-90	(51)	Common
	Wheatfen	E. A. E.	1939	(1)	
<i>Paraliburnia adela</i>	Surlingham	J. E.	1889	(11)	

Family PSYLLIDAE (Psyllids; jumping plant lice and allies).

<i>Livia juncorum</i>	Wheatfen	E. A. E.	1933	(1)
		M. J. D. C.	1937	(1)

Causes galls on *Juncus* spp..

<i>Psyllopsis fraxini</i>	Wheatfen	E. A. E.	1956	(3)
Recorded in the rolled up leaf margins of ash (<i>Fraxinus excelsior</i>).				

<i>Psylla alni</i>	Wheatfen	M. J. D. C.	1937	(1)
		E. A. E.	1961	(1)
On alder (<i>Alnus glutinosa</i>).				

<i>Psylla buxi</i>	Wheatfen	L. E.	1988	(55)
--------------------	----------	-------	------	------

<i>Psylla ioersteri</i>	Wheatfen	M. J. D. C.	1937	(1)
-------------------------	----------	-------------	------	-----

<i>Psylla moscovita</i>	Wheatfen	M. J. D. C.	1937	(1)
-------------------------	----------	-------------	------	-----

<i>Psylla saliceti</i>	Strumpshaw	P. K.	1988	(51)	Local
Feeds on <i>Salix</i> spp..					

<i>Trichohermes walkeri</i>	Wheatfen	E. A. F.	1933	(1)
		E. A. E.	1946	(1)
Causes galls on buckthorn (<i>Rhamnus catharticus</i>).				

<i>Trioza alacris</i>	Wheatfen	L. E.	1988	(55)
-----------------------	----------	-------	------	------

Trioxa galii Common
 Strumpshaw P.K. 1988-90 (51)
 Wheatfen E.A.E. 1933 (1)
 Galls on *Galium palustre* and *Galium ulginosum*.

Family LACHNIDAE (Aphids).

Tuberolachnis salignus
 Wheatfen E.A.E. 1933 (1)
 R.S. 1938 (1)
 Recorded on willows (*Salix spp.*).

Family APHIDIDAE (Aphids).

Aphis rumicus
 Wheatfen E.A.E. 1939 (1)

Family PEMPHIGIDAE (Aphids).

Schizoneura (=Eriosoma) ulmi
 Wheatfen L.E. 1989 (55)

Family DIASPIDIDAE (Scale insects)

Chionaspis salicis
 Wheatfen E.A.E. 1953 (3)
 Recorded on the stems of grey willow (*Salix cinerea*).

Family COCCIDAE (Scale insects).

Pulvinaria vitis
 Wheatfen E.A.E. 1938 (44)
 Recorded on the base of an alder (*Alnus glutinosa*).

Parthenolecanium corni
 Wheatfen E.A.E. 1942 (1)

Family ORTHEZIIDAE (Scale insects).

Orthezia urticae
 Strumpshaw M.E.A.S. 1994
 Feeds on a variety of plants. A female was recorded from low herbage in cpt. 30.

Order Heteroptera (Bugs with membranous forewing tips).

Many Heteropterans overwinter as eggs laid inside vegetable matter.

Family ARADIDAE (Flatbugs).

Aradus depressus
Wheatfen E. A. E. 1943 (1)
Feeds on fungus growing on wood.

Family ACANTHOSOMATIDAE (Shieldbugs).

Acanthosoma haemorrhoidale (Hawthorn shieldbug).
Wheatfen E. A. E. 1939 (1)
R. E. 1991 (55)
Feeds on hawthorn (*Crataegus spp.*)

Elasmotethus interstinctus (Birch shieldbug)
Wheatfen E. A. E. 1939 (1)
E. A. E. 1945 (1)
Feeds on birch (*Betula pendula*), and occasionally hazel (*Corylus avellana*) or aspen (*Populus tremula*).

Elasmucha grisea (Parent bug).
Wheatfen E. T. D. 1941 (1)
E. A. E. 1962 (3)
Feeds on birch (*Betula pendula*).

Family CYNIDAE (Shieldbugs and stinkbugs).

Sehiris bicolor (Pied shieldbug).
Wheatfen E. A. E. 1980 (3)
E. A. E. 1982 (3)
Feeds on white dead nettle (*Lamium album*) and occasionally black whorhound (*Ballota nigra*).

Thyreocornis scaraboides (Negro bug).
Wheatfen E. A. E. 1940 (1)
Foodplants possibly violets (*Viola spp.*).

Family SCUTELLERIDAE (Sheildbugs and stinkbugs).

<i>Eurygaster testudinaria</i>				
	Wheatfen	E. A. E.	1940	(1)
		E. A. E.	1941	(1)
Feeds on rushes and sedges in damp places. Identification can be problematic.				

Family PENTATOMIDAE (Sheildbugs).

<i>Eysarcoris fabricii</i>				
	Wheatfen	E. A. E.	1977	(3)
Feeds on hedge woundwort (<i>Stachys sylvatica</i>) and white dead nettle (<i>Lamium album</i>).				

<i>Piezodorus lituratus</i> (Gorse sheildbug).				
	Coldham Hall	M. E. A. S.	1993	
	Wheatfen	E. A. E.	1937	(1)
		E. A. E.	1939	(1)
Feeds on gorse (<i>Ulex spp.</i>) and occasionally other legumes.				

<i>Pentatoma rufipes</i> (Forest bug).				
	Wheatfen	E. A. E.	1938	(1)
		E. A. E.	1941	(1)
Feeds on oak (<i>Quercus robur</i>) and alder (<i>Alnus glutinosa</i>).				

<i>Picromerus bidens</i>				
	Wheatfen	M. J. D. C.	1936	(44)
		E. A. E.	1944	(1)
Local, but common in reed beds where it feeds on caterpillars and beetle larvae.				

<i>Troilus luridus</i>				
	Wheatfen	E. A. E.	1939	(1)
		E. A. E.	1943	(1)
Frequent at Wheatfen, feeding on various trees.				

Family LYGAEIDAE (Ground bugs).

<i>Heterogaster urticae</i> (Nettle groundbug).				
	Wheatfen	E. A. E.	1943	(1)
		E. A. E.	1944	(1)
On nettles (<i>Urtica spp.</i>).				

Chilacis typhae (Reedmace bug).
 Wheatfen E. A. E. 1939 (1)
 E. A. E. 1941 (1)

In heads of both *Typha* spp..

Ischnodemus sabuleti (European clinch-bug).
 Wheatfen E. A. E. 1954 (1)
 E. A. E. 1983 (1)

Abundant on many fen plants, including *Carex* spp.,
Typha spp., *Phalaris arundinacea* and *Glyceria*
maxima. Following first records in 1954 this species
 became very abundant causing widespread purple
 spotting and stunted growth in *Glyceria maxima* beds
 in 1960 (3).

Kleidocerys resedae
 Wheatfen E. A. E. 1938 (1)
 E. A. E. 1945 (1)

Feeds mainly on birch (*Betula pendula*) and alder
 (*Alnus glutinosa*).

Pachybrachius fracticollis
 Wheatfen E. A. E. 1938 (1)
 E. A. E. 1941 (1)

A fen insect normally found on *Carex* spp., on which
 it feeds.

Peritrechus geniculatus
 Wheatfen E. A. E. 1940 (1)
 Feeds on low plants in dry grassy areas.

Megalonotus chiraga
 Wheatfen E. A. E. 1939 (1)
 Single specimen, typically found on coastal sand
 dunes. Feeds on low plants.

Megalonotus praetextatus
 Wheatfen E. A. E. 1941 (1)
 Typically found on coastal sand dunes or in the
 Brecks where it feeds on low plants. An unusual
 record of a single specimen on an oak (*Quercus*
robur) trunk.

N/b

Acompus rufipes
 Wheatfen E. A. E. 1937 (1)
 E. A. E. 1943 (1)
 Commoner on mowed marshes (E. A. Ellis (18)). Feeds
 on marsh valerian (*Valeriana diotica*).

Local

<i>Stygnocornis pedestris</i> (=scabulosus)				
Wheatfen	E. T. D.	1937	(1)	
	E. A. E.	1941	(1)	
Uncommon at Wheatfen, taken on <i>Calluna vulgaris</i> near the north end of the wood. Foodplant is unknown, but the bug is usually associated with <i>Calluna</i> .				
<i>Stygnocornis rusticus</i>				
Wheatfen	E. T. D.	1937	(1)	
	E. C. B.	1938	(1)	
Feeds on chickweed (<i>Stellaria media</i>).				
<i>Drymus brunneus</i>				
Wheatfen	E. A. E.	1939	(1)	
	E. A. E.	1945	(1)	
Feeds on mosses and fungi.				
<i>Drymus sylvaticus</i>				
Wheatfen	E. A. E.	1939	(1)	
	E. A. E.	1945	(1)	
Feeds on mosses and fungi.				
<i>Scolopostethus affinis</i>				
Wheatfen	E. T. D.	1940	(1)	
	E. A. E.	1941	(1)	
Scavenger in nettle (<i>Urtica diotica</i>) beds.				
<i>Scolopostethus decoratus</i>				
Wheatfen	E. A. E.	1944	(1)	
Predator among heather (<i>Calluna vulgaris</i> and <i>Erica spp.</i>). Recorded in hibernation at Wheatfen under holly (<i>Ilex aquifolium</i>) and rhododendrons.				
<i>Scolopostethus puberulus</i>				
Strumpshaw	P. K.	1990	(51)	Local
Wheatfen	E. A. E. + E. T. D.	1937	(1)	
	E. A. E.	1939	(1)	
A ground bug of damp chalk downland and fens.				
<i>Scolopostethus thomsoni</i>				
Strumpshaw	P. K.	1988-90	(51)	Common
Wheatfen	E. A. E.	1937	(1)	
	E. A. E.	1939	(1)	
Recorded from waterside nettle beds. Feeding habits unknown.				
<i>Taphropeltus contractus</i>				
Wheatfen	E. C. B.	1938	(1)	
	E. A. E.	1945	(1)	
Feeding habits unknown.				

Gastrodes grossipes (Pine-cone bug).
 Wheatfen E.A.E. 1937 (1)
 Found only on *Pinus sylvestris* (3).

Family BERYTINIDAE (Stilt bugs).

Cymus glandicolor Common
 Strumpshaw P.K. 1988-90 (51)
 Wheatfen E.A.E. 1939 (1)
 E.A.E. 1942 (1)
 Associated with *Carex* spp. on which it feeds.

Berytinus minor
 Wheatfen E.A.E. 1940 (1)
 Feeds on a variety of plants and animals.

Neides tipularis
 Wheatfen E.A.E. 1940 (1)
 E.A.E. 1943 (1)
 Feeds on a variety of plants and perhaps animals.

Family PIESMIDAE (Beet bugs).

Piesma maculatum
 Wheatfen E.A.E. 1939 (1)
 E.A.E. 1944 (1)
 Feeds on chenopod weeds, and occasionally spinach
 and beet. Swept from *Calluna* on Old Mill Marsh.

Piesma quadratum (Beet leaf bug).
 Wheatfen E.A.E. 1939 (1)
 Feeds on orache (*Atriplex* spp.) and goosegrass
 (*Chenopodium* spp.).

Family TINGIDAE (Lace bugs).

Acalypta carinata
 Wheatfen E.A.E. 1940 (1)
 Occurs among mosses.

Derephysia foliacea (Ivy lacebug).
 Wheatfen E.A.E. 1939 (1)
 E.A.E. 1943 (1)
 Feeds on ivy (*Hedera helix*).

<i>Tingis ampliata</i> (Creeping thistle lacebug).				
Wheatfen	E. A. E.	1939	(1)	
	E. A. E.	1941	(1)	
Feeds on creeping thistle (<i>Cirsium arvense</i>).				
<i>Tingis cardui</i> (Spear thistle lacebug).				
Wheatfen	E. A. E.	1940	(1)	
Feeds on spear thistle (<i>Cirsium vulgare</i>) and marsh thistle (<i>Cirsium palustre</i>).				
<i>Dictyla convergens</i>				
Wheatfen	E. T. D.	1939	(1)	
	E. A. E.	1941	(1)	
Common on its foodplant water forget-me-not (<i>Myosotis scorpioides</i>).				
Family REDUVIIDAE (Assassin bugs).				
<i>Empicornis vagabundus</i>				
Wheatfen	E. C. B.	1941	(3)	
Arboreal hunter.				
Family NABIDAE (Damsel bugs).				
<i>Nabis flavomarginatus</i> (Broad damsel bug).				
Wheatfen	E. A. E.	1939	(1)	
	E. A. E.	1941	(1)	
Predator of damp, tussocky situations.				
<i>Nabis ferus</i> (Field damsel bug).				
Strumpshaw	P. K.	1988-90	(51)	Common
Wheatfen	E. A. E.	1937	(1)	
	E. A. E.	1941	(1)	
Predator of dryish grassland.				
<i>Apterus</i> (=Aptus) <i>mirmicoides</i> (Ant damsel bug).				
Wheatfen	E. T. D.	1937	(1)	
	E. A. E.	1944	(1)	
Grassland predator.				
<i>Himacerus apterus</i> (Tree damsel bug).				
Wheatfen	E. A. E.	1938	(1)	
	E. A. E.	1981	(1)	
Arboreal predator.				

Dolichonabis limbatus (Marsh damsel bug).
 Wheatfen E.A.E. 1937 (1)
 E.A.E. 1944 (1)
 Predator. Commonest Nabid in fens.

Dolichonabis (=Nabicula) lineatus (Reed damsel bug).
 Wheatfen E.A.E. 1937 (1)
 E.A.E. 1941 (1)
 Predator around the bases of reeds and sedges.

Family CIMICIDAE (Bedbugs, flower bugs and allies).

Temnostethus pusillus
 Wheatfen E.A.E. 1938 (1)
 Predator on lichen covered tree trunks.

Anthrocoris confusus
 Wheatfen E.T.D. 1937 (1)
 E.A.E. 1941 (1)
 Predator, found on flowers, particularly ivy (*Hedera helix*) and umbellifers.

Anthrocoris nemoralis
 Wheatfen E.A.E. 1938 (1)
 E.A.E. 1945 (1)
 Predator among growing plants.

Anthrocoris sarothamni (Broom flower bug).
 Wheatfen E.A.E. 1938 (1)
 E.A.E. 1939 (1)
 Predator on broom (*Cytisus scoparius*).

Anthrocoris nemorum (Common flower bug). Common
 Strumpshaw P.K. 1988-90 (51)
 Surl. Broad D.A.S.+S.G.B. 1993 (61)
 Wheatfen E.A.E.+E.T.D. 1937 (1)
 E.A.E. 1939 (1)
 Predator found on trees and herbage.

Tetrabelaps bicuspis
 Wheatfen E.A.E. 1939 (1)
 Predator found on conifers.

Orius majusculus Common
 Strumpshaw P.K. 1988-90 (51)
 Wheatfen E.A.E. 1939 (1)
 E.A.E. 1941 (1)
 Predator found on a variety of plants.

Orius minutus (=vicinus)
 Wheatfen E.A.E. 1939 (1)
 E.A.E. 1941 (1)
 Predator found on a variety of plants.
 Identification particularly difficult.

Orius niger s. compressicornis
 Wheatfen E.A.E. 1939 (1)
 Predator found on a variety of plants, but
 especially mugwort (*Artemisia vulgaris*).

Lyctocoris campestris (Debris bug).
 Wheatfen E.A.E. 1939 (1)
 E.A.E. 1941 (1)
 Predator found among debris, also sucks the blood
 of birds and mammals.

Xylocoris cursitans
 Wheatfen E.A.E. 1937 (1)
 Predator associated with dead wood.

Xylocoris galactinus (Hot-bed bug). Common
 Strumpshaw P.K. 1988-90 (51)
 Predator associated with manure heaps and other hot
 places.

Family MICROPHYSIDAE (Minute bugs).

Myrmedobia exilis Local
 Strumpshaw P.K. 1988 (51)
 A small ground-dwelling predator.

Family MIRIDAE (Capsid bugs).

Monalocoris filicis (Bracken bug).
 Wheatfen E.A.E. 1939 (1)
 E.A.E. 1941 (1)
 Feeds on ferns including the marsh fern (*Thelypteris
 palustris*) (3).

Bryocoris pteridis (Fernbug).
 Wheatfen E.A.E. 1939 (1)
 E.A.E. 1940 (1)
 Feeds on ferns particularly *Dryopteris* spp. (3).

<i>Deraeocoris lutescens</i>				
	Wheatfen	E. A. E.	1938	(1)
		E. A. E.	1941	(1)
	Arboreal predator.			
<i>Deraeocoris ruber</i>				
	Wheatfen	E. A. E.	1939	(1)
		E. A. E.	1983	(3)
	Feeds on aphids.			
<i>Orthonotus rufifrons</i>				
	Wheatfen	E. A. E.	1939	(1)
	Feeds on the flower buds and unripe fruits of nettles (<i>Urtica dioica</i>).			
<i>Harpocera thoracica</i>				
	Wheatfen	E. A. E.	1937	(1)
		E. A. E.	1941	(1)
	Common at Wheatfen. Feeds on oak (<i>Quercus robur</i>).			
<i>Phylus coryli</i>				
	Wheatfen	E. A. E.	1938	(1)
	Predator found on hazel (<i>Corylus avellana</i>).			
<i>Phylus melanocephalus</i>				
	Wheatfen	E. A. E.	1939	(1)
	Omnivore, feeding on oak (<i>Quercus robur</i>) and its fauna.			
<i>Psallus ambiguus</i>				
	Wheatfen	E. A. E.	1939	(1)
	Omnivore, feeding on apple (<i>Malus spp.</i>), hawthorn (<i>Crataegus monogyna</i>), willow (<i>Salix spp.</i>) and alder (<i>Alnus glutinosa</i>), and their associated fauna.			
<i>Psallus betuleti</i>				
	Wheatfen	E. A. E.	1939	(1)
	Feeds on birch (<i>Betula pendula</i>) and associated fauna.			
<i>Psallus variabilis</i>				
	Wheatfen	E. T. D.	1938	(1)
		E. A. E.	1943	(1)
	Associated with oak (<i>Quercus robur</i>) and willow (<i>Salix spp.</i>). A local species which also causes identification problems.			
<i>Psallus roseus (=haematodes)</i>				
	Wheatfen	E. A. E.	pre.1946	(1)
	Feeds on willows (<i>Salix spp.</i>) and associated fauna.			

<i>Psallus lepidus</i>	Wheatfen	E. A. E.	1938	(1)	
		E. A. E.	1939	(1)	
Omnivorous, often on ash (<i>Fraxinus excelsior</i>).					
<i>Psallus diminutus</i>	Wheatfen	E. A. E.	1939	(3)	
Feeds on oak (<i>Quercus robur</i>), poplars (<i>Populus spp.</i>) and aspen (<i>Populus tremula</i>).					
<i>Psallus varians</i>	Wheatfen	E. A. E.	1939	(1)	
Feeds on oak (<i>Quercus robur</i>) and associated fauna.					
<i>Coniortodes (=Compsidolon) salicellus</i>	Wheatfen	E. A. E.	1941	(1)	
Partially predacious on a variety of trees.					
<i>Plagiognathus arbustorum</i>	Wheatfen	E. A. E.	1937	(1)	
		E. A. E.	1944	(1)	
Common on fens. Feeds on a variety of plants and invertebrates, but is often associated with nettles (<i>Urtica dioica</i>).					
<i>Plagiognathus chrysanthemii</i>					Common
	Strumpshaw	P. K.	1988-90	(51)	
	Wheatfen	E. A. E.	1939	(1)	
		E. A. E.	1944	(1)	
Associated with ragwort (<i>Senecio jacobaea</i>), scentless mayweed (<i>Matricaria perforata</i>), yarrow (<i>Achillea millefolium</i>) and black medick (<i>Medicago arabica</i>).					
<i>Dicyphus epilobii</i>					Common
	Strumpshaw	P. K.	1988-90	(51)	
	Wheatfen	E. A. E.	1937	(1)	
		E. A. E.	1941	(1)	
Abundant on great willow herb (<i>Epilobium hirsutum</i>).					
<i>Dicyphus stachydis</i>	Wheatfen	E. A. E.	1939	(1)	
		E. A. E.	1941	(1)	
Found on hedge woundwort (<i>Stachys sylvatica</i>).					
<i>Campyloneura virgula</i>	Wheatfen	E. A. E.	1937	(1)	
		E. A. E.	1941	(1)	
Arboreal predator.					

<i>Halticus apertus</i>	Wheatfen	E. A. E.	1939	(1)	
		E. A. E.	1941	(1)	
Feeds on vetches (<i>Vicia spp.</i>) and bedstraws (<i>Galium spp.</i>).					
<i>Malacocoris chlorizans</i> (Delicate apple-caspid).	Wheatfen	E. A. E.	1939	(1)	
Predator. Recorded on alder (<i>Alnus glutinosa</i>) at Wheatfen (3), but also occurs on other trees.					
<i>Fieberocapsus flaveolus</i>	Wheatfen	E. A. E.	1941	(1)	
Found in rush (<i>Juncus spp.</i>) clumps.					
<i>Cyllecoris histrionicus</i>	Wheatfen	E. A. E.	1938	(1)	
		E. A. E.	1943	(1)	
Feeds on oak (<i>Quercus robur</i>) and associated fauna.					
<i>Dryophilocoris flavoquadrimaculatus</i>	Wheatfen	E. A. E.	1937	(1)	
		E. A. E.	1940	(1)	
Feeds on oak (<i>Quercus robur</i>) and associated fauna.					
<i>Heterotoma planicornis</i> (=meriopterum)	Wheatfen	E. A. E.	1939	(1)	
		E. A. E.	1941	(1)	
Omnivorous. Found on various plants.					
<i>Globiceps dispar</i>	Strumpshaw	P. K.	1989	(51)	Local
Possibly associated with legumous plants growing among grasses.					
<i>Elepharidopterus angulatus</i> (Black-kneed caspid).	Wheatfen	E. A. E.	1939	(1)	
		E. A. E.	1944	(1)	
On alder (<i>Alnus glutinosa</i>) and other trees. Partly predacious.					
<i>Orthotylus tenellus</i>	Wheatfen	E. A. E.	1938	(1)	
On buckthorn (<i>Rhamnus catharticus</i>) at Wheatfen, also occurs on ash (<i>Fraxinus excelsior</i>), hazel (<i>Corylus avellana</i>) and oak (<i>Quercus robur</i>). Partly predacious.					

- Orthotylus flavinervis*
Wheatfen E.A.E. 1939 (1)
Feeds on alder (*Alnus glutinosa*) and occasionally sycamore (*Acer pseudoplatanus*).
- Orthotylus marginalis* (Dark green apple-caspid).
Wheatfen E.A.E. 1939 (1)
On *Salix spp.*, alder (*Alnus glutinosa*) and apple (*Malus spp.*). Partially predacious.
- Orthotylus ericetorum*
Wheatfen E.A.E. 1940 (1)
Recorded on *Calluna vulgaris* by garden. Feeds on heathers.
- Cyrtorhinus caricis*
Wheatfen E.A.E. pre.1987 (1)
Amongst sedges (*Carex spp.*), where it feeds largely on leafhoppers.
- Mecomma ambulans* Common
Strumpshaw P.K. 1988-90 (51)
Wheatfen E.A.E. 1941 (1)
Feeds on the juices of plants such as sedges and rushes, and probably animal matter as well.
- Mecomma (=Globiceus) dispar* Local
Strumpshaw P.K. 1989 (51)
Possibly associated with leguminous plants in tall vegetation.
- Pithanus maerkeli*
Wheatfen E.T.D. 1938 (1)
E.A.E. 1941 (1)
Amongst grasses and rushes, probably partly predacious.
- Lygus pratensis* RDB 3
Wheatfen E.A.E. 1938 (1)
E.A.E. 1945 (1)
Recorded as common throughout Wheatfen. This record requires confirmation as early keys are unreliable. Restricted to rides in ancient woodland in southern counties.
- Liocoris tripustulatus*
Wheatfen E.A.E. 1937 (1)
Feeds on nettles (*Urtica dioica*).

<i>Orthops cervinus</i>	Wheatfen	E. A. E.	1939	(1)	
Arboreal, feeding on lime (<i>Tilia spp.</i>), ash (<i>Fraxinus excelsior</i>), hazel (<i>Corylus avellana</i>) and ivy (<i>Hedera helix</i>).					
<i>Orthops campestris</i>	Wheatfen	E. T. D.	1937	(1)	
		E. A. E.	1944	(1)	
Feeds on umbellifers.					
<i>Orthops kalmi</i>	Wheatfen	E. A. E.	1939	(1)	
		E. A. E.	1940	(1)	
Feeds on umbellifers.					
<i>Lygocoris pabulinus</i> (Common green caspid).	Wheatfen	E. T. D.	1937	(1)	
		E. A. E.	1941	(1)	
Feeds on a variety of plants.					
<i>Lygocoris viridis</i>	Wheatfen	E. A. E.	1939	(1)	
		E. A. E.	1944	(1)	
Feeds on lime (<i>Tilia spp.</i>), alder (<i>Alnus glutinosa</i>), alder buckthorn (<i>Frangula alnus</i>) and oak (<i>Quercus robur</i>). Partially predacious.					
<i>Lygocoris lucorum</i>	Strumpshaw	P. K.	1988-90	(51)	Common
	Wheatfen	E. A. E.	1939	(1)	
		E. A. E.	1944	(1)	
Feeds on a variety of herbaceous plants.					
<i>Lygocoris spinolai</i>	Wheatfen	E. A. E.	1939	(1)	
Feeds on a variety of plants.					
<i>Polymerus palustis</i>	Wheatfen	E. T. D.	1938	(1)	
		E. A. E.	1941	(1)	
Feeds on marsh bedstraw (<i>Galium palustre</i>).					
<i>Polymerus nigritus</i>	Wheatfen	E. A. E.	1939	(3)	
		E. A. E.	1941	(3)	
Feeds on goosegrass (<i>Galium aparine</i>) and other <i>Galium spp.</i> .					

<i>Miris striatus</i>					
	Wheatfen	E. A. E.	1938	(1)	
		E. A. E.	1941	(1)	
	Local, arboreal and partially predacious.				
<i>Calocoris quadripunctatus</i>					
	Wheatfen	E. A. E.	1937	(1)	
		E. A. E.	1943	(1)	
	Associated with oak (<i>Quercus robur</i>) but not strictly arboreal. Partially predacious.				
<i>Calocoris norvegicus</i> (Potato caspid).					
	Wheatfen	E. A. E.	1937	(1)	
		E. A. E.	1941	(1)	
	Feeds on a variety of plants.				
<i>Adelphocaris seticornis</i>					RDB 3
	Wheatfen	E. A. E.	1960	(3)	(N/a)
	Collected from marsh pea (<i>Lathyrus palustris</i>) on Home Marsh (3). Also feeds on other legumes among tall grass in damp places. Tends to form small localised colonies, and is therefore as vulnerable to rotational management as it is to non-rotational management. Only if the colonies were located could they be managed sensitively.				
<i>Adelphocaris ticinensis</i>					N/b
	Wheatfen	E. A. E.	1936	(1)	
		E. A. E.	1944	(1)	
	Feeds on marsh pea (<i>Lathyrus palustris</i>) and large birds-foot trefoil (<i>Lotus ulginosus</i>). A fenland species which requires high water levels. Present on the host plant throughout the year and does not form isolated colonies, it therefore benefits greatly from rotational management.				
<i>Stenotus binotatus</i>					
	Wheatfen	E. T. D.	1937	(1)	
		E. A. E.	1944	(1)	
	Feeds on the flowers of grasses (Gramineae).				
<i>Phytocoris dimidiatus</i>					
	Wheatfen	E. A. E.	1936	(1)	
		E. A. E.	1943	(1)	
	Arboreal.				
<i>Phytocoris longipennis</i>					
	Wheatfen	E. A. E.	1939	(1)	
	Arboreal.				

<i>Phytocoris reuteri</i>				
	Wheatfen	E. A. E.	1939	(1)
		E. A. E.	1941	(1)
	Arboreal, mainly predacious.			
<i>Phytocoris tiliae</i>				
	Wheatfen	E. T. D.	1939	(1)
		E. A. E.	1941	(1)
	Arboreal, largely predacious.			
<i>Capsus ater</i>				
	Strumpshaw	P. K.	1988-90	(51)
	Wheatfen	E. T. D.	1938	(1)
		E. A. E.	1942	(1)
	Recorded at Wheatfen on fen plants. Usually associated with grasses (Gramineae).			
<i>Pantilius tunicatus</i>				
	Wheatfen	E. A. E.	1939	(1)
		E. A. E.	1940	(1)
	Feeds on hazel (<i>Corylus avellana</i>), alder (<i>Alnus glutinosa</i>) and birch (<i>Betula pendula</i>).			
<i>Capsodes gothicus</i>				
	Wheatfen	E. A. E.	1939	(1)
	Found in luxuriant marsh vegetation, probably associated with legumes.			
<i>Acetropis gimmerthali</i>				
	Strumpshaw	P. K.	1990	(51)
	Wheatfen	E. A. E.	1939	(1)
	Typically found in dry grassland, but also recorded on marshes. Found amongst grass and rushes in marshy areas at Wheatfen.			
<i>Stenodema calcaratum</i>				
	Wheatfen	E. A. E.	1938	(1)
		E. A. E.	1943	(1)
	Feeds on the flowers and unripe seeds of grasses (Gramineae).			
<i>Stenodema trispinosum</i>				
	Wheatfen	E. A. E.	1937	(1)
		E. A. E.	1943	(1)
	Common at Wheatfen. Feeds on the flowering heads of sedges and rushes. Lives in marshy meadows, often adjacent to a brackish water body.			

Common

Local

Local

Stenodema laevigatum

Wheatfen	E. A. E.	1938	(1)
	E. A. E.	1941	(1)

Found in drier areas than *S. trispinosum*. Feeds on the heads of grasses.

Notostira elongata

Wheatfen	E. A. E.	1938	(1)
	E. A. E.	1941	(1)

Feeds on grasses.

Teratocoris antennatus

Wheatfen	E. A. E.	1937	(1)
	E. A. E.	1941	(1)

Among *Phragmites* at Wheatfen. A marsh species, feeding on club rush (*Scirpus spp.*) and bulrush (*Typha spp.*).

Teratocoris saundersi

Surlingham	J. E.	1889	(11)
Wheatfen	E. A. E.	1941	(1)

Among *Phragmites* and *Glyceria* at Wheatfen. A marsh species, also feeding on club rush (*Scirpus spp.*), bulrush (*Typha spp.*) and rushes.

Leptopterna dolabrata (Meadow plantbug).

Common

Strumpshaw	P. K.	1988-90	(51)
Wheatfen	E. T. D.	1937	(1)
	E. A. E.	1943	(1)

Abundant among fen grasses on which it feeds.

Family DIPSOCORIDAE

Ceratocombus coleoptratus

Local

Strumpshaw	P. K.	1989	(51)
	P. K.	1990	(51)

Probably predacious in damp places. Small and almost certainly under-recorded.

Family SALDIDAE (Shore bugs).

Agile predators, often associated with water margins.

Salda muelleri

Wheatfen	E. A. E.	1938	(1)
	E. A. E.	1941	(1)

Taken on eastern fens and marshes. These specimens were originally identified as *Salda morio* by E. C. Bedwell

Saldula orchochila

Wheatfen	E. A. E.	1937	(1)
----------	----------	------	-----

Typically found in dry, sandy areas.

Saldula opacula

Strumpshaw	P. K.	1988	(51)
------------	-------	------	------

Only known from estuarine areas of East Anglia and Scotland and always at low density. A reduction in salinity may be very damaging for this species.

RDB 3
(N/b)

Saldula saltatoria (Common shorebug).

Common

Strumpshaw	P. K.	1988-90	(51)
Wheatfen	E. A. E.	1940	(1)

Commonly found around the margins of ponds and lakes.

Chartoscripta cincta

Common

Strumpshaw	P. K.	1988-90	(51)
Wheatfen	E. A. E.	1937	(1)
	E. A. E.	1945	(1)

Frequent at Wheatfen. Occurs in marginal vegetation.

Family HYDROMETRIDAE (Water measurers).

Hydrometra stagnorum (Water-measurer).

Wheatfen	E. T. D.	1937	(1)
	R. B.	1994	(54)

Feeds on small aquatic invertebrates.

Family VELIIDAE (Water crickets).

Velia caprai (Water cricket).

Wheatfen	E. A. E.	1937	(1)
	E. A. E.	1943	(1)

On shallow tidal dykes at Wheatfen (3). Now much more local and found in only 1 of 1000 Broadland dykes examined in the mid-1970's (5). A predator of invertebrates at the water surface.

Microvelia reticulata (Minute water-cricket).

Buckenham	J.B.	1993	(50)
Wheatfen	E.A.E.	1940	(1)
	E.A.E.	1943	(1)

Only found in 1 dyke in the above survey (5). A surface predator.

Microvelia umbricola (= *beunoi s. umbricola*)

Wheatfen	E.A.E.	1940	(1)
----------	--------	------	-----

Unknown in Britain outside the Norfolk Broads. Not found in the above survey (5). Usually found at the edges of still water under overhanging *Carex spp.*. A surface predator. Threats include tree shading, non-rotational dyke clearance and eutrophication.

RDB 3

Family GERRIDAE (Water skaters).

Predators of the water surface.

Gerris thoracicus

Wheatfen	E.A.E.	1940	(1)
	E.A.E.	1941	(1)

Frequent at Wheatfen. Tolerates a higher salinity than many *Gerris spp.*

Gerris argentatus (Little pondskater).

Rockland	E.T.D.	1936	(44)
Wheatfen	E.T.D.	1938	(1)

Local, associated with emergent vegetation.

Gerris lacustris (Common pondskater).

Buckenham	R.J.D.	1974	(5)
Cantley	R.J.D.	1974	(5)
Strumpshaw	K.H.	1992	
Wheatfen	E.A.E.	1938	(1)
	E.A.E.	1942	(1)

Frequent at Wheatfen. Common in a wide variety of water bodies.

Gerris odontogaster (Toothed pondskater).

Cantley	R.J.D.	1974	(5)
Wheatfen	E.A.E.	1940	(1)
	E.A.E.	1941	(1)

Less common in the Mid-Yare Valley than most of Broadland.

Family NEPIDAE (Tailed water bugs).

<i>Nepa cinerea</i> (Water scorpion).					Common
	Buckenham	J. B.	1993	(50)	
	Cantley	M. E. A. S.	1993		
	Strumpshaw	P. D. W.	1979	(6)	
		M. E. A. S.	1994		
	Wheatfen	M. J. D. C.	1939	(1)	
		M. J. D. C.	1943	(1)	
	Wheatfen Broad	R. J. D.	1977	(36)	

Occasional at Wheatfen. Common in the more saline dykes on Cantley (1993) and at Strumpshaw (1994). A predator of sub-aquatic and surface invertebrates and small vertebrates.

Ranatra linearis (Water stick-insect).

Strumpshaw	M. E. A. S.	1994	
------------	-------------	------	--

A southern species of deep, weedy water bodies. An aquatic predator. Once scarcely encountered in the Broads and absent from the tidal areas, in the last five years it has been recorded from several new sites (R. Driscoll pers. comm.).

Family NAUCORIDAE (Saucer bugs).

Ilyocoris cimicoides (Saucer bug).

Buckenham	R. J. D.	1974	(5)
Strumpshaw	K. H.	1992	
Wheatfen	E. A. E.	1939	(1)
	E. A. E.	1940	(1)

Sparse at Wheatfen. Flightless. A fierce aquatic carnivore.

Family NOTONECTIDAE (Backswimmers).

Aquatic predators in possession of a painful bite.

Notonecta glauca (Common backswimmer).

Buckenham	R. J. D.	1974	(5)
Cantley	R. J. D.	1974	(5)
Strumpshaw	M. J.	1987	(14)
	K. H.	1992	
Wheatfen	E. A. E.	1938	(1)
	R. J. D.	1977	(36)

Common in Mid-Yare valley.

Notonecta viridis (= *marmorea s. viridis*)
 Cantley R.J.D. 1974 (5)
 Surl. Broad R.J.D. 1977 (36)
 Uncommon in Broadland. Has a southern distribution,
 often in brackish areas.

Family PLEIDAE (Minute backswimmers).

Plea atomaria (= *leachi*) (Lesser backswimmer).
 Wheatfen E.A.E. 1938 (1)
 E.A.E. 1943 (1)
 A predator of weedy water bodies.

Family CORIXIDAE (Water boatmen).

Micronecta poweri (Water singer) Common
 Surlingham J.E. 1889 (11)
 Feeds on algal detritus, Associated with a sandy
 substrates and clean water. Males have a very loud
 mating call.

Cymatia bondsdorffi
 Buckenham R.J.D. 1974 (5)
 Strumpshaw K.H. 1992
 Uncommon in Broadland (1974(5)). An aquatic predator.

Cymatia coleoptrata
 Buckenham R.J.D. 1974 (5)
 Cantley R.J.D. 1974 (5)
 Rockland Broad R.J.D. 1977 (36)
 Strumpshaw M.J. 1987 (14)
 Wheatfen E.A.E. 1937 (1)
 E.A.E. 1939 (1)
 Common at Wheatfen but not common in Broadland.
 An aquatic predator.

Callicorixa praeusta
 Buckenham R.J.D. 1974 (5)
 Cantley R.J.D. 1974 (5)
 Strumpshaw M.J. 1987 (14)
 K.H. 1992
 Surl. Broad R.J.D. 1977 (36)
 Wheatfen E.A.E. 1939 (1)
 Frequent at Wheatfen generally common in Broadland
 (1976(5)). Probably predacious.

<i>Corixa dentipes</i>	Cantley	R. J. D.	1974	(5)
A northern boatman, uncommon in Broadland. Algae feeder.				
<i>Corixa punctata</i> (Common water boatman).	Buckenham	R. J. D.	1974	(5)
	Cantley	R. J. D.	1974	(5)
	Strumpshaw	J. M.	1978	(14)
		K. H.	1992	
	Wheatfen	E. A. E.	1937	(1)
		R. J. D.	1977	(36)
Common. Feeds on algae.				
<i>Corixa panzeri</i>	Buckenham	R. J. D.	1974	(5)
Commonest in brackish and weed-less waters. Feeds on algae and chironomid larvae.				
<i>Hesperocorixa linnei</i>	Buckenham	R. J. D.	1974	(5)
	Cantley	R. J. D.	1974	(5)
	Wheatfen	E. S. E.	1951	(3)
Scarce at Wheatfen. A detritus feeder associated with emergent vegetation.				
<i>Hesperocorixa sahlbergi</i>	Strumpshaw	K. H.	1992	
	Wheatfen	E. A. E.	1937	(1)
		E. A. E.	1960	(1)
Occasional at Wheatfen, uncommon in the Broads (1976 (5)). A detritus feeder in areas with a high organic matter content.				
<i>Sigara dorsalis</i>	Buckenham	R. J. D.	1974	(5)
	Cantley	R. J. D.	1974	(5)
	Rockland Broad	R. J. D.	1977	(36)
	Strump. Broad	R. J. D.	1977	(36)
	Surl. Broad	R. J. D.	1977	(36)
	Wheatfen	E. A. E.	1937	(1)
		R. J. D.	1977	(36)
Abundant at Wheatfen (especially 1951) (3). Common and widely distributed occasionally occurring in large numbers (1976(5)). Feeds on algae, detritus and small invertebrates.				

<i>Sigara disticta</i>				
	Wheatfen	E. A. E.	1937	(1)
		E. A. E.	1939	(1)
Common at Wheatfen. Detritus feeder.				
<i>Sigara falleni</i> (Lesser water boatman).				
	Rockland Broad	R. J. D.	1977	(36)
	Surl. Broad	R. J. D.	1977	(36)
	Strumpshaw	P. K.	1988-90	(51)
	Wheatfen	E. A. E.	1938	(1)
		R. B.	1994	(54)
	Wheatfen Broad	R. J. D.	1977	(36)
At Wheatfen common in 1930's, scarce in 1951 but common in 1977. Also very common in Rockland Broad in 1977 (36). Detritus feeder.				
<i>Sigara fossarum</i>				
	Buckenham	R. J. D.	1974	(5)
	Cantley	R. J. D.	1974	(5)
	Wheatfen	E. S. B.	1951	(3)
Not resistant to saline conditions. Detritus feeder.				
<i>Sigara nigrolineata</i>				
	Buckenham	R. J. D.	1974	(5)
	Wheatfen	E. A. E.	1939	(1)
Uncommon at Wheatfen. Detritus feeder.				
<i>Sigara concinna</i>				
	Wheatfen	E. A. E.	1939	(1)
A rather scarce detritus feeder.				
<i>Sigara limitata</i>				
	Buckenham	R. J. D.	1974	(5)
	Cantley	R. J. D.	1974	(5)
	Wheatfen	E. A. E.	1939	(1)
Only one specimen taken at Wheatfen. Uncommon in Broadland (1976(5)). Detritus feeder.				
<i>Sigara semistriata</i>				
	Wheatfen	E. S. B.	1951	(3)
Detritus feeder of weedy lakes. Rare in eastern England and not recorded by Driscoll (1976(5)).				
<i>Sigara stagnalis</i>				
	Buckenham	R. J. D.	1974	(5)
A detritus feeder of brackish water.				

Order Coleoptera (Beetles).

Status from Hyman and Parsons (1992 and 1994).

Family CARABIDAE (Ground beetles).

<i>Cychrus caraboides s. rostralis</i>	Wheatfen	M. J. D. C.	1937	(1)	Local
<i>Carabus granulatus</i>	Strumpshaw	C. N. M.	1986	(14)	Local
		M. T.	1994		
	Surlingham	M. C.	1983	(57)	
	Wheatfen	M. J. D. C.	1933	(1)	
		M. T.	1994		
<i>Carabus nemoralis</i>	Wheatfen	R. E.	1990	(55)	Local
<i>Carabus problematicus s. gallicus</i>	Wheatfen	E. A. E.	pre. 1983	(74)	Common
<i>Leistus fulvibarbis</i>	Wheatfen	M. J. D. C.	1937	(1)	Local
		P. D. O.	1964	(74)	
<i>Leistus rufescens</i>	Wheatfen	M. J. D. C.	1933	(1)	Common
		A. B. D.	1978	(3)	
<i>Leistus spinibarbis</i>	Wheatfen	E. C. B.	1938	(1)	Local
<i>Nebria brevicollis</i>	Buckenham	M. T.	1993		Common
	Strumpshaw	M. T.	1994		
	Wheatfen	A. H. N.	1938	(1)	
		A. B. D.	1978	(57)	
<i>Notiophilus aquaticus</i>	Wheatfen	E. A. E.	1939	(1)	Local
<i>Notiophilus biguttatus</i>	Wheatfen	M. J. D. C.	1939	(1)	Common
		M. T.	1994		
<i>Notiophilus substriatus</i>	Wheatfen	M. J. D. C.	1939	(1)	Local
<i>Elethisa multipunctata</i>	Wheatfen	P. D. O.	1964	(74)	N/b
Occurs among <i>Carex</i> spp. in fens, bogs and water margins.					

<i>Elaphrus cupreus</i>					Common
	Strumpshaw	G. R.	1993		
		M. T.	1994		
	S. Church Marsh	M. C.	1984	(57)	
	Wheatfen	M. J. D. C.	1936	(1)	
		M. T.	1994		
<i>Elaphrus riparius</i>					Common
	Wheatfen	A. H. N.	1938	(1)	
		E. A. E.	1957	(3)	
<i>Loricera pilicornis</i>					Common
	Buckenham	M. T.	1993		
	Strumpshaw	M. T.	1994		
	S. Church Marsh	M. C.	1983	(57)	
	Wheatfen	A. H. N.	1939	(1)	
		M. T.	1994		
Feeds on springtails (Collembola).					
<i>Dyschirius luedersi</i>					Local
	Buckenham	M. T.	1993		
	Strumpshaw	A. P. F.	1981	(57)	
A burrowing species found in wet clay soils. Occurs on wetlands and coastal sites.					
<i>Dyschirius globosus</i>					Local
	Strumpshaw	M. T.	1994		
<i>Clivina collaris</i>					Local
	Wheatfen	M. J. D. C.	1938	(1)	
Found on sandy or gravelly riverbanks.					
<i>Clivina fossor</i>					Common
	Buckenham	M. T.	1993		
<i>Trechus quadristriatus</i>					Common
	Buckenham	M. T.	1993		
	Wheatfen	P. D. C.	1967	(74)	
<i>Asaphidion flavipes</i>					Common
	Wheatfen	E. A. E.	1937	(1)	
		E. A. E.	1945	(1)	
Has recently been split into three species.					
<i>Bembidion litorale</i>					N/b
	Wheatfen	M. J. D. C.	1939	(1)	
		M. J. D. C.	1940	(1)	
Predatory. Usually found on shingle or sandy riverbanks in the north. This record requires confirmation as there are no other East Anglian records (B. Eversham pers. comm.).					

<i>Bembidion lampros</i>					Common
	Wheatfen	M. J. D. C.	1939	(1)	
		P. D. O.	1967	(74)	
<i>Bembidion properans</i>					Common
	Buckenham	M. T.	1993		
<i>Bembidion nitidulum</i>					Local
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Bembidion tetracolum</i>					Common
	Wheatfen	M. T.	1994		
<i>Bembidion quadrimaculatum</i>					Common
	Wheatfen	M. J. D. C.	1941	(1)	
		P. D. O.	1964	(74)	
<i>Bembidion quadripustulatum</i>					N/b
	Wheatfen	M. J. D. C.	1940	(1)	
<p>Predatory. Found on bare mud surrounding water. River pollution, water level regulation and colonisation by Himalayan balsam (<i>Impatiens glandulifera</i>) can reduce the area of habitat available to this beetle.</p>					
<i>Bembidion gilvipes</i>					N/b
	Buckenham	M. T.	1993		
<p>Occurs on bare mud at water margins and on marshes. Threatened by pollution and hinderance of the natural flow of rivers.</p>					
<i>Bembidion assimile</i>					Common
	Surlingham	M. C.	1984	(57)	
	Wheatfen	A. B. D.	1978	(3)	
<i>Bembidion clarki</i>					N/b
	Wheatfen	M. J. D. C.	1939	(1)	
<p>Predatory, most often found near the coast, in marshes, sallow carr and at water margins. Benefits from high water levels and pollution free conditions.</p>					
<i>Bembidion normannum</i>					Local
	Wheatfen	M. J. D. C.	1939	(1)	
<p>Restricted to salt marshes.</p>					
<i>Bembidion obtusum</i>					Common
	Buckenham	M. T.	1993		
<i>Bembidion harpaloides</i>					Common
	Wheatfen	P. D. O.	1967	(74)	

<i>Bembidion guttula</i>					Common
	Buckenham	M. T.	1993		
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Bembidion unicolor (=mannerheimi)</i>					Local
	Wheatfen	M. J. D. C.	1939	(1)	
		M. J. D. C.	1941	(1)	
<i>Stomis pumicatus</i>					Local
	Wheatfen	M. J. D. C.	1940	(1)	
		P. D. O.	1964	(74)	
<i>Pterostichus cristatus s. parumpunctatus</i>					N/b
	Wheatfen	E. A. E.	1939	(1)	
	Predatory. Found under stones in wet woodland and damp grassland. This record requires confirmation as it is not otherwise known south of Yorkshire.				
<i>Pterostichus diligens</i>					Common
	Strumpshaw	A. P. F.	1981	(57)	
		M. T.	1994		
	Surlingham	M. C.	1984	(57)	
	Wheatfen	E. A. E.	1937	(1)	
		M. T.	1994		
<i>Pterostichus gracilis</i>					N/b
	Strumpshaw	M. T.	1994		
	Wheatfen	A. B. D.	1978	(3)	
	Found at water margins and in fens. Recorded from cpt. 31.				
<i>Pterostichus madidus</i>					Common
	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1939	(1)	
<i>Pterostichus melanarius</i>					Common
	Buckenham	M. T.	1993		
	Wheatfen	M. J. D. C.	1937	(1)	
		M. J. D. C.	1940	(1)	
<i>Pterostichus minor</i>					Local
	Strumpshaw	M. T.	1994		
	Wheatfen	M. J. D. C.	1937	(1)	
		M. T.	1994		
<i>Pterostichus niger</i>					Common
	S. Church Marsh	M. C.	1984	(57)	
	Wheatfen	M. J. D. C.	1937	(1)	
		E. A. E.	1978	(3)	

<i>Pterostichus nigrita</i>					Common
	Strumpshaw	M. T.	1994		
	S. Church Marsh	M. C.	1983	(57)	
	Wheatfen	M. J. D. C.	1939	(1)	
		M. T.	1994		
Recently split into two species, both of which should occur in the Mid-Yare (M. Telfer pers. comm.).					
<i>Pterostichus strenuus</i>					Common
	Surlingham	F. D. B.	1954	(57)	
		M. C.	1982	(57)	
	Wheatfen	M. J. D. C.	1939	(1)	
		M. T.	1994		
<i>Pterostichus vernalis</i>					Local
	Strumpshaw	M. T.	1994		
Associated with wet meadows. Recorded from cpt. 31.					
<i>Calathus melanocephalus</i>					Common
	Buckenham	M. T.	1993		
<i>Calathus piceus</i>					Common
	Wheatfen	A. E. E.	1939	(1)	
		E. A. E.	1977	(3)	
<i>Laemostenus terricola</i>					Local
	Strumpshaw	M. E. A. S.	1994		
Occurs in association with mammal dwellings. Found at Strumpshaw in a sandy bank near a rabbit warren.					
<i>Agonum dorsale</i>					Common
	S. Church Marsh	M. C.	1981	(57)	
	Wheatfen	P. D. O.	1967	(74)	
<i>Agonum fuliginosum</i>					Common
	S. Church Marsh	M. C.	1983	(57)	
	Wheatfen	E. A. E.	1937	(1)	
		M. T.	1994		
<i>Agonum gracile</i>					Local
	S. Church Marsh	M. C.	1981	(57)	
		M. C.	1983	(57)	
	Wheatfen	E. A. E.	1939	(1)	
		E. A. E.	1944	(1)	
<i>Agonum marginatum</i>					Local
	Buckenham	M. T.	1993		
Found on lake margins and the seashore.					
<i>Agonum micans</i>					Local
	Wheatfen	P. D. O.	1964	(74)	
<i>Agonum moestum</i>					Local
	S. Church Marsh	M. C.	1983	(57)	

<i>Agonum muelleri</i>	Wheatfen	E. A. E. M. T.	1938 1994	(1)	Common
<i>Agonum piceum</i>	Wheatfen	E. A. E. E. A. E.	1939 1940	(1) (1)	Local
<i>Agonum thoryi</i>	Strumpshaw Surlingham S. Church Marsh Wheatfen	A. P. F. + D. A. P. F. D. B. M. C. M. C. M. T.	1988 1954 1982 1983 1994	(57) (57) (57) (57)	Local
<i>A. thoryi v. puellum</i>	Wheatfen	E. A. E. A. B. D.	1938 1978	(1) (3)	
<i>Agonum viduum</i>	Wheatfen	E. A. E.	1938	(1)	Common
<i>Amara aenea</i>	S. Church Marsh Wheatfen	M. C. M. E. L. N. E. A. E.	1981 1939 1941	(57) (1) (1)	Common
<i>Amara communis</i>	Strumpshaw	M. T.	1994		Local
<i>Amara familiaris</i>	Wheatfen	E. A. E.	1940	(1)	Common
<i>Amara lunicollis</i>	Wheatfen	E. A. E.	1938	(1)	Local
<i>Amara plebeja</i>	Wheatfen	M. J. D. C. P. D. O.	1937 1967	(1) (74)	Common
<i>Amara similata</i>	Wheatfen	E. A. E.	1946	(1)	Common
	Recorded eating hairy bittercress (<i>Cardamine hirsuta</i>) seeds.				
<i>Harpalus rufipes</i> (Strawberry seed beetle).	Wheatfen	P. D. O.	1967	(74)	Common
<i>Anisodactylus binotatus</i>	Wheatfen	E. A. E. M. C.	1940 1984	(1) (57)	Local
A phytophagous ground beetle usually found in near water in grassland.					

<i>Trichocellus cognatus</i>					Local
	Wheatfen	M. J. D. C.	1939	(1)	
	A northern ground beetle, associated with heather (<i>Calluna vulgaris</i> and <i>Erica spp.</i>).				
<i>Trichocellus placidus</i>					Local
	Surlingham	M. C.	1985	(57)	
	S. Church Marsh	M. C.	1984	(57)	
	Wheatfen	M. J. D. C.	1939	(1)	
		A. B. D.	1978	(3)	
<i>Bradycellus ruficollis</i>					Common
	Wheatfen	E. A. E.	1945	(1)	
	Feeds on heather (<i>Calluna vulgaris</i>). Recorded from several East Anglian heaths (B. Eversham pers. comm.).				
<i>Acupalpus dorsalis</i>					Local
	Wheatfen	M. T.	1994		
	Found in a habitat pile. Identification needs to be checked.				
<i>Acupalpus meridianus</i>					Common
	Wheatfen	E. A. E.	pre. 1983	(74)	
<i>Badister bipustulatus</i>					Common
	Wheatfen	D. N. S.	1944	(1)	
		E. A. E.	1977	(3)	
<i>Badister sodalis</i>					Local
	Wheatfen	M. J. D. C.	1939	(1)	
		P. D. O.	1964	(74)	
	Predatory ground beetle usually found near running water.				
<i>Oodes helopioides</i>					N/b
	Strumpshaw	M. T.	1994		
	S. Church Marsh	M. C.	1983	(57)	
	Wheatfen	M. J. D. C.	1936	(1)	
		P. D. O.	1962	(3)	
	Found on bare mud among lush vegetation in fens and wet meadows. Semi-aquatic and probably predatory. May benefit from rotational disturbance of water margins.				

<i>Odacantha melanura</i>					N/b
	Rockland	E. A. E.	1936	(44)	
	Strumpshaw	A. P. F. + D. A. P.	1988	(57)	
	Wheatfen	M. J. D. C.	1936	(1)	
		A. B. D.	1978	(3)	
<p>A south-eastern metallic red and blue ground beetle, once typical of and abundant in fenland and reed beds, by the 1930's it had become much rarer. The maintenance of water quality and open areas is probably essential for this species.</p>					
<i>Demetrias atricapillus</i>					Common
	S. Church Marsh	M. C.	1983	(57)	
	Wheatfen	M. J. D. C.	1938	(1)	
		M. T.	1994		
<p>Recorded from inside an umbellifer stem at Wheatfen (P. D. Orton 1962 (3)).</p>					
<i>Demetrias imperialis</i>					N/b
	Wheatfen	E. A. E.	1977	(3)	
		A. B. D.	1978	(3)	
<p>Probably predatory in tall emergent vegetation, especially Phragmites. Historically locally common in eastern fens and marshes, the species suffered a dramatic decline but now seems to be recovering. Drainage and eutrophication are probably the major threats to this ground beetle.</p>					
<i>Demetrias monostigma</i>					N/b
	Wheatfen	M. J. D. C.	1938	(1)	
		M. J. D. C.	1939	(1)	
<p>Probably predatory. Found on sand dunes, coastal habitats, fens and marshes. Threatened by falling water tables.</p>					
<i>Dromius linearis</i>					Common
	Wheatfen	M. J. D. C.	1939	(1)	
		A. B. D.	1978	(3)	
<i>Dromius longiceps</i>					RDB 2 (N/a)
	Rockland	E. A. E.	1936	(44)	
	Wheatfen	R. S. M. B.	1942	(1)	
		A. B. D.	1978	(3)	
<p>Probably predatory. Occurs on fens, broads, marshes and brackish situations. This ground beetle is often found in reed stems and the galls of <i>Lipara lucens</i> (Diptera). Threatened by falling water tables. Also recorded at Wheatfen in 1967 by P. Orton (74) and 1971 by K. Durrant (62).</p>					
<i>Dromius melanocephalus</i>					Common
	Wheatfen	M. J. D. C.	1938	(1)	
		A. B. D.	1978	(3)	

<i>Dromius meridionalis</i>	Wheatfen	E. A. E.	1937	(1)	Local
<i>Dromius notatus</i>	Wheatfen	M. J. D. C.	1939	(1)	Local
	Found on sandy soil.				
<i>Dromius quadrimaculatus</i>	Wheatfen	M. J. D. C.	1937	(1)	Common
		P. D. O.	1967	(74)	
<i>Dromius quadrinotatus</i>	Wheatfen	M. J. D. C.	1937	(1)	Common
		M. J. D. C.	1939	(1)	
<i>Metabletus foveatus</i>	Strumpshaw	M. T.	1994		Common
	A heathland and sandy ground species, recorded from a sand pit at Strumpshaw.				

Family HALIPLIDAE (Water beetles).

<i>Haliplus fluviatilis</i>	Wheatfen	E. A. E.	1939	(1)	
	Not recorded in Broadland by R. Driscoll (1976).				
<i>Haliplus fulvus</i>	Strumpshaw	J. M.	1978	(14)	
		P. D. W.	1979	(6)	
	Found to be local in Broadland by R. Driscoll (1976).				
<i>Haliplus immaculatus</i>	Buckenham	R. J. D.	1974	(5)	
	Cantley	R. J. D.	1974	(5)	
<i>Haliplus lineatocollis</i>	Buckenham	R. J. D.	1974	(5)	
	Cantley	R. J. D.	1974	(5)	
	Strumpshaw	A. P. F.	1981	(76)	
	Wheatfen	E. S. B.	1951	(3)	
<i>Haliplus lineolatus</i>	Buckenham	R. J. D.	1974	(5)	Local
	Cantley	R. J. D.	1974	(5)	
	Found in man made ponds and lakes.				
<i>Haliplus obliquus</i>	Wheatfen	M. J. D. C.	1937	(1)	
	Local in Broadland (R. Driscoll 1976).				

Haliplus ruficollis

Buckenham	R. J. D.	1974	(5)
	J. B.	1993	(50)
Wheatfen	E. S. B.	1951	(3)

Haliplus wehnckeii

Buckenham	R. J. D.	1974	(5)
Cantley	R. J. D.	1974	(5)
Wheatfen	E. S. B.	1951	(3)
	R. B.	1994	(54)

Family HYGROBIIDAE (Water beetles).

Hygrobia herrmanni (Squeak beetle).

Buckenham	G. N. F.	1993	(50)
-----------	----------	------	------

Local

A south-eastern water beetle associated with ponds and dykes visited by cattle.

Family NOTERIDAE (Water beetles).

Noterus clavicornis

Buckenham	R. J. D.	1974	(5)
Cantley	R. J. D.	1974	(5)
Strumpshaw	P. D. W.	1979	(6)
Wheatfen	M. J. D. C.	1939	(1)
	E. S. B.	1951	(3)

Noterus crassicornis

Buckenham	R. J. D.	1974	(5)
	J. B.	1993	(50)
Cantley	R. J. D.	1974	(5)
Strumpshaw	R. J. D.	1972-4	(62)
Wheatfen	M. J. D. C.	1939	(1)

N/b

A flightless water beetle. Found on fens and grazing levels.

Family DYTISCIDAE (Water beetles).

Laccophilus minutus

Buckenham	R. J. D.	1974	(5)
	J. B.	1993	(50)
Wheatfen	M. J. D. C.	1939	(1)
	R. J. D.	1977	(36)
Wheatfen Broad	R. J. D.	1977	(36)

Local

A water beetle found in ponds and dykes on lowland grazing marshes.

Hydroglyphus (=Guignotus) pusillus

Buckenham	J. B.	1993	(50)
-----------	-------	------	------

N/b

A small water beetle which occurs in man-made silt ponds and peat cuttings.

<i>Hyphydrus ovatus</i>				
Buckenham	R. J. D.	1974	(5)	
	J. B.	1993	(50)	
Strumpshaw	P. D. W.	1979	(6)	
Wheatfen	M. J. D. C.	1936	(1)	
	E. S. B.	1951	(3)	
<i>Hygrotytus inaequalis</i>				
Buckenham	R. J. D.	1974	(5)	
	J. B.	1993	(50)	
Cantley	R. J. D.	1974	(5)	
Wheatfen	M. J. D. C.	1937	(1)	
<i>Hydroporus angustatus</i>				
Strumpshaw	A. P. F.	1981	(76)	
Wheatfen	E. S. B.	1951	(3)	
Found to be local in Broadland by R. Driscoll (1976).				
<i>Hydroporus erythrocephalus</i>				
Wheatfen	M. J. D. C.	1939	(1)	
<i>Hydroporus palustris</i>				
Buckenham	R. J. D.	1974	(5)	
	G. N. F.	1993	(50)	
Cantley	R. J. D.	1974	(5)	
Strumpshaw	J. M.	1978	(14)	
	P. D. W.	1979	(6)	
Wheatfen	M. J. D. C.	1939	(1)	
	R. J. D.	1977	(36)	
<i>Hydroporus planus</i>				
Buckenham	R. J. D.	1974	(5)	
<i>Hydroporus striola</i>				
Wheatfen	E. S. B.	1951	(3)	
Found to be local in Broadland by R. Driscoll (1976).				
<i>Hydroporus tessellatus</i>				
Wheatfen	E. A. E.	1939	(1)	
Not recorded in Broadland by R. Driscoll (1976).				
<i>Graptodytes (=Hydroporus) pictus</i>				
Cantley	R. J. D.	1974	(5)	
Strumpshaw	P. D. W.	1979	(6)	
Wheatfen	E. S. B.	1951	(3)	
<i>Scarodytes (=Oreodytes) halensis</i>				
Brundall Marsh	J. E.	1893	(76)	N/b
Buckenham	R. J. D.	1974	(5)	
Strumpshaw	R. J. D.	1972-4	(62)	
Found in vegetation rich slow flowing and still water. Particularly associated with <i>Chara</i> spp..				

<i>Copelatus haemorrhoidalis</i>	Wheatfen	E. S. B.	1951	(3)	
<i>Agabus bipustulatus</i>	Buckenham Carr	M. J. M.	1993	(76)	
	Wheatfen	E. A. E.	1938	(1)	
<i>Agabus nebulosus</i>	Buckenham	J. B.	1993	(50)	
	Not recorded in Broadland by R. Driscoll (1976).				
<i>Agabus paludosus</i>	Wheatfen	E. A. E.	1939	(1)	
	Found to be local in Broadland by R. Driscoll (1976).				
<i>Agabus sturmi</i>	Buckenham	J. B.	1993	(50)	
<i>Ilybius fenestratus</i>	Strumpshaw	P. D. W.	1979	(6)	N/b
	Found to be local in Broadland by R. Driscoll (1976). This record requires confirmation.				
<i>Ilybius guttiger</i>	Wheatfen	E. C. B.	1938	(1)	N/b
		R. B.	1994	(54)	
	Also recorded by E. Brown in 1951 (3). Not recorded in Broadland by R. Driscoll (1976). A water beetle found in shaded, mossy ponds in relict fens.				
<i>Rhantus frontalis</i>	Brundall Marsh	H. R. P. C.	1932	(67)	N/b
<i>Acilius sulcatus</i>	Wheatfen	E. A. B.	1937	(1)	
		E. A. E.	1938	(1)	
<i>Dystiscus marginalis</i> (Great diving beetle).	Strumpshaw	P. D. W.	1979	(6)	
		C. N. M.	1986	(14)	
	Wheatfen	M. J. D. C.	1942	(1)	
<i>Dystiscus semisulcatus</i>	Wheatfen	E. C. B.	1938	(1)	
Family GYRINIDAE (Whirligig beetles).					
<i>Gyrinus marinus</i>	Buckenham	R. J. D.	1974	(5)	
	Cantley	R. J. D.	1974	(5)	
	Wheatfen	E. S. B.	1951	(3)	

<i>Gyrinus semistriatus</i>				Common
	Buckenham	R. J. D.	1974 (5)	
	Cantley	R. J. D.	1974 (5)	
	Strumpshaw	A. P. F.	1981 (76)	

This species was previously confused with *G. natator*, which is in fact very rare.

Family HYDROPHILIDAE (Water beetles (some terrestrial species)).

Helophorus (=aequalis) aquaticus

	Buckenham	J. B.	1993 (50)	
--	-----------	-------	-----------	--

Found to be local in Broadland by R. Driscoll (1976).

Helophorus brevipalpis

	Wheatfen	A. H. N.	1938 (1)	
		P. D. O.	1964 (74)	

Helophorus dorsalis

	Wheatfen	E. A. E.	1939 (1)	RDB 3 (RDB 2)
--	----------	----------	----------	------------------

Not recorded in Broadland by R. Driscoll (1976).
Typically found in small often temporary ponds eg. hoof prints. Has a very restricted distribution in East Anglia.

Coelostoma orbiculare

	Surlingham	M. C.	1985 (76)	
	Wheatfen	M. J. D. C.	1939 (1)	

Sphaeridium bipustulatum

	Wheatfen	P. D. O.	1964 (74)	
--	----------	----------	-----------	--

Cercyon atomarius

	Wheatfen	A. B. D.	1978 (3)	
--	----------	----------	----------	--

Cercyon lateralis

	Wheatfen	P. D. O.	1962 (3)	
		P. D. O.	1967 (74)	

Cercyon littoralis

	Strumpshaw	M. K. D.	1988 (7)	
--	------------	----------	----------	--

This record requires confirmation.

Cercyon melanocephalus

	Wheatfen	P. D. O.	1967 (74)	
--	----------	----------	-----------	--

Cercyon tristis

	Buckenham	G. N. F.	1993 (50)	N/b
--	-----------	----------	-----------	-----

Terrestrial.

Cercyon unipunctatus

	Wheatfen	P. D. O.	1962 (3)	
--	----------	----------	----------	--

<i>Cercyon ustulatus</i>					N/b
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Megasternum obscurum</i>					
	Wheatfen	P. D. O.	1967	(74)	
<i>Cryptopleurum minutum</i>					
	Wheatfen	P. D. O.	1962	(74)	
<i>Hydrobius fuscipes</i>					
	Buckenham	J. B.	1993	(50)	
	Strumpshaw	P. D. W.	1979	(6)	
	Surlingham	M. C.	1984	(76)	
	Wheatfen	E. A. E.	1938	(1)	
		E. S. B.	1951	(3)	
<i>Anacaena globulus</i>					
	Wheatfen	E. A. E.	1938	(1)	
		M. J. D. C.	1939	(1)	
	Local in Broadland (R. Driscoll 1976).				
<i>Anacaena limbata</i>					
	Buckenham	R. J. D.	1974	(5)	
	Strumpshaw	A. P. F.	1981	(76)	
	Strump. Broad	R. J. D.	1977	(36)	
	Wheatfen	R. A. C.	1944	(1)	
		R. J. D.	1977	(36)	
	Wheatfen Broad	R. J. D.	1977	(36)	
<i>Laccobius biguttatus</i>					Local
	Buckenham	R. J. D.	1974	(5)	
		J. B.	1993	(50)	
	Cantley	R. J. D.	1974	(5)	
	Usually found at the margins of large lowland ponds.				
<i>Laccobius bipunctatus</i>					
	Strumpshaw	A. P. F.	1981	(76)	
	Surlingham	M. C.	1985	(76)	
<i>Laccobius minutus</i>					Local
	Buckenham	J. B.	1993	(50)	
	A water beetle of grazing marsh ditches and lowland ponds.				
<i>Helochares lividus</i>					N/b
	Buckenham	J. B.	1993	(50)	
	Found to be local in Broadland by R. Driscoll (1976).				
	A south-eastern water beetle of ponds and dykes.				
<i>Enochrus coarctatus</i>					
	Strumpshaw	J. M.	1978	(14)	
	Found to be local in Broadland by R. Driscoll (1976).				

<i>Enochrus melanocephalus</i>	Buckenham	R. J. D.	1974	(5)	
<i>Enochrus testaceus</i>	Buckenham	J. B.	1993	(50)	Local
	Wheatfen	E. S. B.	1951	(3)	
Occurs in well vegetated water bodies.					
<i>Chaetarthria seminulum</i>	Strumpshaw	M. K. D.	1988	(7)	N/b
	Wheatfen	R. A. C.	1944	(1)	
A small water beetle found in wet mud and plant litter at the edges of ponds.					
<i>Hydrophilus piceus</i> (Great silver diving beetle).	Brundall Marsh	J. E.	1893	(76)	RDB 3
Requires clear, vegetated water. Threatened by pollution and eutrophication. Has declined greatly this century but is still to be found at Hickling where three were taken at light in 1994 (N. Peet pers. comm.).					

Family HISTERIDAE

<i>Saprinus semistriatus</i>	Wheatfen	R. S. M. B.	1942	(1)	
		P. D. O.	1962	(3)	
Recorded at Wheatfen in the corpse of a pheasant (<i>Phasianus colchicus</i>) (3).					
<i>Carcinops pumilio</i>	Wheatfen	P. D. O.	1962	(3)	

Family HYDRAENIDAE (Water beetles).

<i>Octhebius dilatatus</i>	Strumpshaw	A. P. F.	1981	(76)	
<i>Octhebius minimus</i>	Strumpshaw	A. P. F.	1981	(76)	
<i>Hydraena riparia</i>	Strumpshaw	A. P. F.	1981	(76)	
	Wheatfen	E. S. B.	1951	(3)	
<i>Hydraena testacea</i>	Strumpshaw	A. P. F.	1981	(62)	N/b
Found in fast flowing streams and old fens.					

<i>Limnebius papposus</i>					Local
	Wheatfen	E. S. B.	1951	(3)	
	Most frequently encountered amongst rotting vegetation in shallow water. Although most records come from East Anglia, it was found to be local in Broadland by R. Driscoll (1976).				

Family LBIODIDAE

<i>Anisotoma humeralis</i>					
	Wheatfen	R. S. M. B.	1942	(1)	
		E. A. E.	1970	(1)	
<i>Anisotoma orbicularis</i>					
	Wheatfen	R. S. M. B.	1942	(1)	
<i>Agathidium varians</i>					
	Wheatfen	P. D. O.	1967	(74)	
<i>Ptomaphagus subvillosus</i>					
	Wheatfen	P. D. O.	1967	(74)	
<i>Catops chrysomeliodes</i>					
	Wheatfen	R. S. M. B.	1942	(1)	
	On dryad's saddle (<i>Polyporus squamosus</i>) on dead elm (<i>Ulmus spp.</i>).				
<i>Catops fuliginosus</i>					
	Wheatfen	P. D. O.	1962	(3)	
<i>Catops tristis</i>					
	Wheatfen	M. J. D. C.	1937	(1)	
		R. S. M. B.	1942	(1)	
	In dryad's saddle (<i>Polyporus squamosus</i>) on dead elm (<i>Ulmus spp.</i>).				
<i>Catops kirbii</i>					
	Wheatfen	P. D. O.	1962	(3)	
	Recorded from the corpse of a pheasant (<i>Phasianus colchicus</i>).				

Family SILPHIDAE (Burying beetles).

<i>Nicrophorus humator</i>					
	Wheatfen	E. C. B.	1938	(1)	
<i>Nicrophorus investigator</i>					
	Wheatfen	M. J. D. C.	1944	(1)	
<i>Nicrophorus vespillo</i>					
	Wheatfen	M. J. D. C.	1940	(1)	

<i>Microphorus vespilloides</i>	Wheatfen	A. B. D.	1978	(3)	
<i>Thanatophilus rugosus</i>	Wheatfen	P. D. O.	1962	(3)	
Recorded from the corpse of a pheasant (<i>Phasianus colchicus</i>).					
<i>Oiceoptoma thoracicum</i>	Strumpshaw	J. B.	1993	(50)	Local
	Wheatfen	R. S.	1939	(1)	
		E. A. E.	1946	(1)	
Found in rotting vegetation and animals.					
<i>Silpha atrata</i>	Strumpshaw	C. N. M.	1986	(14)	
	Wheatfen	P. D. O.	1962	(3)	
		M. E. A. S.	1994		
<i>S. atrata s. subrotundata</i>	Wheatfen	P. D. O.	1962	(3)	
A rather local beetle which feeds on snails.					

Family SCYDMAENIDAE

<i>Euconnus hirticollis</i>	Wheatfen	E. A. E.	1945	(1)	
<i>Scydmaenus tarsatus</i>	Wheatfen	P. D. O.	1962	(3)	
In dryad's saddle (<i>Polyporus squamosus</i>).					

Family STAPHYLINIDAE (Rove beetles).

<i>Proteinus ovalis</i>	Wheatfen	P. D. O.	1962	(3)	
		P. D. O.	1964	(74)	
Recorded from the corpse of a pheasant (<i>Phasianus colchicus</i>).					
<i>Anthabium atrocephalum</i>	Wheatfen	E. A. E.	1945	(1)	
		A. B. D.	1978	(3)	
<i>Anthabium unicolor</i>	Wheatfen	E. A. E.	1945	(1)	
<i>Olophrum fuscum</i>	Wheatfen	A. B. D.	1978	(3)	
<i>Olophrum piceum</i>	Wheatfen	E. A. E.	1937	(1)	
		E. A. E.	1945	(1)	

<i>Lesteva heeri</i>	Wheatfen	P. D. O.	1964	(74)	
		P. D. O.	1967	(74)	
<i>Eusphalerum minutum</i>	Wheatfen	A. B. D.	1978	(3)	
<i>Eusphalerum torquatum</i>	Wheatfen	E. A. E.	1938	(1)	
		E. A. E.	1939	(1)	
Found on violet (<i>Viola spp.</i>).					
<i>Omalium rivulare</i>	Wheatfen	E. C. B.	1938	(1)	
		P. D. O.	1967	(74)	
<i>Xylodromus depressus</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Coprophilus striatulus</i>	Wheatfen	M. J. D. C.	1938	(1)	
<i>Aploderus caelatus</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Platystethus cornutus</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Anotylus rugosus</i>	Wheatfen	P. D. O.	1962	(3)	
		P. D. O.	1967	(74)	
<i>A. rugosus v. pulcher</i>	Wheatfen	P. D. O.	1967	(74)	
		A. B. D.	1978	(1)	
<i>Oxytelus fulvipes</i>	Wheatfen	P. D. O.	1964	(74)	N/a
		P. D. O.	1967	(74)	
Found in vegetable litter and dung.					
<i>Oxyporus rufus</i>	Wheatfen	M. J. D. C.	1933	(1)	
		P. D. O.	1967	(74)	
Recorded from a <i>Boletus sp.</i> mushroom in 1933.					
<i>Stenus bimaculatus</i>	Wheatfen	M. J. D. C.	1939	(1)	
		E. A. E.	1977	(1)	
<i>Stenus binotatus</i>	Wheatfen	A. H. N.	1938	(1)	

<i>Stenus boops</i>	Wheatfen	E. C. B.	1938	(1)	
		M. J. D. C.	1939	(1)	
<i>Stenus brunnipes</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Stenus cicindeloides</i>	Wheatfen	A. H. N.	1938	(1)	
<i>Stenus comma</i>	Wheatfen	E. A. E.	pre. 1983	(74)	
<i>Stenus crassus v. formicetorum</i>	Wheatfen	M. J. D. C.	1939	(1)	First Norfolk record.
<i>Stenus flavipes</i>	Wheatfen	M. J. D. C.	1939	(1)	
		P. D. O.	1964	(74)	
<i>Stenus formicetorum</i>	Wheatfen	E. A. E.	pre. 1983	(74)	
<i>Stenus junco</i>	Wheatfen	E. C. B.	1938	(1)	
		P. D. O.	1967	(74)	
<i>Stenus lustrator</i>	Brundall Marsh	H. R. F. C.	1932	(67)	Local
	A marshland rove beetle.				
<i>Stenus melanopus</i>	Wheatfen	P. D. O.	1962	(3)	Rare in Norfolk, this specimen was slightly atypical.
<i>Stenus nigrutilus</i>	Wheatfen	M. J. D. C.	1938	(1)	N/b
	Found on river banks and saltmarshes. Pollution and lack of sheltered water margins may threaten this species.				
<i>Stenus nitens</i>	Wheatfen	P. D. O.	1967	(74)	
		E. A. E.	1977	(3)	
<i>Stenus nitidiusculus</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Stenus rogeri</i>	Wheatfen	M. J. D. C.	1939	(1)	

<i>Stenus solutus</i>	Wheatfen	P. D. O.	1962	(3)	
		A. B. D.	1978	(3)	
<i>Stenus tarsalis</i>	Wheatfen	E. C. B.	1938	(1)	
<i>Euaesthetus bipunctatus</i>	Wheatfen	R. A. C.	1944	(1)	
<i>Paederus riparius</i>	Wheatfen	A. H. N.	1938	(1)	
		P. D. O.	1964	(74)	
<i>Lathrobium brunnipes</i>	Wheatfen	E. A. E.	1939	(1)	
		P. D. O.	1967	(74)	
<i>Lathrobium fulvipenne</i>	Wheatfen	P. D. O.	1964	(74)	
		P. D. O.	1967	(74)	
<i>Lathrobium geminum</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Lathrobium impressum</i>	Wheatfen	P. D. O.	1964	(74)	
<i>Lathrobium multipunctum</i>	Wheatfen	E. C. B.	1938	(1)	
<i>Lathrobium terminatum</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Lithocharis nigriceps</i>	Wheatfen	P. D. O.	1964	(74)	
		P. D. O.	1967	(74)	
<i>Astenus lyonessius</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Rugilus fragilis</i>	Wheatfen Biology unknown.	P. D. O.	1967	(74)	N/b
<i>Rugilus orbiculatus</i>	Wheatfen	E. C. B.	1938	(1)	
		P. D. O.	1967	(74)	
<i>Rugilus rufipes</i>	Wheatfen	P. D. O.	1962	(3)	
		P. D. O.	1964	(74)	

<i>Rugilus similis</i>	Wheatfen	P. D. O.	1962	(3)	N
Found in dry grassland or reed debris. Has been recorded from habitat piles.					
<i>Othius punctulatus</i>	Wheatfen	E. A. E.	1945	(1)	
<i>Leptacinus intermedius</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Gyrophypnus angustatus</i>	Wheatfen	M. J. D. C.	1938	(1)	
<i>Gyrophypnus fracticornis</i>	Wheatfen	P. D. O.	1964	(74)	
		P. D. O.	1967	(74)	
<i>Xantholinus glabratus</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Xantholinus jarrigei</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Xantholinus linearis</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Philonthus addendus</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Philonthus cephalotes</i>	Wheatfen	P. D. O.	1962	(3)	
		P. D. O.	1964	(74)	
<i>Philonthus cognatus</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Philonthus concinnus v. ochropus</i>	Wheatfen	P. D. O.	1962	(3)	
<i>Philonthus decorus</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Philonthus fimetarius</i>	Wheatfen	P. D. O.	1962	(3)	
		P. D. O.	1967	(74)	
<i>Philonthus jurgans</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Philonthus mannerheimi</i>	Wheatfen	M. J. D. C.	1937	(1)	N/b
Usually recorded in sedge litter or around the roots of bogbean (<i>Menyanthes trifoliata</i>).					

<i>Philonthus marginatus</i>	Wheatfen	P. D. O.	1967	(74)
<i>Philonthus micans</i>	Wheatfen	M. J. D. C.	1939	(1)
<i>Philonthus politus</i>	Wheatfen	P. D. O.	1962	(3)
	Recorded from corpses of a pheasant (<i>Phasianus colchicus</i>) and a coypu (<i>Myocastor coypus</i>) (3).			
<i>Philonthus sanginolentus</i>	Wheatfen	P. D. O.	1962	(3)
<i>Philonthus succicola</i>	Wheatfen	P. D. O.	1962	(3)
	Recorded in the corpse of a pheasant (<i>Phasianus colchicus</i>) (3).			
<i>Philonthus varians</i>	Wheatfen	P. D. O.	1962	(3)
	Recorded from the corpse of a pheasant (<i>Phasianus colchicus</i>) (3).			
<i>Philonthus varius</i>	Wheatfen	M. J. D. C.	1939	(1)
		P. D. O.	1967	(74)
<i>Grabrius subnigritulus</i>	Wheatfen	P. D. O.	1964	(74)
<i>Grabrius trossulus</i>	Wheatfen	P. D. O.	1964	(74)
<i>Staphylinus erythropterus</i>	Wheatfen	M. J. D. C.	1937	(1)
<i>Staphylinus globulifer</i>	Wheatfen	M. J. D. C.	1937	(1)
<i>Staphylinus olens</i> (Devil's coach horse).	Buckenham	M. E. A. S.	1993	
	Wheatfen	M. J. D. C.	1937	(1)
<i>Ontholestes tessellatus</i>	Wheatfen	P. D. O.	1962	(3)
	From a pheasant (<i>Phasianus colchicus</i>) corpse (3).			
<i>Heterothrops dissimilis</i>	Wheatfen	P. D. O.	1967	(74)
	A very local rove beetle found in grass litter.			

RDB K

<i>Quedius cinctus</i>	Wheatfen	P. D. O.	1964	(74)	
<i>Quedius cruentus</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Quedius fuliginosus</i>	Wheatfen	M. J. D. C. P. D. O.	1938 1964	(1) (74)	
<i>Quedius humeralis</i>	Wheatfen	P. D. O.	1967	(74)	Local
	Ground living rove beetle.				
<i>Quedius maurorufus</i>	Wheatfen	E. C. B.	1938	(1)	
<i>Quedius mesomelinus</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Quedius molochinus</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Quedius picipes</i>	Wheatfen	P. D. O. P. D. O.	1964 1967	(74) (74)	
<i>Quedius nitipennis</i>	Wheatfen	P. D. O.	1962	(3)	
<i>Quedius schatzmayri</i>	Wheatfen	P. D. O.	1962	(74)	
<i>Quedius scintillans</i>	Wheatfen	P. D. O.	1964	(74)	
<i>Habrocerus capillaricornis</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Mycetoporus longicornis</i>	Wheatfen	P. D. O.	1967	(74)	N/b
	A small rove beetle found in moss and litter.				
<i>Mycetoporus splendidus</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Lordithon exoletus</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Lordithon lunulatus</i>	Wheatfen	R. S. M. B.	1942	(1)	
<i>Bolitobius analis</i>	Wheatfen	M. J. D. C.	1939	(1)	

<i>Bolitobius cingulatus</i>				
Wheatfen	P. D. O.	1967	(74)	
	E. A. E.	1977	(3)	
<i>Sepedophilus littoreus</i>				
Wheatfen	P. D. O.	1967	(74)	
<i>Sepedophilus marshami</i>				
Wheatfen	P. D. O.	1962	(74)	
	P. D. O.	1964	(74)	
<i>Sepedophilus testaceus</i>				
Wheatfen	M. J. D. C.	1937	(1)	N/b
	P. D. O.	1964	(74)	
Associated with wood infected by fungal mycelia in deciduous woods, including carr. Removal of standing dead timber should be avoided. Due to changes in nomenclature early records of this species may refer to species now considered to be separate.				
<i>Tachyporus chrysomelinus</i>				
Wheatfen	E. A. E.	1938	(1)	
	P. D. O.	1964	(74)	
<i>Tachyporus hypnorum</i>				
Wheatfen	M. J. D. C.	1945	(1)	
	A. B. D.	1978	(3)	
<i>T. hypnorum s. meridionalis</i>				
Wheatfen	M. J. D. C.	1939	(1)	
<i>Tachyporus nitidulus</i>				
Wheatfen	E. A. E.	1945	(1)	
<i>Tachyporus obtusus</i>				
Wheatfen	P. D. O.	1964	(74)	
	P. D. O.	1967	(74)	
<i>Tachyporus pallidus</i>				
Wheatfen	E. A. E.	1945	(1)	
	A. B. D.	1978	(3)	
<i>Tachyporus tersus</i>				
Wheatfen	E. A. E.	1939	(1)	
<i>Tachyporus transversalis</i>				
Wheatfen	E. A. E.	1945	(1)	
<i>Tachinus humeralis</i>				
Wheatfen	R. S. M. B.	1942	(1)	
<i>Tachinus laticollis</i>				
Wheatfen	P. D. O.	1964	(74)	
	P. D. O.	1967	(74)	

<i>Tachinus marginellus</i>	Wheatfen	P. D. O.	1964	(74)	
<i>Tachinus signatus</i>	Wheatfen	M. J. D. C.	1938	(1)	
		P. D. O.	1962	(3)	
<i>Cypha discoidea</i>	Wheatfen	A. B. D.	1978	(3)	N/b
Found amongst rotting reed litter in fens, marshes and estuaries. High water levels and the provision of habitat piles would benefit this species.					
<i>Cypha longicornis</i>	Wheatfen	A. B. D.	1978	(3)	
<i>Hygronoma dimidiata</i>	Wheatfen	E. C. B.	1938	(1)	
		P. D. O.	1962	(3)	
<i>Gyrophaena nana</i>	Wheatfen	R. S. M. B.	1942	(1)	
<i>Anomognathus cuspidatus</i>	Wheatfen	P. D. O.	1964	(74)	
<i>Bolitochara obliqua</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Autalia impressa</i>	Wheatfen	P. D. O.	1962	(3)	
<i>Autalia rivularis</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Cordalia obscura</i>	Wheatfen	E. C. B.	1938	(1)	
		P. D. O.	1967	(74)	
<i>Falagria caesa</i>	Wheatfen	E. C. B.	1938	(1)	
<i>Nehemitropia sordida</i>	Wheatfen	P. D. O.	1964	(74)	
<i>Dinaraea aequata</i>	Wheatfen	P. D. O.	1964	(74)	
		P. D. O.	1967	(74)	
<i>Dinaraea angustata</i>	Wheatfen	P. D. O.	1964	(74)	

<i>Atheta luteipes</i>	Wheatfen	P. D. O.	1967	(74)
	Very scarce in Norfolk.			
<i>Atheta aquatica</i>	Wheatfen	E. A. E.	1938	(1)
<i>Atheta graminicola</i>	Wheatfen	P. D. O.	1964	(74)
		P. D. O.	1967	(74)
<i>Pachnida nigella</i>	Wheatfen	P. D. O.	1962	(74)
		P. D. O.	1967	(74)
<i>Drusilla canaliculata</i>	Wheatfen	E. A. E.	1938	(1)
<i>Zyrras collaris</i>	Wheatfen	P. D. O.	1964	(74)
		A. B. D.	1978	(3)
<i>Aleochara curtula</i>	Wheatfen	P. D. O.	1962	(3)
	Recorded in the corpse of a pheasant (<i>Phasianus colchicus</i>) (3).			
<i>Ocalea rivularis</i>	Wheatfen	P. D. O.	1964	(74)
	First Norfolk record.			
<i>Deubellia picina</i>	Wheatfen	P. D. O.	1962	(74)
		P. D. O.	1964	(74)
<i>Oxypoda alternans</i>	Wheatfen	P. D. O.	1964	(74)
<i>Oxypoda elongatula</i>	Wheatfen	P. D. O.	1964	(74)
		P. D. O.	1967	(74)
<i>Aleochara curtula</i>	Wheatfen	P. D. O.	1962	(74)
<i>Aleochara lanuginosa</i>	Wheatfen	P. D. O.	1967	(74)

Family PSELAPHIDAE (Moss beetles).

<i>Bythinus macropalpus</i>					Local
	Wheatfen	A. B. D.	1978	(3)	
	Found in rotten wood and occasionally in small mammal nests.				
<i>Bryaxis bulbifer</i>					
	Wheatfen	E. A. E.	1935	(1)	
		E. A. E.	1941	(1)	
	Recorded from moss in carr undergrowth in 1935 and a mouse nest in 1941 (1).				
<i>Rybaxis longicornis</i>					
	Wheatfen	E. A. E.	1935	(1)	
		E. A. E.	1945	(1)	
	Recorded from moss in sallow carr.				

Family LUCANIDAE (Stag beetles and allies).

<i>Dorcus parallelipedus</i> (Lesser stag beetle).					
	Strumpshaw	M. E. A. S.	1993		
		M. E. A. S.	1994		
	Wheatfen	E. A. E.	pre. 1983	(74)	

Family GEOTRUPIDAE (Dung beetles).

<i>Geotrupes stercorarius</i> (Dor beetles).					
	Wheatfen	E. A. E.	pre. 1983	(74)	

Family SCARABAEIDAE (Scarabs and cockchafer).

<i>Aphodius sphaelatus</i>					
	Wheatfen	E. A. E.	1943	(1)	
<i>Serica brunnea</i>					
	Wheatfen	E. A. E.	pre. 1983	(74)	
<i>Melolontha melolontha</i> (Cockchafer).					
	Wheatfen	M. J. D. C.	1937	(1)	
<i>Phyllopertha horticola</i> (Garden chafer).					
	Wheatfen	M. J. D. C.	1938	(1)	
		E. A. E.	1939	(1)	

Family SCIRTIDAE (Saltatory beetles).

<i>Microcara testacea</i>					
	Wheatfen	M. J. D. C.	1938	(1)	
		A. B. D.	1978	(3)	

<i>Cyphon coarctatus</i>	Wheatfen	A. H. N.	1938	(1)
<i>Cyphon padi</i>	Wheatfen	M. J. D. C.	1933	(1)
		A. B. D.	1978	(3)
<i>Cyphon palustris</i>	Buckenham	A. C. W.	1993	(50)
<i>Cyphon phragmieticola</i>	Wheatfen	E. C. B.	1938	(1)
		M. J. D. C.	1939	(1)

Hydrocyphon deflexicollis N/b
Wheatfen A. B. D. 1978 (3)
Occurs on gravelly water margins and occasionally in other wet situations. Gravelly areas should be maintained and managed with care.

Scirtes hemisphaericus Local
Strumpshaw J. B. 1993 (50)
Wheatfen A. H. N. 1938 (1)
Small saltatory beetle found on rushes in wet places. The larvae are aquatic.

Family BYRRHIDAE (Pill beetles).

Cytilus sericeus
Wheatfen E. A. E. 1942 (1)

Family DRYOPIDAE (Water and semi-aquatic beetles).

Dryops anglicanus RDB 3
Strumpshaw A. P. F. 1989 (62)
Known only from Norfolk and Berwickshire. Found in shallow areas of standing water.

Family ELATERIDAE (Click beetles).

Agrypnus murinus
Wheatfen M. J. D. C. 1942 (1)

Hypnoidus riparius
Wheatfen M. J. D. C. 1939 (1)
P. D. O. 1962 (74)

Cidnopus minutus
Wheatfen E. A. E. 1939 (1)
R. S. M. B. 1942 (1)

<i>Athous haemorrhoidalis</i>	Wheatfen	E. A. E.	1936	(1)
		A. B. D.	1978	(3)
<i>Athous hirtus</i>	Wheatfen	E. A. E.	1936	(1)
		E. A. E.	1941	(1)
<i>Athous vittatus</i>	Wheatfen	E. A. E.	1939	(1)
<i>Actenicerus sjaelandicus</i>	Wheatfen	E. A. E.	1937	(3)
		M. J. D. C.	1941	(1)
<i>Selatosomus incanus</i>	Wheatfen	M. J. D. C.	1939	(1)
<i>Agriotes acuminatus</i>	Wheatfen	E. A. E.	1938	(1)
		E. A. E.	1941	(1)
<i>Agriotes obscurus</i>	Wheatfen	E. A. E.	1938	(1)
		E. A. E.	1939	(1)
<i>Agriotes pallidulus</i>	Wheatfen	E. A. E.	1938	(1)
		A. B. D.	1978	(3)
<i>Dalopius marginatus</i>	Wheatfen	A. H. N.	1938	(1)
		P. D. O.	1962	(74)
<i>Adrastus pallens</i>	Wheatfen	E. A. E.	1936	(1)
		R. A. C.	1944	(1)
<i>Denticollis linearis</i>	Wheatfen	M. J. D. C.	1937	(1)
		M. J. D. C.	1942	(1)

Family CANTHARIDAE (Soldier beetles and sailor beetles).

Cantharis cryptica
Wheatfen M. J. D. C. 1934 (1)

Cantharis figurata
Wheatfen M. J. D. C. 1939 (1)

Local

A marshland and saltmarsh soldier beetle. Adults and larvae are predatory.

<i>Cantharis livida</i>					
	Strumpshaw	C. N. M.	1986	(14)	
	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1942	(1)	
<i>Cantharis nigra v. flavilabris</i>					
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Cantharis nigricans</i>					
	Wheatfen	M. J. D. C.	1936	(1)	
		A. B. D.	1978	(3)	
<i>C. nigricans a. discoides</i>					
	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1937	(1)	
<i>Cantharis pallida</i>					Local
	Wheatfen	M. J. D. C.	1936	(1)	
		E. A. E.	1939	(1)	
	A predatory soldier beetle. Most often encountered on flowers in damp areas.				
<i>Cantharis pellucida</i>					
	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1938	(1)	
<i>Cantharis rufa v. liturata</i>					
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Cantharis rustica</i>					
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Cantharis thoracica</i>					Local
	Surlingham	M. C.	1982	(62)	
	A predatory soldier beetle of grasslands and wetlands.				
<i>Rhagonycha femoralis</i>					
	Wheatfen	M. J. D. C.	1938	(1)	
<i>Rhagonycha fulva</i> (Soldier beetle).					
	Cantley	J. B.	1993	(50)	
	Strumpshaw	C. N. M.	1986	(14)	
	Wheatfen	M. J. D. C.	1936	(1)	
		R. E.	1993	(55)	
	Often found on umbellifer flower-heads.				
<i>Rhagonycha lignosa</i>					
	Wheatfen	M. J. D. C.	1938	(1)	
		E. A. E.	1984	(3)	
<i>Rhagonycha testacea</i>					
	Wheatfen	M. J. D. C.	1936	(1)	
		R. S. M. B.	1942	(1)	

<i>Silis ruficollis</i>					N/b
	Strumpshaw	A. B. D.	1983	(62)	
	Wheatfen	M. J. D. C.	1936	(1)	
		R. S. M. B.	1991	(47)	

Probably predatory. Found at river and lake margins and in fens. This soldier beetle was formally very rare, but is now more frequent. Requires high water tables.

<i>Malthinus flaveolus</i>					
	Wheatfen	P. D. O.	1967	(74)	

<i>Malthinus seriepunctatus</i>					
	Wheatfen	M. J. D. C.	1939	(1)	

<i>Malthodes dispar</i>					
	Wheatfen	M. J. D. C.	1939	(1)	
		E. A. E.	1944	(1)	

Family LAMPYRIDAE (Glow-worms and fireflies).

<i>Lampyris noctiluca</i> (Glow-worm).					Local
	Strumpshaw	C. N. M.	1986	(14)	
	Wheatfen	M. J. D. C.	1920	(1)	
		M. E. A. S.	1994		

Often found on tussock sedge (*Carex paniculata*). Only two post 1945 records. The 1994 record was of a fully grown larva.

Family LYCIDAE (Net winged beetles).

<i>Platycis minutus</i>					N/b
	Wheatfen	E. A. E.	pre.1983	(74)	

Larvae live in dead wood. A beetle of old woodlands. Maintenance of a variety of standing and fallen dead wood will benefit this species.

Family DERMESTIDAE (Larder beetles).

<i>Dermestes lardarius</i> (Larder beetle).					
	Wheatfen	E. A. E.	pre.1983	(74)	
<i>Dermestes murinus</i>					
	Wheatfen	E. A. E.	pre.1983	(74)	
<i>Attagenus pelli</i>					
	Wheatfen	H. F.	1939	(1)	
<i>Anthrenus fuscus</i>					
	Wheatfen	R. A. C.	1944	(1)	

Family ANOBIIDAE

<i>Hedobia imperialis</i>	Wheatfen	E. A. E.	1942	(1)	
<i>Dryophilus pusillus</i>	Surlingham	M. C.	1984	(62)	Local
	A pine wood boring beetle.				
<i>Ochina pitoides</i>	Wheatfen	E. A. E.	pre.1983	(74)	
<i>Xestobium rufovillosum</i> (Death-watch beetle).	Wheatfen	E. A. E.	pre.1983	(74)	
<i>Anobium punctatum</i> (Common furniture beetle).	Wheatfen	E. A. E.	pre.1983	(74)	
<i>Ptilinus petinicornis</i> (Fan-bearing wood borer).	Wheatfen	M. J. D. C.	1937	(1)	
		R. S. M. B.	1942	(1)	

Family PTINIDAE (Spider beetles).

<i>Ptinus fur</i> (White-marked spider beetle).	Wheatfen	R. A. C.	1942	(1)	
		E. A. E.	1963	(1)	

Family MELYRIDAE (False soldier beetles).

<i>Dasytes aeratus</i>	Wheatfen	A. H. N.	1938	(1)	
		R. S. M. B.	1942	(1)	
<i>Malachius bipustulatus</i>	Wheatfen	M. J. D. C.	1934	(1)	
		R. S. M. B.	1991	(47)	
<i>Malachius marginellus</i>	Wheatfen	R. A. C.	1944	(1)	N/b
	Primarily a coastal beetle, but also recorded from riverside vegetation. Succession should be controlled to prevent shading of waterside habitats.				
<i>Cerapheles terminatus</i>	Wheatfen	E. A. E.	1934	(1)	N/a
		A. B. D.	1978	(3)	
	A south eastern false soldier beetle. Lives in fens and reed beds, particularly on flowers. Also recorded by P. Orton in 1967 (74).				

<i>Anthocomus rufus</i>					Local
	Cantley	J. B.	1993	(50)	
	Wheatfen	A. H. N.	1938	(1)	
		A. B. D.	1978	(3)	

Usually occurs in marshes and fens.

Family NITIDULIDAE (Sap and pollen beetles).

<i>Kateretes bipustulatus</i>					
	Wheatfen	E. A. E.	1945	(1)	
		A. B. D.	1978	(3)	
<i>Kateretes pedicularius</i>					
	Wheatfen	P. D. O.	1964	(74)	
		A. B. D.	1978	(3)	
<i>Meligethes aeneus</i>					
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Meligethes coracinus</i>					
	Wheatfen	P. D. O.	1967	(74)	
	Record requires confirmation.				
<i>Meligethes viridescens</i>					
	Wheatfen	R. A. C.	1944	(1)	
<i>Epuraea aestiva</i>					
	Wheatfen	P. D. O.	1967	(74)	
<i>Epuraea deleta</i>					
	Wheatfen	R. S. M. B.	1942	(1)	
		P. D. O.	1967	(74)	
<i>Epuraea pusilla</i>					
	Wheatfen	P. D. O.	1964	(74)	
<i>Epuraea unicolor</i>					
	Wheatfen	P. D. O.	1964	(74)	
<i>Nitidula carnaria</i>					
	Wheatfen	E. A. E.	1968	(1)	
<i>Omosita colon</i>					
	Wheatfen	P. D. O.	1962	(74)	
<i>Omosita discoidea</i>					
	Wheatfen	P. D. O.	1964	(74)	
<i>Cychromus luteus</i>					
	Wheatfen	R. S. M. B.	1942	(1)	

<i>Cryptarcha strigata</i>					N/b
	Wheatfen	M. J. D. C.	1937	(1)	
	Associated with sap runs on deciduous trees, particularly those caused by the wood boring larvae of the goat moth (<i>Cossus cossus</i>). Conservation management for <i>Cossus cossus</i> will benefit this beetle.				
<i>Glischrochilus hortensis</i>					
	Buckenham	M. E. A. S.	1993		
	Strumpshaw	M. E. A. S.	1994		
	Wheatfen	P. D. O.	1962	(74)	
		M. E. A. S.	1994		
<i>Glischrochilus quadripunctatus</i>					
	Wheatfen	P. D. O.	1964	(74)	
Family RHIZOPHAGIDAE					
<i>Rhyzophagus bipustulatus</i>					
	Wheatfen	R. S. M. B.	1942	(1)	
Family SPHINDIDAE					
<i>Aspidiphorus orbiculatus</i>					Local
	Wheatfen	R. S. M. B.	1942	(1)	
	Lives on slime moulds and fungi growing on dead wood.				
Family CUCUJIDAE					
<i>Pediacus depressus</i>					N/a
	Wheatfen	E. A. E.	pre. 1983	(74)	
	Found under the bark of broadleaved trees.				
<i>Pediacus dermestoides</i>					Local
	Wheatfen	R. S. M. B.	1942	(1)	
	One specimen under alder (<i>Alnus glutinosa</i>) bark. More widespread now than when this record was made.				
Family SILVANIDAE					
<i>Psammoecus bipunctatus</i>					
	Wheatfen	E. A. E.	1937	(1)	
		E. A. E.	1977	(3)	

Family CRYPTOPHAGIDAE

Small beetles, often associated with fungi.

<i>Telmatophilus caricis</i>	Wheatfen	A. B. D.	1978	(3)	
<i>Cryptophagus scanicus</i>	Wheatfen	P. D. O.	1962	(74)	
<i>Micrambe villosus</i>	Wheatfen	A. B. D.	1978	(3)	Local
Found on the flowers of broom (<i>Cytisus scoparius</i>) and gorse (<i>Ulex spp.</i>).					
<i>Micrambe vini</i>	Wheatfen	E. A. E.	1945	(1)	
<i>Atomaria apicalis</i>	Wheatfen	E. A. E.	1960?	(57)	
<i>Atomaria atricapilla</i>	Wheatfen	C. J.	1960?	(57)	
<i>Atomaria basalis</i>	Wheatfen	C. J.	1960?	(57)	
		P. D. O.	1964	(74)	
<i>Atomaria rubella</i>	Wheatfen	E. W. A.	1960?	(57)	
<i>Atomaria fuscata</i>	Surlingham	M. C.	1960?	(57)	
	Wheatfen	C. J.	1960?	(57)	
		A. B. D.	1978	(3)	
<i>Atomaria nigrirostriata</i>	Wheatfen	E. W. A.	1960?	(57)	
		P. D. O.	1960?	(57)	
<i>Atomaria gutta</i>	Surlingham	M. C.	1960?	(57)	
<i>Atomaria lewisi</i>	Wheatfen	P. D. O.	1962	(74)	
<i>Atomaria mesomela</i>	Rockland Broad	B. M. N. H.	1960?	(57)	
	Surlingham	M. C.	1960?	(57)	
	Wheatfen	E. A. E.	1939	(1)	
		A. B. D.	1960?	(57)	

<i>Atomaria nitidula</i>	Wheatfen	E. A. E.	1945	(1)	
		C. J.	1960?	(57)	
<i>Atomaria rubida</i>	Wheatfen	C. J.	1960?	(57)	Local
<i>Atomaria testacea</i>	Wheatfen	C. J.	1960?	(57)	
		P. D. O.	1960?	(57)	
<i>Ephistemus globulus</i>	Wheatfen	E. W. A.	1960?	(57)	
Family BYTURIDAE					
<i>Byturus tomentosus</i> (Raspberry beetle).	Strumpshaw	A. C. W.	1993	(50)	
	Wheatfen	A. H. N.	1938	(1)	
		M. J. D. C.	1942	(1)	
Family EROTYLIDAE					
<i>Triplax russica</i>	Wheatfen	R. S. M. B.	1942	(1)	
	On dryad's saddle (<i>Polyporus squamosus</i>).				
<i>Dacne rufifrons</i>	Wheatfen	R. S. M. B.	1942	(1)	
		P. D. O.	1967	(74)	
	Found on dryad's saddle (<i>Polyporus squamosus</i>) in 1942.				
Family PHALACRIDAE					
<i>Phalacrus caricis</i>	Wheatfen	P. D. O.	1967	(74)	
<i>Phalacrus fimetarius</i>	Wheatfen	A. M. M.	1960	(3)	
<i>Olibrus aeneus</i>	Wheatfen	A. B. D.	1978	(3)	
<i>Olibrus corticalis</i>	Wheatfen	M. J. D. C.	1939	(1)	
		E. A. E.	1945	(1)	
<i>Olibrus liquidus</i>	Wheatfen	M. J. D. C.	1939	(1)	

Stilbus testaceus
 Wheatfen M. J. D. C. 1939 (1)
 A. B. D. 1978 (3)
 On honeysuckle (*Lonicera spp.*).

Family CERYLONIDAE

Cerylon histeroides
 Wheatfen A. B. D. 1978 (3)

Family COCCINELLIDAE (Ladybirds and allies).

Most species are carnivorous however some feed on mildew.

Coccidula rufa
 Wheatfen M. J. D. C. 1934 (1)
 P. D. O. 1967 (74)
 Occurs in wetlands on *Phragmites*, *Typha* and rushes.

Coccidula scutellata Local
 Wheatfen M. J. D. C. 1940 (1)
 E. A. E. 1977 (3)
 A marshland aphid predator occurring on *Phragmites*,
Typha and rushes. Infrequent at Wheatfen.

Rhyzobius litura
 Wheatfen A. H. N. 1938 (1)
 M. J. D. C. 1941 (1)
 A grassland beetle.

Scymnus suturalis
 Wheatfen A. B. D. 1978 (3)
 Occurs on Scots pine (*Pinus sylvestris*).

Chilocorus bipustulatus (Heather ladybird).
 Strumpshaw C. N. M. 1986 (14)
 Recorded on alder (*Alnus glutinosa*). Usually occurs
 on heather heathland and conifer scrub.

Chilocorus bipustulatus/renipustulatus
 (Heather/kidney-spot ladybird).
 Wheatfen E. A. E. 1933 (3)
 E. A. E. 1957 (3)

It is not clear from the records which of these
 species was recorded at Wheatfen.

Exochomus quadripustulatus (Pine ladybird).
 Wheatfen E. A. E. pre.1983 (74)
 Usually occurs on pine trees but occasionally on
 deciduous trees.

C. renipustulatus
 (Heather/kidney-spot ladybird)

Hippodamia tredecimpunctata (13 spot ladybird) RDB 3
 Wheatfen E.A.E. pre.1983 (74) (RDB K)

A rare marshland ladybird. Probably extinct in Britain as there are no post 1950 records. The unspecific nature of this record and extreme rarity of the species cast doubt on the record. It is possible that this record could refer to an specimen of *Adalia decempunctata*. Indeed the author has found a heavily marked specimen of this species with a scutellary spot at Wheatfen. Without confirmation this record should be treated as suspect. However the habitat appears to be suitable and the site occurs within the previous range of *H. tredecimpunctata*. Therefore it may be worth searching for.

Adonia variegata (Adonis' ladybird) N/b
 Wheatfen E.A.E. 1937 (1)
 M.J.D.C. 1940 (1)

A largely coastal species, usually found on sandy soils.

Anisosticta novemdecimpunctata (Water ladybird).
 Wheatfen M.J.D.C. 1937 (1)
 A.B.D. 1978 (3)

Found in *Phragmites* and *Typha* reed beds.

Aphidecta oblitterata (Larch ldybird).
 Wheatfen M.J.D.C. 1938 (1)
 M.J.D.C. 1942 (1)

Occurs in conifer woodland.

Tytthaspis (=Micraspis) sedecimpunctata (16 spot ladybird).
 Wheatfen M.J.D.C. 1938 (1)
 M.J.D.C. 1941 (1)

A grassland species. Feeds on mildew and may be species specific as it has never been reared in captivity.

Adalia bipunctata (Two spot ladybird).

Strumpshaw	C. N. M.	1986	(14)
Surlingham	M. E. A. S.	1993	
Wheatfen	M. J. D. C.	1936	(1)
	M. E. A. S.	1994	

A common ladybird at Wheatfen, where it displays a wide range of genetic variation. As well as the common two black spots on red and two red spots on black the following forms have been recorded.

A. bipunctata f. four red spots on black.

Surlingham	M. E. A. S.	1993	
Wheatfen	M. J. D. C.	1942	(1)
	M. J. D. C.	1945	(1)

A. bipunctata f. six red spots on black.

Wheatfen	M. J. D. C.	1942	(1)
	D. N. S.	1944	(1)

Adalia decempunctata (Ten spot ladybird).

Common

Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)
Wheatfen	M. J. D. C.	1936	(1)
	M. E. A. S.	1994	

A woodland and hedgerow species. Common at Wheatfen.

Coccinella hieroglyphica (Hieroglyphic ladybird).

Wheatfen	M. J. D. C.	1938	(1)
----------	-------------	------	-----

Occurs on heather heathland.

Coccinella septumpunctata (Seven spot ladybird).

Strumpshaw	C. N. M.	1986	(14)
Wheatfen	M. J. D. C.	1938	(1)
	M. E. A. S.	1994	

Common in the Mid-Yare, with many minor variations in pattern.

Coccinella undecimpunctata (11 spot ladybird).

Wheatfen	M. J. D. C.	1936	(1)
	A. B. D.	1978	(3)

C. undecimpunctata v. *9-punctata*

Wheatfen	M. J. D. C.	1939	(1)
	M. J. D. C.	1943	(1)

Occurs in many, often coastal, habitats.

Harmonia quadripunctata (Cream-streaked ladybird).

Wheatfen	M. J. D. C.	1937	(1)
	E. A. E.	1945	(1)

A conifer species which first appeared in East Anglia in 1937 but has since spread. Common at Wheatfen by 1945.

Propylea quattuordecimpunctata (14 spot ladybird).

Strumpshaw	C. N. M.	1986	(14)
Wheatfen	A. B. D.	1978	(3)
	M. E. A. S.	1994	

Anatis ocellata (Eyed ladybird).
 Wheatfen E. A. E. pre.1983 (74)
 Occurs in conifer woodland, particularly Scots pine
 (*Pinus sylvestris*).

Myrrha octodecimguttata (18 spot ladybird).
 Wheatfen A. H. N. 1938 (1)
 Occurs in conifer woodland, particularly crowns of
 Scots pine (*Pinus sylvestris*).

Clavia quattuordecimguttata (14 spot ladybird).
 Strumpshaw C. N. M. 1986 (14)
 Wheatfen M. J. D. C. 1937 (1)
 A. B. D. 1978 (3)
 Common at Wheatfen.

Halyzia sedecimguttata (Orange ladybird). Local
 Surl. Broad D. A. S. + S. G. B. 1993 (61)
 Wheatfen M. J. D. C. 1936 (1)
 M. J. D. C. 1941 (1)

The first Norfolk record for this rare wood and
 grassland beetle was from Surlingham Wood (Wheatfen).
 Often associated with sycamore (*Acer pseudoplatanus*).
 Feeds on mildew and may be species specific as it
 has never been reared in captivity.

Thea (=Psynlobora) vigintiduopunctata (22 spot ladybird).
 Strumpshaw C. N. M. 1986 (14)
 Wheatfen M. J. D. C. 1936 (1)
 A. B. D. 1978 (3)
 A grassland species. Feeds on mildew.

Family ENDOMYCHIDAE

Endomychus coccineus
 Strumpshaw C. N. M. 1986 (14)
 Wheatfen E. A. E. 1940 (1)
 E. A. E. 1967 (1)
 Found feeding under bark of alder (*Alnus glutinosa*)
 log (14).

Family LATHRIDIIDAE (Mould beetles).

Stephostethus lardarius
 Wheatfen M. J. D. C. 1939 (1)
 A. B. D. 1978 (3)

Aridius nodifer
 Wheatfen M. J. D. C. 1939 (1)
 A. B. D. 1978 (3)

<i>Lathridius minutus</i>	Wheatfen	E. A. E.	1945	(1)
<i>Corticaria impressa</i>	Wheatfen	M. J. D. C.	1939	(1)
		A. B. D.	1978	(3)
<i>Corticaria punctulata</i>	Wheatfen	P. D. O.	1967	(74)
<i>Corticarina fuscula</i>	Wheatfen	R. A. C.	1943	(1)
<i>Corticinara gibbosa</i>	Wheatfen	M. J. D. C.	1939	(1)
		R. A. C.	1943	(1)

Family CISIDAE

<i>Octotemnus glabriculus</i>	Wheatfen	R. S. M. B.	1942	(1)
		A. B. D.	1978	(3)
<i>Cis bidentatus</i>	Wheatfen	R. S. M. B.	1942	(1)
<i>Cis bilamellatus</i>	Wheatfen	P. D. O.	1967	(74)
<i>Cis nitidus</i>	Wheatfen	R. S. M. B.	1942	(1)

Family MYCETOPHAGIDAE

<i>Pseudotriphyllus suturalis</i>	Wheatfen	P. D. O.	1962	(74)
		P. D. O.	1967	(74)
<i>Mycetophagus multipunctatus</i>	Buckenham	J. E.	1914	(25)
	Wheatfen	R. S. M. B.	1942	(1)
		P. D. O.	1967	(74)
On dryad's saddle (<i>Polyporus squamosus</i>).				
<i>Mycetophagus quadripustulatus</i>	Wheatfen	E. A. E.	1937	(1)
		E. A. E.	1968	(1)
On dryad's saddle (<i>Polyporus squamosus</i>).				
<i>Typhaea stercorea</i>	Wheatfen	M. J. D. C.	1939	(1)

Family TENEBRIONIDAE (Flour beetles and mealworm beetles).

<i>Tenebrio molitor</i> (Mealworm beetle).				
	Wheatfen	E. A. E.	pre.1983	(74)
<i>Lagria hirta</i>				
	Wheatfen	M. J. D. C.	1937	(1)
		E. A. E.	1966	(1)
<i>Isomira murina</i>				
	Wheatfen	M. J. D. C.	1942	(1)

Family TETRATOMIDAE

<i>Tetratoma fungorum</i>				
	Wheatfen	E. A. E.	pre.1983	(74)

Family SALPINGIDAE

<i>Vincenzellus ruficollis</i>				
	Wheatfen	M. J. D. C.	1938	(1)
<i>Rhinosimus planirostris</i>				
	Wheatfen	M. J. D. C.	1939	(1)

Family PYROCHROIDAE (Cardinal beetles).

<i>Pyrochroa serraticornis</i> (Cardinal beetle).				
	Strumpshaw	J. B.	1989	(18)
	S. Broad Marsh	E. A. E.	1962	(3)
	Wheatfen	M. J. D. C.	1934	(1)
		R. S. M. B.	1991	(47)

Family MELANDRYIDAE (False darkening beetles).

<i>Melandrya caraboides</i>					N/b
	Wheatfen	E. A. E.	1937	(1)	
Feeds in rotten wood, especially willows (<i>Salix</i> spp.) but also other trees. Found in ancient woodland. Removal or burning of dead wood should be avoided.					
<i>Conopalpus testaceus</i> v. <i>vigorsii</i>					N/b
	Wheatfen	E. A. E.	1936	(1)	
Feeds in rotten oak (<i>Quercus robur</i>), hazel (<i>Corylus avellana</i>) and apple wood. Found in ancient woodland. Fallen and standing timber should be retained, especially if the bark is present.					

Family SCRAPTIIDAE

<i>Anaspis frontalis</i>	Wheatfen	A. H. N.	1938	(1)
<i>Anaspis humeralis</i>	Wheatfen	E. A. E.	1939	(1)
		E. A. E.	1942	(1)
<i>Anaspis lurida</i>	Wheatfen	A. H. N.	1938	(1)
<i>Anaspis maculata</i>	Wheatfen	E. A. E.	1938	(1)
		R. A. C.	1944	(1)
<i>Anaspis pulicaria</i>	Wheatfen	A. M. M.	1960	(3)
<i>Anaspis regimbarti</i>	Wheatfen	E. A. E.	1942	(1)
<i>Anaspis rufilabris</i>	Wheatfen	A. B. D.	1978	(3)

Family MORDELLIDAE

<i>Mordellistena pumila</i>	Wheatfen	M. J. D. C.	1939	(1)
-----------------------------	----------	-------------	------	-----

Family RHIPIPHORIDAE

<i>Metoeocus paradoxus</i>	Wheatfen	E. A. E.	pre. 1983	(74)	Local
Eggs are laid on old trees. The larvae then parasitize the larvae of common wasps (<i>Vespula vulgaris</i>) or german wasps (<i>Vespula germanicus</i>).					

Family OEDEMERIDAE

<i>Nacerdes melanura</i>	Wheatfen	A. H. N.	1938	(1)	
<i>Oedemera nobilis</i>	Wheatfen	E. A. E.	1984	(3)	
<i>Oedemera viriscens</i>	Wheatfen	E. A. E.	pre. 1983	(74)	RDB 3 (RDB 2)
Larvae live in dead wood. No recent records from Norfolk.					

Family MELOIDAE (Blister beetles).

Lytta vesicatoria (Spanish fly). Local
 Wheatfen M. J. D. C. 1940 (1)
 Larvae live in the nests of solitary bees.

Family ANTHICIDAE

Anthicus floralis
 Wheatfen P. D. O. 1962 (74)

Family CERAMBYCIDAE (Longhorn beetles).

Prionus coriarius (Sawyer beetle). N/a
 Strumpshaw C. N. M. 1986 (14)
 Robust and up to 4.5 cm long. A single specimen was recorded from a moth trap. The larvae feeds on the roots and dead wood of oak (*Quercus robur*), birch (*Betula pendula*) and other trees. This longhorn beetle has declined due to loss of habitat. Old trees and standing timber should be retained. This is the first Norfolk record. Since a colony has been discovered higher up the Yare valley in two decaying scots' pines (*Pinus sylvestris*).

Arhopalus rusticus
 S. Broad Marsh Rec.No.20 1980 (77)

Rhagium bifasciatum
 Brundall Marsh Rec.No.213 pre.1901 (77)

Grammoptera ruficornis
 S. Broad Marsh Rec.No.20 1983 (77)
 Wheatfen M. J. D. C. 1936 (1)
 E. A. E. 1956 (3)

Strangalia maculata Local
 Buckenham A. E. S. + M. N. P. 1993 (61)
 Strumpshaw C. N. M. 1986 (14)
 M. E. A. S. 1993
 Wheatfen E. A. E. 1961 (1)
 A. B. D. 1978 (3)

A large yellow and black longhorn beetle with a tapering abdomen. Larvae feed in dead wood, particularly smallish branches. Has a southern distribution.

Molorchus minor Local
 Wheatfen M. J. D. C. 1940 (1)

<i>Clytus arietis</i> (Wasp beetle).				
	Strumpshaw	C. N. M.	1986	(14)
	Wheatfen	M. J. D. C.	1934	(1)
<i>Pogonocherus hispidus</i>				
	Wheatfen	M. J. D. C.	1936	(1)
		E. A. E.	1939	(1)
<i>Leiopus nebulosus</i>				
	Strumpshaw	C. N. M.	1986	(14)
	Wheatfen	A. H. N.	1938	(1)
<i>Agapanthia villosoviridescens</i>				
	Strumpshaw	C. M. D. et al.	1993	(61)
	S. Broad Marsh	Rec. No. 20	1982	(77)
	Wheatfen	R. S. M. B.	1942	(1)
		P. Withers	1986	(63)
Commoner now in the Broads than it used to be. Larvae feed in the stems of hogweed (<i>Heracleum spondylium</i>) and wild parsnip (<i>Pastinaca sativa</i>). Adults often found on flowers.				
<i>Saperda carcharias</i> (Willow borer).				
	Wheatfen	E. A. E.	pre. 1983	(74)
Larvae live in the wood of <i>Salix</i> spp. and poplars (<i>Populus</i> spp.).				
Family BRUCHIDAE (Seed-eating beetles).				
<i>Bruchus loti</i>				
	Wheatfen	A. H. N.	1938	(1)
Family CHRYSOMELIDAE (Leaf beetles).				
<i>Donacia clavipes</i>				
	Wheatfen	M. J. D. C.	1936	(1)
		R. S. M. B.	1947	(47)
Associated with emergent vegetation. Feeds in nodules on the roots of <i>Phragmites</i> and <i>Sparganium</i> spp.. If emergents are cut this should be done rotationally.				
<i>Donacia semicuprea</i>				
	Buckenham	J. B.	1993	(50)
	Cantley	J. B.	1993	(50)
	Wheatfen	A. H. N.	1937	(1)
		E. A. E.	1962	(3)
A metallic purple leaf beetle. Larvae feed on the roots of <i>Glyceria maxima</i> and adults graze the leaves.				

<i>Donacia simplex</i>	Strumpshaw	J.B.	1993	(50)	Local
Larvae feed on the roots of branched bur reed (<i>Sparganium erectum</i>) and adults feed on the leaves.					
<i>Donacia thalassina</i>	Wheatfen	A.B.D.	1978	(3)	N/b
Larvae feed in the roots of club rush (<i>Scirpus spp.</i>) and <i>Carex spp.</i> . Could be threatened by non-rotational dyke management.					
<i>Plateumaris braccata</i>	Surlingham	J.E.	1893	(26)	N/a
	Wheatfen	M.J.D.C.	1936	(1)	
		A.B.D.	1978	(3)	
Larvae feed on the roots of <i>Phragmites</i> and adults on the leaves. Often found near the coast. Could be threatened by non-rotational dyke management.					
<i>Plateumaris discolor</i>	Wheatfen	M.J.D.C.	1934	(1)	
Often occurs on <i>Sphagnum</i> .					
<i>Plateumaris sericea</i>	Wheatfen	M.J.D.C.	1934	(1)	
		A.B.D.	1978	(3)	
Brassy, green and red specimens found.					
<i>Lema cyanella</i>	Wheatfen	M.J.D.C.	1936	(1)	Local
<i>Oulema lichenis</i>	Wheatfen	A.H.N.	1938	(1)	
		E.A.E.	1939	(1)	
<i>Oulema (=Lema) melanopa</i>	Wheatfen	E.A.E.	1939	(1)	
		R.S.M.B.	1991	(47)	
<i>Crioceris asparagi</i>	Wheatfen	A.H.N.	1938	(1)	
Occurs on wild asparagus (<i>Asparagus officinalis</i>).					
<i>Timarcha tenebricosa</i> (Bloody-nosed beetle).	Wheatfen	E.A.E.	pre.1983	(74)	
<i>Chrysolina polita</i>	Strumpshaw	J.B.	1993	(50)	
	Wheatfen	M.J.D.C.	1933	(1)	
		A.B.D.	1978	(3)	
Very common at Wheatfen.					

Chrysolina fastuosa
 Strumpshaw MEAS 1999
 On *Galopsis tetrahiti*

<i>Chrysolina staphylaea</i>				
Wheatfen	M. J. D. C.	1936	(1)	
	E. A. E.	1940	(1)	
<i>Gastrophysa polygoni</i>				
Wheatfen	M. J. D. C.	1939	(1)	
	R. S. M. B.	1942	(1)	
<i>Gastrophysa viridula</i>				
Wheatfen	M. J. D. C.	1936	(1)	
	E. A. E.	1946	(1)	
Often on <i>Rumex spp.</i> at Wheatfen.				
<i>Phaedon armoraciae</i>				
Wheatfen	M. J. D. C.	1938	(1)	
	E. A. E.	1945	(1)	
Occurs on watercress (<i>Nasturtium spp.</i>).				
<i>Phaedon cochleariae</i> (Mustard beetle).				
Wheatfen	M. J. D. C.	1932	(1)	
	E. A. E.	1977	(3)	
<i>Hydrothassa marginella</i>				
Wheatfen	M. J. D. C.	1933	(1)	
	P. D. O.	1962	(74)	
Feeds on members of the buttercup family (<i>Ranunculaceae</i>).				
<i>Prasocuris phellandrii</i>				
Wheatfen	M. J. D. C.	1938	(1)	
	E. A. E.	1945	(1)	
Feeds on water dropwort (<i>Oenanthe spp.</i>).				
<i>Plagioderma versicolora</i>				
Wheatfen	A. B. D.	1978	(3)	
<i>Chrysomela populi</i>				
Wheatfen	M. J. D. C.	1936	(1)	Local
Recorded on creeping willow (<i>Salix repens</i>).				
<i>Phyllodecta laticollis</i>				
Wheatfen	A. H. N.	1938	(1)	
<i>Phyllodecta vitellinae</i>				
Surl. Broad	D. A. S. + S. G. B.	1993	(61)	
<i>Galerucella calvariensis</i>				
Surl. Broad	D. A. S. + S. G. B.	1993	(61)	Local
Wheatfen	P. D. O.	1962	(74)	
Feeds on purple loosestrife (<i>Lythrum salicaria</i>).				
<i>Galerucella lineola</i>				
Wheatfen	R. S. M. B.	1991	(47)	
On alder (<i>Alnus glutinosa</i>).				

<i>Galerucella nymphaeae</i>				
Wheatfen	M. J. D. C.	1938	(1)	
	A. B. D.	1978	(3)	
<i>Galerucella pusilla</i>				
Strumpshaw	M. K. D.	1988	(7)	
<i>Galerucella sagittariae</i>				
Wheatfen	M. J. D. C.	1936	(1)	
	E. A. E.	1939	(1)	
<i>Galerucella tenella</i>				
Wheatfen	M. J. D. C.	1936	(1)	
	A. B. D.	1978	(3)	
Commonest on tussock sedge (<i>Carex paniculata</i>).				
<i>Pyrrhalta viburni</i>				
Wheatfen	W. H. T.	1945	(1)	
	A. B. D.	1978	(3)	
Typical leaf damage on <i>Viburnum opulus</i> .				
<i>Galeruca tanacetii</i>				
Wheatfen	E. A. E.	1939	(1)	Local
Foodplant unknown, but recorded on a variety of plants. Taken from the stomach of a corncrake (<i>Crex crex</i>).				
<i>Lochmaea caprea</i>				
Wheatfen	R. S. M. B.	1942	(1)	
On willow (<i>Salix spp.</i>).				
<i>Phyllobrotica quadrimaculata</i>				
Surlingham	J. E.	1893	(26)	Local
Wheatfen	P. D. O.	1967	(74)	
	E. A. E.	1974	(3)	
Found on skullcap (<i>Scutellaria galericulata</i>) (26). Occurs in marshes and wet woodland.				
<i>Phyllotetra atra</i>				
Wheatfen	E. A. E.	pre.1983	(74)	
<i>Phyllotreta cruciferae</i>				
Wheatfen	E. A. E.	1945	(1)	N/b
Recorded on pepperwort (<i>Lepidium spp.</i>), sea rocket (<i>Cakile maritima</i>) and turnip (<i>Brassica rapa</i>). Larvae feed on the roots. Most species in this genus feed on crucifers.				
<i>Phyllotreta exclamationis</i>				
Wheatfen	M. J. D. C.	1939	(1)	
On ivy (<i>Hedera helix</i>).				

<i>Phyllotreta flexuosa</i>	Wheatfen	E. A. E.	1977	(3)	
<i>Phyllotetra nemorum</i> (Turnip flea beetle).	Wheatfen	M. E. A. S.	1994		
<i>Phyllotetra tetrastigma</i>	Wheatfen	P. D. O.	1964	(74)	
<i>Phyllotreta undulata</i> (Lesser striped flea beetle).	Wheatfen	A. M. M.	1960	(3)	
<i>Phyllotreta vittula</i>	Wheatfen	M. J. D. C.	1939	(1)	Local
		A. B. D.	1978	(3)	
Foodplant uncertain.					
<i>Aphthona euphorbiae</i>	Wheatfen	E. A. E.	1945	(1)	
Feeds on wood spurge (<i>Euphorbia amygdaloides</i>).					
<i>Aphthona lutescens</i>	Wheatfen	A. H. N.	1938	(1)	
		E. A. E.	1939	(1)	
Feeds on <i>Spirea ulmaria</i> .					
<i>Aphthona nonstriata</i>	Wheatfen	E. A. E.	1939	(1)	
		R. S. M. B.	1991	(47)	
<i>A. nonstriata v. pseudacori</i>	Wheatfen	E. A. E.	1939	(1)	
Var. <i>pseudacori</i> was found feeding on yellow iris (<i>Iris pseudacorus</i>).					
<i>Longitarsus brunneus</i>	Wheatfen	P. D. O.	1964	(74)	N/b
A flea beetle which feeds on sea aster (<i>Aster tripolium</i>) and meadow rues (<i>Thalictrum spp.</i>).					
<i>Longitarsus kutscherae</i>	Wheatfen	P. D. O.	1964	(74)	
<i>Longitarsus luridus</i>	Wheatfen	E. A. E.	1945	(1)	
<i>Altica (=Haltica) lythri</i>	Strumpshaw	A. P. F. + D. A. P.	1988-89	(51)	Common
	Wheatfen	M. J. D. C.	1934	(1)	
		R. S. M. B.	1991	(47)	
At Wheatfen usually found on great willow herb (<i>Epilobium hirsutum</i>).					

<i>Crepidodera transversa</i>	Wheatfen	A.H.N.	1938	(1)	
Feeds on nettles (<i>Urtica</i> spp.) and thistles.					
<i>Hippuriphila modeeri</i>	Brundall Marsh	H.R.P.C.	1932	(67)	Local
	Wheatfen	M.J.D.C.	1939	(1)	
A local flea beetle which feeds on horsetails (<i>Equisetum</i> spp.) in marshy places.					
<i>Chalcoides aurata</i>	Brundall Marsh	H.R.P.C.	1932	(67)	
	Wheatfen	M.J.D.C.	1938	(1)	
Recorded on a willow (<i>Salix</i> sp.) at Brundall. Most species in this genus occur on Salicaceae trees.					
<i>Chalcoides aurea</i>	Wheatfen	M.J.D.C.	1939	(1)	
<i>Chalcoides fulvicornis</i>	Wheatfen	A.H.N.	1938	(1)	
<i>Chalcoides plutus</i>	Wheatfen	M.J.D.C.	1939	(1)	
<i>Epitrix pubescens</i>	Wheatfen	A.B.D.	1978	(3)	
A flea beetle found on bittersweet (<i>Solanum dulcamara</i>).					
<i>Mantura obtusata</i>	Wheatfen	A.H.N.	1938	(1)	N/b
Found in damp meadows, feeding on sorrel (<i>Rumex acetosa</i>) and possibly other small-leaved <i>Rumex</i> spp. The larvae of this leaf beetle are leaf miners. Rotational cutting or grazing is required to maintain open conditions.					
<i>Chaetocnema concinna</i>	Wheatfen	M.J.D.C.	1939	(1)	
		A.B.D.	1978	(3)	
Feeds on knot-grass and relatives (<i>Polygonum</i> spp.).					
<i>Chaetocnema hortensis</i>	Wheatfen	P.D.O.	1962	(74)	
<i>Psylliodes affinis</i> (Potato flea beetle).	Wheatfen	P.D.O.	1964	(74)	
<i>Psylliodes dulcamarae</i>	Wheatfen	A.B.D.	1978	(3)	Local
A flea beetle which feeds on bittersweet (<i>Solanum dulcamara</i>).					

<i>Psylliodes picina</i>	Wheatfen	A. B. D.	1978	(3)	Local
Feeds on the leaves of various Cruciferae species.					
<i>Cassida rubiginosa</i>	Wheatfen	M. J. D. C.	1936	(1)	
		P. D. O.	1964	(74)	
Feeds on thistles. Also recorded by G. M. T. in 1941 (1)					
<i>Cassida viridis</i> (Green tortoise beetle).	Wheatfen	M. J. D. C.	1934	(1)	
		E. A. E.	1943	(1)	
Found on marsh woundwort (<i>Stachys palustris</i>) (1943).					
<i>Cassida vittata</i>	Wheatfen	E. A. E.	1936	(1)	Local
		E. A. E.	1943	(1)	
Usually found on salt marshes, rare inland. Feeds on spurrey (<i>Spergularia spp.</i>) and possibly sea beet (<i>Beta vulgaris</i>) and <i>Chenopodium spp.</i> (fat hen, goosefoot etc.).					
Family ATTELABIDAE (Primitive weevils).					
<i>Apoderus coryli</i>	Wheatfen	R. E.	1993	(55)	Local
Recorded as being common at Wheatfen.					
<i>Rhynchites caeruleus</i>	Wheatfen	A. H. N.	1938	(1)	
<i>Rhynchites aeneovirens</i>	Wheatfen	A. M. M.	1960	(3)	
<i>Rhynchites aequatus</i>	Wheatfen	M. J. D. C.	1936	(1)	
		A. B. D.	1978	(3)	
<i>Rhynchites germanicus</i>	Wheatfen	M. J. D. C.	1938	(1)	
<i>Byctiscus betulae</i>	Wheatfen	E. A. E.	pre. 1983	(74)	N/b
Larvae develop in leaf rolls on hazel (<i>Corylus avellana</i>) and birch (<i>Betula pendula</i>) in woodland and scrub.					
<i>Deporaus betulae</i>	Wheatfen	E. A. E.	1938	(1)	
		E. A. E.	1978	(3)	

Family APIONIDAE (Weevils).

<i>Apion curtirostre</i>	Wheatfen	M. J. D. C.	1939	(1)	Surlingham MC 1984 Records of P. Hyman
<i>Apion hydrolapathi</i>	Wheatfen	M. J. D. C. A. B. D.	1939 1978	(1) (3)	Surlingham MC 1983 Records of P. Hyman
<i>Apion ulicis</i>	Wheatfen	M. J. D. C. A. B. D.	1937 1978	(1) (3)	
<i>Apion vicinum</i>	Wheatfen	E. C. B.	1938	(1)	N/b
First Norfolk record. A wetland species, associated with mints (<i>Mentha</i> spp.). Larvae occur in galls in the stem.					
<i>Apion confluens</i>	Wheatfen	E. A. E.	pre. 1983	(74)	
<i>Apion striatum</i>	Wheatfen	M. J. D. C.	1937	(1)	
<i>Apion ervi</i>	Wheatfen	A. M. M.	1960	(3)	Surlingham MC 1984 A. loti MC Surlingham 84 Records of P. Hyman A. vicine
<i>Apion virens</i>	Wheatfen	M. J. D. C. M. J. D. C.	1938 1939	(1) (1)	MC Surlingham 1984 records of P. Hyman
<i>Apion pomonae</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Apion apricans</i>	Wheatfen	A. H. N. E. A. E.	1938 1945	(1) (1)	
<i>Apion assimile</i>	Wheatfen	A. B. D.	1978	(3)	
<i>Apion dichroum</i>	Wheatfen	P. D. O.	1964	(74)	
<i>Apion nigrifarse</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Apion trifolii</i>	Wheatfen	P. D. O. A. B. D.	1964 1978	(74) (3)	

Apion varipes Wheatfen M. J. D. C. 1937 (1) N/b
 A grassland weevil, associated with red clover (*Trifolium pratense*) and possibly other *Trifolium* spp. Larvae feed in galls or on the flower heads. Requires a variety of vegetation structures.

Nanophyes marmoratus
 Wheatfen E. C. B. 1938 (1)
 A. B. D. 1978 (3)

Family CURCULIONIDAE (Weevils).

Otiorhynchus ovatus
 Wheatfen R. S. M. B. 1940 (1)

Otiorhynchus singularis
 Wheatfen M. J. D. C. 1937 (1)
 K. C. D. 1970 (3)

Otiorhynchus sulcatus
 Wheatfen E. A. E. pre. 1983 (74)

Phyllobius argentatus
 Wheatfen M. J. D. C. 1936 (1)
 A. B. D. 1978 (3)

Phyllobius calcaratus
 Wheatfen M. J. D. C. 1937 (1)
 A. B. D. 1978 (3)

Phyllobius maculicornis
 Wheatfen R. S. M. B. 1942 (1)
 On hazel (*Corylus avellana*).

Phyllobius oblongus
 Wheatfen R. S. M. B. 1942 (1)
 A. B. D. 1978 (3)

Phyllobius pomaceus
 Wheatfen M. J. D. C. 1936 (1)
 A. B. D. 1978 (3)

Phyllobius pyri
 Wheatfen M. J. D. C. 1937 (1)
 A. B. D. 1978 (3)

Phyllobius roboretanus
 Wheatfen M. J. D. C. 1938 (1)

Phyllobius viridiaeris
 Wheatfen A. H. N. 1938 (1)
 R. S. M. B. 1942 (1)

<i>Polydrusus cervinus</i>					
	Wheatfen	M. J. D. C.	1938	(1)	
		A. B. D.	1978	(3)	
<i>Polydrusus chrysamela</i>					Local
	Wheatfen	M. J. D. C.	1937	(1)	
<i>Polydrusus confluens</i>					N/b
	Wheatfen	M. J. D. C.	1936	(1)	
	Associated with broom (<i>Cytisus scoparius</i>), gorse (<i>Ulex europaeus</i>) and dwarf gorse (<i>Ulex minor</i>). Flightless. Requires the constant presence of its food plants as its dispersal powers are limited.				
<i>Polydrusus pterygomalis</i>					
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Strophosomus melanogrammus</i>					
	Wheatfen	M. J. D. C.	1939	(1)	
		A. B. D.	1978	(3)	
<i>Liophloeus tessulatus</i>					
	Wheatfen	E. A. E.	pre. 1983	(74)	
<i>Tanymecus palliatus</i>					N/b
	Wheatfen	K. G. B.	1937	(1)	
		R. S. M. B.	1942	(1)	
	Rare at Wheatfen (1) and in Norfolk. Often found near the coast. Larvae feed on the roots of hedgerow plants. Few recent records.				
<i>Sitona hispidulus</i>					
	Wheatfen	M. J. D. C.	1936	(1)	
<i>Sitona humeralis</i>					
	Wheatfen	E. C. B.	1938	(1)	
		M. J. D. C.	1939	(1)	
<i>Sitona lineatus</i> (Pea weevil).					
	Wheatfen	E. C. B.	1938	(1)	
		P. D. O.	1967	(74)	
<i>Sitona macularius</i>					N/b
	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1940	(1)	
	Larvae feed on roots and root nodules. Adults have been recorded from wild licorice (<i>Astragalus glycyphyllos</i>), sainfoin (<i>Onobrychis viciifolia</i>), birds-foot trefoil (<i>Lotus spp.</i>), hairy tare (<i>Vicia hirsuta</i>) and smooth tare (<i>Vicia tetrasperma</i>).				

<i>Sitona regensteinensis</i>	Wheatfen	R. S. M. B.	1939	(1)	
		A. B. D.	1978	(3)	
<i>Sitona striatellus</i>	Wheatfen	E. A. E.	1939	(1)	
		E. A. E.	1945	(1)	
<i>Sitona sulcifrons</i>	Wheatfen	R. S. M. B.	1939	(1)	
<i>Hypera adspersa</i> (=pollux)	Strumpshaw	A. P. F. + D. A. P.	1988-89	(51)	Common
<i>Hypera nigrirostris</i>	Wheatfen	E. A. E.	1937	(1)	
		M. J. D. C.	1940	(1)	
<i>Hypera postica</i>	Wheatfen	E. A. E.	1939	(1)	
<i>Hypera rumicus</i>	Wheatfen	M. J. D. C.	1939	(1)	
	The first Norfolk record of this weevil.				
<i>Cionus alauda</i>	Wheatfen	M. J. D. C.	1934	(1)	
		A. H. N.	1938	(1)	
<i>Cionus scrophulariae</i>	Wheatfen	M. J. D. C.	1934	(1)	
		M. J. D. C.	1940	(1)	
<i>Cleopus pulchellus</i>	Wheatfen	M. J. D. C.	1934	(1)	
<i>Alophus triguttatus</i>	Wheatfen	M. J. D. C.	1939	(1)	N/b
<i>Hylobius abietis</i> (Pine weevil).	Strumpshaw	C. N. M.	1986	(14)	
<i>Magdalis cerasi</i>	Wheatfen	M. J. D. C.	1942	(1)	N/b
	Feeds on oak (<i>Quercus robur</i>), but also trees of the rose family. Associated with scrub, hedgerow and glade habitats. Threatened by non rotational hedge trimming.				
<i>Magdalis ruficornis</i>	Wheatfen	M. J. D. C.	1939	(1)	

<i>Cryptorhynchus lapathi</i>					N/b
Wheatfen	E. A. E.	1947	(1)		
	E. A. E.	1961	(1)		
Found in fen and carr habitats. Feeds on <i>Salix</i> spp. and occasionally poplars (<i>Populus</i> spp.).					
<i>Hydronomus alismatis</i>					N/b
Wheatfen	E. A. E.	1945	(1)		
	A. B. D.	1978	(3)		
This weevil lives in aquatic habitats, feeding on water plantain (<i>Alisma plantago-aquatica</i>), other <i>Alisma</i> spp. and arrowhead (<i>Sagittaria sagittifolia</i>). Threatened by pollution and non-rotational dyke management.					
<i>Dorytomus taeniatus</i>					
Wheatfen	M. J. D. C.	1937	(1)		
	A. B. D.	1978	(3)		
This species has been split into several species, however the 1978 record is probably correct.					
<i>Notaris acridulus</i>					
Wheatfen	P. D. O.	1962	(74)		
<i>Thryogenes festucae</i>					Local
Wheatfen	E. A. E.	1939	(1)		
	P. D. O.	1964	(74)		
A marshland weevil, foodplants include <i>Carex</i> spp. and <i>Schoenoplectus lacustris</i> .					
<i>Thryogenes nereis</i>					
Wheatfen	M. J. D. C.	1934	(1)		
	A. B. D.	1978	(3)		
<i>Coeliodes dryados</i>					
Wheatfen	M. J. D. C.	1942	(1)		
<i>Cidnorhinus quadrimaculatus</i>					
Wheatfen	M. J. D. C.	1936	(1)		
	A. B. D.	1978	(3)		
<i>Ceutorhynchidius troglodytes</i>					
Wheatfen	E. A. E.	1939	(1)		
<i>Ceutorhynchus asperifoliarum</i>					
Wheatfen	P. D. O.	1964	(74)		
<i>Ceutorhynchus assimilis</i>					
Wheatfen	R. S. M. B.	1991	(47)		
<i>Ceutorhynchus cochleariae</i>					
Wheatfen	M. J. D. C.	1939	(1)		

<i>Ceutorhynchus contractus</i>	Wheatfen	P. D. O.	1962	(74)	
<i>Ceutorhynchus erysimi</i>	Wheatfen	E. A. E.	1945	(1)	
		P. D. O.	1967	(74)	
<i>Ceutorhynchus floralis</i>	Wheatfen	P. D. O.	1962	(74)	
<i>Ceutorhynchus melanostichus</i>	Wheatfen	E. C. B.	1938	(1)	
		E. A. E.	1945	(1)	
<i>Ceutorhynchus pyrrhorhynchus</i>	Wheatfen	E. A. E.	1945	(1)	
<i>Ceutorhynchus quadridens</i>	Wheatfen	P. D. O.	1964	(74)	
		A. B. D.	1978	(3)	
<i>Ceutorhynchus viduatus</i>	Wheatfen	A. M. M.	1960	(1)	N/b
A wetland and damp meadow weevil, larvae feed in the stems of marsh woundwort (<i>Stachys palustris</i>) and field woundwort (<i>Stachys arvensis</i>).					
<i>Rhinoncus perpendicularis</i>	Wheatfen	A. B. D.	1978	(3)	
<i>Phytobius quadrituberculatus</i>	Wheatfen	P. D. O.	1964	(74)	
<i>Tapinotus sellatus</i>	Strumpshaw	A. P. F.	1981	(76)	N/a
	Wheatfen	E. A. E.	1977	(3)	
A wetland species associated with yellow loosestrife (<i>Lysimachia vulgaris</i>). Rotational cutting and high water levels would benefit this weevil.					
<i>Poophagus sisymbrii</i>	Wheatfen	E. A. E.	1937	(1)	Local
		M. J. D. C.	1939	(1)	
An aquatic weevil which lives on aquatic crucifers particularly cress (<i>Rorripa spp.</i>).					
<i>Limnobaris t-album</i>	Wheatfen	E. A. E.	1937	(1)	
		E. A. E.	1939	(1)	
<i>Anthonomus pedicularius</i>	Wheatfen	A. H. N.	1938	(1)	
		R. S. M. B.	1942	(1)	

<i>Curculio glandium</i>	Wheatfen	M. J. D. C.	1938	(1)	
		R. S. M. B.	1942	(47)	
<i>Curculio salicivorus</i>	Wheatfen	E. A. E.	pre. 1983	(74)	
<i>Curculio venosus</i>	Wheatfen	E. A. E.	1966	(1)	
<i>Curculio villosus</i>	Wheatfen	E. A. E.	1937	(3)	N/b
		M. J. D. C.	1941	(1)	
The larvae of this weevil develop in the apple galls on oak (<i>Quercus robur</i>) which are caused by <i>Biorhiza pallida</i> (Hymenoptera) and occasionally in robins' pin-cushion galls on roses caused by <i>Diplalepis rosae</i> (Hymenoptera).					
<i>Acalyptus carpini</i>	Wheatfen	M. J. D. C.	1939	(1)	N/b
		A. B. D.	1978	(3)	
First Norfolk record. A rare southern fen species which feeds on <i>Salix spp.</i>					
<i>Mecinus pyraister</i>	Wheatfen	A. H. N.	1938	(1)	
		M. J. D. C.	1939	(1)	
<i>Gymnetron villosulum</i>	Wheatfen	M. J. D. C.	pre. 1946	(1)	N/b
At Wheatfen found in galls on water speedwell (<i>Veronica anagallis-aquatica</i>). Also recorded on pink water speedwell (<i>Veronica catenata</i>). Population could be decimated by non-rotational dyke management.					

Family SCOLYTIDAE (Bark beetles).

<i>Scolytus scolytus</i> (Elm bark beetle).	Wheatfen	R. S. M. B.	1942	(1)	
Found in elm (<i>Ulmus spp.</i>). Carrier of Dutch Elm Disease.					
<i>Hylesinus crenatus</i>	Wheatfen	R. S. M. B.	1991	(47)	
Found in dead ash (<i>Fraxinus excelsior</i>).					
<i>Leperisinus varius</i> (Ash bark beetle).	Wheatfen	R. A. C.	1944	(1)	
		R. S. M. B.	1990	(47)	
Found in ash (<i>Fraxinus excelsior</i>) log.					

<i>Hylastinus obscurus</i>				
	Wheatfen	A. B. D.	1978	(3)
<i>Xyloterus domesticum</i>				
	Wheatfen	E. A. E.	1956	(1)

Order Hymenoptera (Ants, wasps and bees).

Nomenclature follows Kloet and Hincks (1978). Due to the numerous taxonomy and nomenclature changes some groups during the last 50 years many early records should be treated with caution.

Status of aculeate Hymenoptera from Falk (1991). There are no available RDB status designations of non-aculeate Hymenoptera although many species are very local or rare.

Sub Order Symphyta (Waist-less hymenoptera).

Family CEPHIDAE (Sawflies).

<i>Hartigia linearis</i>					Common
	Rockland	C.M.	1902	(30)	
	Surlingham	C.M.	1902	(30)	
	Wheatfen	J.W.S.	1938	(1)	
		E.A.E.	1942	(1)	
Feeds on quaking grass (<i>Briza media</i>).					
<i>Hartigia nigra</i>					
	Wheatfen	P. Withers	1987	(63)	
<i>Cephus cultratus</i>					
	Wheatfen	J.W.S.	1938	(1)	
<i>Cephus pygmeus</i>					
	Wheatfen	E.A.E.	1939	(1)	

Family ARGIDAE (Sawflies).

<i>Arge ciliaris</i>					
	Wheatfen	P. Withers	1987	(63)	
<i>Arge ustulata</i>					
	Wheatfen	M. J. D. C.	1938	(1)	
		E. A. E.	1940	(1)	

Family CIMBICIDAE (Sawflies).

<i>Abia sericea</i>					
	Wheatfen	M. J. D. C.	1937	(1)	
		E. M. E. M.	1938	(1)	

<i>Cimbex femoratus</i> (Birch sawfly).				
Wheatfen	E. A. E.	1942	(1)	
	E. A. E.	1958	(1)	
Larva on birch (<i>Betula pendula</i>).				
<i>Trichiosoma lucorum</i>				
Wheatfen	M. E. A. S.	1994		
Larvae feed on birch (<i>Betula pendula</i>) and <i>Salix</i> spp..				
Family TENTHREDINIDAE (Sawflies).				
<i>Pseudohemitaxonus sharpi</i>				
Wheatfen	M. J. D. C.	1937	(1)	
<i>Strongylogaster lineata</i>				
Wheatfen	M. J. D. C.	1937	(1)	
<i>Aneugmenus padi</i>				
Wheatfen	M. J. D. C.	1938	(1)	
	E. A. E.	1940	(1)	
<i>Nesoselandria morio</i>				
Wheatfen	J. W. S.	1938	(1)	
<i>Birka (=Melisandra) cinereipes</i>				
Buckenham	C. M.	1908	(31)	
Wheatfen	P. Withers	1986	(63)	
<i>Selandria serva</i>				
Wheatfen	J. W. S.	1938	(1)	
	P. Withers	1987	(63)	
<i>Selandria sixii</i>				
Wheatfen	E. A. E.	1939	(1)	
<i>Loderus vestigialis</i>				
Wheatfen	M. J. D. C.	1938	(1)	
	E. A. E.	1940	(1)	
<i>Dolerus aericeps</i>				
Wheatfen	J. W. S.	1938	(1)	
	E. A. E.	1939	(1)	
<i>Dolerus anthracinus</i>				
Wheatfen	E. A. E.	1940	(1)	
<i>Dolerus cothurnatus</i>				
S. Church Marsh	S. G. B. et al.	1993	(61)	Local
<i>Dolerus gonager</i>				
Wheatfen	M. J. D. C.	1939	(1)	

<i>Dolerus nigratus</i>	Wheatfen	J. W. S.	1938	(1)	
<i>Dolerus picipes</i>	Wheatfen	M. J. D. C.	1937	(1)	
<i>Dolerus pratensis</i>	Wheatfen	J. W. S.	1938	(1)	
<i>Dolerus puncticollis</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Dolerus sanguinicollis v. ravus</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Heterarthrus aceris</i>	Wheatfen	P. Withers	1990	(63)	
<i>Heterarthrus microcephalus</i>	Wheatfen	P. Withers	1987	(63)	
<i>Athalia bicolor</i>	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	Unknown
<i>Athalia circularis</i>	S. Church Marsh	S. G. B. et al.	1993	(61)	Common
	Wheatfen	E. A. E.	1939	(1)	
		E. A. E.	1940	(1)	
<i>Athalia cordata</i>	Wheatfen	J. W. S.	1938	(1)	
		W. R.	1966	(1)	
	First Norfolk record.				
<i>Athalia glabricollis</i> (Smooth-necked sawfly).	Wheatfen	M. J. D. C.	1939	(1)	
<i>Athalia rosae</i> (Turnip sawfly).	Claxton	E. A. E.	1949	(3)	
<i>Athalia scutellariae</i> (Skullcap sawfly).	Wheatfen	E. A. E.	1938	(1)	
		E. A. E.	1942	(1)	
	Recorded ovipositing on skullcap (<i>Scutellaria galericulata</i>) at Wheatfen.				
<i>Monostegia abdominalis</i>	Wheatfen	E. A. E.	1939	(1)	
	Larva on yellow loosestrife (<i>Lysimachia vulgaris</i>).				
<i>Empira excisa</i>	Wheatfen	J. W. S.	1938	(1)	
		E. A. E.	1940	(1)	

<i>Empira liturata</i>				
	Strumpshaw	J. B. B.	1887	(32)
	Wheatfen	M. J. D. C.	1938	(1)
		E. A. E.	1939	(1)
<i>Ametastegia equiseti</i>				
	Wheatfen	M. J. D. C.	1938	(1)
		M. J. D. C.	1939	(1)
<i>Ametastegia glabrata</i>				
	Strumpshaw	D. A. S.	1988	(51)
	S. Church Marsh	S. G. B. et al.	1993	(61)
	Wheatfen	M. J. D. C.	1936	(1)
		J. W. S.	1938	(1)
Larvae feed on buttercups (<i>Ranunculus spp.</i>).				
<i>Protoemphytus tener</i>				
	Wheatfen	G. E. D. + E. A. E.	1937	(3)
		E. A. E.	1939	(1)
<i>Allantus calceatus</i>				
	Wheatfen	J. W. S.	1938	(1)
		E. A. E.	1939	(1)
<i>Allantus cinctus</i>				
	Wheatfen	E. A. E.	1937	(1)
		M. J. D. C.	1938	(1)
<i>Allantus truncatus</i>				
	Wheatfen	P. Withers	1989	(63)
<i>Endelomyia aethiops</i>				
	Wheatfen	E. A. E.	1939	(1)
<i>Caliroa cerasi</i>				
	Wheatfen	E. A. E.	1939	(1)
<i>Tomostethus nigrinus</i>				
	Wheatfen	E. A. E.	1939	(1)
<i>Eutomostethus ephippium</i>				
	Wheatfen	J. W. S.	1938	(1)
		P. Withers	1986	(63)
<i>Eutomostethus gagathinus</i>				
	S. Church Marsh	S. G. B. et al.	1993	(61)
	Wheatfen	J. W. S.	1938	(1)
First Norfolk record.				
<i>Eutomostethus luteiventris</i>				
	Wheatfen	J. W. S.	1938	(1)

<i>Stethomostus fuliginosus</i>					Common
	S. Church Marsh	S. G. B. et al.	1993	(61)	
	Wheatfen	J. W. S.	1938	(1)	
		E. A. E.	1939	(1)	
	On spindle (<i>Euonymus europaeus</i>).				
<i>Phytomatocera aterrima</i>					
	Wheatfen	M. J. D. C.	1936	(1)	
		E. A. E.	1939	(1)	
	On yellow iris (<i>Iris pseudacorus</i>).				
<i>Periclista albida</i>					
	Wheatfen	E. A. E.	1940	(1)	
	Larvae on oak (<i>Quercus robur</i>).				
<i>Blennocampa pusilla</i>					Common
	Surl. Broad	D. A. S. + S. G. B.	1993	(61)	
	Wheatfen	L. E.	1989	(55)	
<i>Monophadnoides geniculatus</i>					
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Monophadnoides ruficruris</i>					
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Aglaostigma aucupariae</i>					
	Wheatfen	E. A. E.	1939	(1)	
<i>Tenthredopsis coquebertii</i>					
	Wheatfen	M. J. D. C.	1936	(1)	
		J. W. S.	1938	(1)	
<i>Tenthredopsis nassata</i>					
	Wheatfen	M. J. D. C.	1938	(1)	
		E. A. E.	1939	(1)	
	On oak (<i>Quercus robur</i>).				
<i>T. nassata v. flavomaculata</i>					
	Wheatfen	J. W. S.	1938	(1)	
	A first Norfolk record.				
<i>Rhogogaster picta</i>					
	Wheatfen	E. A. E.	1939	(1)	
<i>Rhogogaster viridis</i>					
	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1939	(1)	
<i>Tenthredo arcuata</i>					
	Wheatfen	M. J. D. C.	1936	(1)	
		W. R.	1966	(1)	
	On meadowsweet (<i>Filipendula ulmaria</i>).				

<i>Tenthredo atra</i>	Rockland	C. M.	1902	(30)
	Wheatfen	M. J. D. C.	1938	(1)
		P. Withers	1989	(63)
<i>Tenthredo celtica</i>	Wheatfen	M. J. D. C.	1936	(1)
		M. J. D. C.	1938	(1)
<i>Tenthredo colon</i>	Wheatfen	P. Withers	1989	(63)
<i>Tenthredo livida</i>	Wheatfen	M. J. D. C.	1938	(1)
		M. J. D. C.	1939	(1)
<i>Tenthredo mesomelas</i>	Wheatfen	M. J. D. C.	1936	(1)
		M. J. D. C.	1939	(1)
<i>Tenthredo moniliata</i>	Rockland	C. M.	1902	(30)
<i>Pachyprotasis rapae</i>	Wheatfen	J. W. S.	1938	(1)
<i>Macrophya annulata</i>	Wheatfen	E. A. E.	1939	(1)
<i>Macrophya blanda</i>	Wheatfen	M. J. D. C.	1939	(1)
		E. A. E.	1940	(1)
	On blackcurrant (<i>Ribes nigrum</i>).			
<i>Macrophya duodecimpunctata</i>	Wheatfen	M. J. D. C.	1936	(1)
<i>Cladius pectinicornis</i>	Wheatfen	M. J. D. C.	1938	(1)
		E. A. E.	1939	(1)
<i>Priophorus pilicornis</i>	Wheatfen	M. J. D. C.	1937	(1)
<i>Hemichroa australis</i>	Wheatfen	E. A. E.	1940	(1)
<i>Platycampus luridiventris</i>	Wheatfen	J. W. S.	1938	(1)
		M. J. D. C.	1939	(1)
<i>Pristiphora fulvipes</i>	Wheatfen	J. W. S.	1938	(1)

<i>Pristiphora pallipes</i>	Wheatfen	J. W. S.	1938	(1)
<i>Nematinus luteus</i>	Wheatfen	E. A. E.	1939	(1)
<i>Euura mucronata</i>	Wheatfen	J. W. S.	1938	(1)
<i>Pontania pedunculi</i>	Wheatfen	M. J. D. C.	pre. 1946	(1)
Galls on willow (<i>Salix</i> spp.).				
<i>Pontania proxima</i>	Wheatfen	M. J. D. C.	1933	(1)
		E. A. E.	1939	(1)
Galls on crack willow (<i>Salix fragilis</i>).				
<i>Croesus septentrionalis</i>	Wheatfen	E. T. D.	1939	(1)
<i>Nematus brevis</i>	Wheatfen	E. A. E.	1940	(1)
<i>Nematus incompletus</i>	Wheatfen	J. W. S.	1938	(1)
<i>Nematus myosotidis</i>	Wheatfen	E. A. E.	1939	(1)
<i>Nematus oligospilus</i>	Wheatfen	M. J. D. C.	1938	(1)
<i>Nematus ribesii</i> (Gooseberry sawfly).	Wheatfen	E. A. E.	1939	(1)
		E. A. E.	1940	(1)
Larva on gooseberry (<i>Ribes uva-crispa</i>).				
<i>Nematus viridescens</i>	Wheatfen	E. A. E.	1937	(1)
		M. J. D. C.	1938	(1)
A rare sawfly.				
<i>Pachynematus albipennis</i>	Wheatfen	E. A. E.	1939	(1)
<i>Pachynematus xanthocarpus</i>	Wheatfen	J. W. S.	1938	(1)

Sub Order Apocrita (Waisted Hymenoptera).

Series Parasitica (Ichneumons, chalcids, gall wasps and allies).

Family ICHNEUMONIDAE (Ichneumon wasps).

Rhyssa purpurator
Strongham 1996 MEMS

<i>Scambus arundinator</i>				
Wheatfen	M. J. D. C.	1941	(1)	
	E. A. E.	1943	(1)	
<i>Scambus detritus</i>				
Wheatfen	M. J. D. C.	1939	(1)	
<i>Scambus brevicornis</i>				
Wheatfen	M. J. D. C.	1939	(1)	
<i>Clistopyga rufator</i>				
Wheatfen	M. J. D. C.	1936	(1)	
<i>Itopectis maculator</i>				
Wheatfen	M. J. D. C.	1938	(1)	
	M. J. D. C.	1939	(1)	
<i>Isoplectis melanocephala</i>				
Surlingham	C. M.	1901	(33)	
<i>Pimpla instigator</i>				
Wheatfen	E. A. E.	1944	(1)	
<i>Pimpla turionellae</i>				
Wheatfen	M. J. D. C.	1939	(1)	
<i>Perithous mediator</i>				
Wheatfen	M. J. D. C.	1937	(1)	
<i>Gelis vagans</i>				
Buckenham	J. B. B.	1894	(34)	
<i>Atractodes gilvipes</i>				
Rockland	C. M.	1912	(33)	
<i>Polytribax perspicillator</i>				
Wheatfen	M. J. D. C.	1939	(1)	
<i>Pleolophus sperator</i>				
Rockland	C. M.	1912	(33)	
<i>Glypta similis</i>				
Surlingham	C. M.	1901	(33)	

<i>Lissonota frontalis</i>	Wheatfen	E. A. E.	1943	(1)
<i>Lissonota impressor</i>	Wheatfen	M. J. D. C.	1938	(1)
<i>Cryptopimpla calceolata</i>	Strumpshaw	C. M.	1912	(33)
<i>Cryptopimpla quadrilineata</i>	Buckenham	J. B. B.	1894	(34)
<i>Perilissus filicornis</i>	Surlingham	C. M.	1901	(33)
<i>Hadrodactylus villosulus</i>	Rockland	C. M.	1901	(33)
<i>Phobetes atomator</i>	Buckenham	J. B. B.	1894	(34)
<i>Meloboris stagnalis</i>	Rockland	C. M.	1912	(33)
<i>Diadegma lateralis</i>	Surlingham	C. M.	1901	(33)
<i>Hyposoter notatus</i>	Rockland	C. M.	1912	(33)
<i>Exochus flavomarginatus</i>	Wheatfen	M. J. D. C.	1936	(1)
<i>Trichomma enecator</i>	Surlingham	C. M.	1912	(33)
<i>Agrypon flaveolatum</i>	Surlingham	C. M.	1912	(33)
<i>Collyria coxator</i>	Wheatfen	M. J. D. C.	1936	(1)
<i>Homotropus tarsatorius</i>	Buckenham	J. B. B.	1894	(34)
<i>Syrphophilus bizonarius</i>	Buckenham	J. B. B.	1894	(34)
<i>Tymmophorus graculus</i>	Buckenham	J. B. B.	1894	(34)
<i>Promethes sulcator</i>	Buckenham	J. B. B.	1894	(34)

<i>Sussaba elongata</i>	Rockland	C. M.	1912	(33)
<i>Sussaba pulchella</i>	Rockland	C. M.	1912	(33)
	Surlingham	C. M.	1912	(33)
<i>Stenichneumon culpator</i>	Wheatfen	M. J. D. C.	1939	(1)
<i>Cratichneumon fugitivus</i>	Wheatfen	M. J. D. C.	1936	(1)
<i>Ichneumon albiger</i>	Wheatfen	M. J. D. C.	1937	(1)
<i>Ichneumon latrator</i>	Wheatfen	C. M.	1937	(1)
<i>Ichneumon nereni</i>	Wheatfen	C. M.	1937	(1)
<i>Ichneumon primatorius</i>	Wheatfen	M. E. L. N.	1939	(1)
<i>Ichneumon sarcitorius</i>	Wheatfen	E. A. E.	1943	(1)
<i>Ichneumon terminatorius</i>	Wheatfen	K. C. D.	1988	(65)
<i>Chasmias motatorius</i>	Wheatfen	C. M.	1937	(1)
<i>Ctenichneumon castigator</i>	Wheatfen	M. J. D. C.	1936	(1)
		M. J. D. C.	1939	(1)
Family BRACONIDAE (Ichneumon wasps).				
<i>Aleiodes circumscriptus</i>	Rockland	C. M.	1912	(33)
<i>Polemochartus liparæ</i>	Surlingham	C. M.	1912	(33)

Family GASTERUPTIIDAE (Ensign wasps).

Gasteruption assectator

Wheatfen	M. J. D. C.	1936	(1)
----------	-------------	------	-----

Rare. A parasite of the bee *Hylaeus pectoralis*, which lives in the gall chambers created by *Lipara lucens* (Diptera) on *Phragmites*.

Family CYNIPIDAE (Gall wasps).

Diplolepis eglanteriae

Wheatfen	M. J. D. C.	1936	(1)
----------	-------------	------	-----

Galls on *Rosa canina*.

Diplolepis nervosa

Wheatfen	M. J. D. C.	1937	(1)
	M. J. D. C.	1940	(1)

Galls on *Rosa canina*.

Diplolepis rosae

Coldham Hall	M. E. A. S.	1993	
Wheatfen	M. J. D. C.	pre. 1946	(1)

Robin's pin cushion gall on *Rosa canina*.

Neuroterus albipes

Wheatfen	E. A. E.	1936	(1)
	L. E.	1991	(55)

Causes spangle galls on oak (*Quercus robur*).

Neuroterus numismalis

Wheatfen	E. A. E.	1937	(1)
	L. E.	1991	(55)

Galls on oak (*Quercus robur*).

Neuroterus quercusbaccarum

Wheatfen	M. J. D. C.	1937	(1)
	L. E.	1993	(55)

Causes spangle galls on oak (*Quercus robur*).

Andricus anthracina

Wheatfen	L. E.	1993	(55)
----------	-------	------	------

Andricus kollari (Marble gall).

Wheatfen	M. J. D. C.	1937	(1)
	L. E.	1993	(55)

Galls on oak (*Quercus robur*).

Andricus lignicola

Wheatfen	L. E.	1991	(55)
----------	-------	------	------

<i>Andricus quercuscalicis</i>	Wheatfen	L. E.	1993	(55)
An introduced species which causes the formation of galls in the place of acorns on oak (<i>Quercus robur</i>).				
<i>Andricus quercusramuli</i>	Wheatfen	L. E.	1989	(55)
<i>Cynips divisa</i>	Wheatfen	E. A. E.	1937	(1)
		L. E.	1991	(55)
Galls on oak (<i>Quercus robur</i>).				
<i>Cynips (=Andricus) quercusfolii</i>	Wheatfen	E. A. E.	1937	(1)
		L. E.	1989	(55)
Galls on oak (<i>Quercus robur</i>).				
<i>Biorhiza pallida</i>	Wheatfen	L. E.	1988	(55)

Family PTEROMALIDAE (Chalcids).

<i>Stenomalina liparae</i>	Wheatfen	E. A. E.	1939	(1)
Recorded emerging from galls of <i>Lipara lucans</i> on <i>Phragmites australis</i> .				

Family PROCTOTRUPIDAE

<i>Phaenoserphus pallipes</i>	Wheatfen	M. J. D. C.	1936	(1)
-------------------------------	----------	-------------	------	-----

Series Aculeata (Ants, bees, wasps and allies).

Family DRYINIDAE

Chelogyne (=Anteon) fulviventris Unknown
Strumpshaw A.P.F.+D.A.P. 1988-90 (51)

Family CHRYSIDIDAE (Ruby-tailed wasps).

Chrysis ignita
Wheatfen E.A.E. 1936 (1)
E.A.E. 1938 (1)

Family FORMICIDAE (Ants).

Myrmica rubra (Red ant).
Surlingham E.A.E. 1972 (3)
Strumpshaw M.E.A.S. 1994
Wheatfen E.A.E. 1938 (1)
M.E.A.S. 1994

Myrmica ruginodis (Red ant).
Strumpshaw M.E.A.S. 1994
Wheatfen M.J.D.C. 1936 (1)
A.E.E. 1942 (1)

Myrmica scabrinodis (Red ant).
Strumpshaw M.E.A.S. 1994
Wheatfen A.E.E. 1939 (1)
A.E.E. 1942 (1)

The large blue butterfly (*Maculinea arion*) is associated with this ant.

Myrmica sulcinodis (Red ant).
Wheatfen E.A.E. 1964 (3)
E.A.E. 1979 (3)

Very rare in East Anglia. Found in damp areas around heathland.

Leptothorax nylanderi
Wheatfen E.A.E. 1986 (3)

Formica fusca (Negro ant).
Wheatfen A.E.E. 1939 (1)
E.A.E. 1941 (1)

F. fusca v. rubescens
Wheatfen A.N.B. 1938 (1)

Lasius fuliginosus (Jet ant).

Wheatfen	A. N. B.	1938	(1)
	A. E. E.	1939	(1)

Lasius niger (Black garden ant).

Strumpshaw	M. E. A. S.	1994	
Wheatfen	A. E. E.	1939	(1)
	E. A. E.	1957	(3)

Family POMPILIDAE (Spider-hunting wasps).

Priocnemis perturbator

Wheatfen	M. J. D. C.	1937	(1)
----------	-------------	------	-----

Family EUMENIDAE (Potter and mason wasps).

Ancistrocerus antilope

Wheatfen	E. A. E.	1939	(1)
----------	----------	------	-----

Nests in a variety of cavities, including beetle burrows, hollow twigs and loose mortar. Here it stores small caterpillars (eg. pyralid) to feed its larvae. Appears to have declined greatly this century.

RDB 3

Ancistrocerus nigricornis

Wheatfen	M. J. D. C.	1936	(1)
	E. A. E.	1939	(1)

Ancistrocerus parietinus

Wheatfen	E. A. E.	1940	(1)
	E. A. E.	1985	(3)

Ancistrocerus parietum

Wheatfen	E. A. E.	1937	(1)
	E. A. E.	1939	(1)

Ancistrocerus scoticus

Wheatfen	E. A. E.	1941	(1)
----------	----------	------	-----

Family VESPIDAE (Social wasps).

Vespa crabro (Hornet).

Coldham Hall	M. E. A. S.	1993	
Strumpshaw	E. A. E.	1934	(44)
	M. E. A. S.	1993	
Wheatfen	E. A. E.	1941	(1)
	M. J. D. C.	1945	(1)

<i>Vespa rufa</i> (Red wasp).				
	Strumpshaw	M. E. A. S.	1993	
	Wheatfen	E. A. E.	1938	(1)
		E. A. E.	1958	(3)
<i>Vespa germanica</i> (German wasp).				
	Wheatfen	E. A. E.	1937	(1)
		E. A. E.	1940	(1)
<i>Vespa vulgaris</i> (Common wasp).				
	Coldham Hall	M. E. A. S.	1993	
	Strumpshaw	M. E. A. S.	1993	
	Wheatfen	E. A. E.	1937	(1)
		E. A. E.	1945	(1)
Family SPHECIDAE (Digger wasps).				
<i>Crabro cribrarius</i> (Slender-bodied digger).				
	Wheatfen	E. A. E.	1938	(1)
<i>Crossocerus annulipes</i>				
	Wheatfen	P. Withers	1986	(63)
<i>Crossocerus vagabundus</i>				
	Wheatfen	E. A. E.	1936	(1)
	Once widespread but local in the south east of England. The most recent record was in 1953 and it may be extinct. Nests in dead wood in sunny situations, here it stores crane flies as food for its larvae. Loss of dead wood habitat has certainly contributed to the decline of this species.			
<i>Ectemnius lapidarius</i>				
	Wheatfen	E. A. E.	1936	(1)
		E. A. E.	1941	(1)
<i>Ectemnius cephalotes</i>				
	Wheatfen	E. A. E.	1936	(1)
		E. A. E.	1983	(3)
<i>Passaloecus clypealis</i>				
	Strumpshaw	A. G. I.	1980	(62)
	A digger wasp of fens and marshes. Has been raised from the galls of <i>Lipara lucens</i> (Diptera) in <i>Phragmites</i> . Rarely encountered in un-galled <i>Phragmites</i> stems. Requires at least a two year wale as the galls used are more than a year old. Succession should be controlled to prevent shading.			
<i>Passaloecus insignis</i>				
	Wheatfen	E. A. E.	1941	(1)

RDB 1

RDB 2
(RDB 3)

<i>Mellinus arvensis</i> (Field digger wasp).				
Wheatfen	E. A. E.	1937	(1)	
	E. A. E.	1971	(3)	
<i>Gorytes quadrifasciatus</i> (Four-banded digger).				
Wheatfen	E. A. E.	1938	(1)	
	E. A. E.	1943	(3)	
<i>Argogorytes mystaceus</i> (= <i>campestris</i>) (Two-girdled digger).				
Wheatfen	E. A. E.	1983	(3)	

Family COLLETIDAE (Solitary bees).

<i>Hylaeus communis</i> (Common yellow-face).				
Wheatfen	P. Withers	1986	(63)	

Family ANDRENIDAE (Mining bees).

<i>Andrena fulva</i> (Tawny mining bee).				
Wheatfen	E. A. E.	1943	(1)	

<i>Andrena varians</i>				
Wheatfen	E. A. E.	1938	(1)	N/b
Nests in light, often sandy soil in sunny situations. Associated with spring flowering fruit trees (<i>Prunus</i> , <i>Pyrus</i> and <i>Malus</i>), where it forages for pollen. A south-eastern species which is threatened by agricultural intensification.				

<i>Andrena rosae</i>				
Wheatfen	M. J. D. C.	1936	(1)	RDB 3 (RDB 2)
This species is associated with coastal formations, heathland, moorland and disturbed situations. It nests in light soil in sunny situations. In spring associated with blackthorn (<i>Prunus spinosa</i>) and <i>Salix</i> blossom. The summer brood forages on bramble, umbellifers and other flowers. Historically this predominantly western species has been regularly misidentified, and this record therefore requires confirmation.				

<i>Andrena dorsata</i>				
Wheatfen	E. A. E.	1938	(1)	
	E. A. E.	1939	(1)	
Regularly visits willow (<i>Salix spp.</i>) blossom.				

Family HALICTIDAE (Mining bees).

<i>Halictus tumulorum</i>				
Wheatfen	M. J. D. C.	1937	(1)	

<i>Halticus smeathmanellum</i>	Wheatfen	E. A. E.	1937	(44)
<i>Lassioglossum calceatum</i>	Wheatfen	M. J. D. C.	1938	(1)
<i>Lassioglossum smeathmanellum</i>	Wheatfen	M. J. D. C.	1937	(1)
<i>Sphecodes crassus</i>	Wheatfen	E. A. E.	1943	(1)
<i>Sphecodes gibbus</i> (Humped sphecodes).	Wheatfen	M. J. D. C.	1941	(1)
<i>Sphecodes miniatus</i>	Wheatfen	M. J. D. C.	1937	(1)

Family MELITTIDAE (Bees).

Macropis europaea

Strumpshaw	C. M. D. et al.	1993	(61)
Wheatfen	E. A. E.	1939	(1)

RDB 3
(N/a)

A rare south-eastern species associated with yellow loosestrife (*Lysimachia vulgaris*) in wetland areas. Nests are built in dry peaty banks and water-proofed using oils from the yellow loosestrife (*Lysimachia vulgaris*). Falling water levels, scrub encroachment and eutrophication act to reduce the abundance of yellow loosestrife (*Lysimachia vulgaris*). Prolonged winter flooding will reduce the availability of nest sites. A 2-4 year rotational cutting of small areas of reedbed will favour this species.

Family MEGACHILIDAE (Carpenter and leaf-cutting bees).

Chelostoma florissomme (Sleepy carpenter bee).

Wheatfen	J. W. S.	1938	(1)
----------	----------	------	-----

Family ANTHOPHORIDAE (Cuckoo and nomad bees).

Nomada lathburiana

Wheatfen	E. A. E.	1939	(1)
----------	----------	------	-----

RDB 3

A cleptoparasite of the mining bees *Andrena cineraria* and *A. vaga*. Neither of these species have been recorded in the Mid-Yare, however they may be present or this nomad bee may be parasitising other members of the *Andrena* genus. Scrub should be cleared from potential nesting banks to prevent over-shading.

Family APIDAE (Bumble, cuckoo and honey bees).

Bombus lucorum (Small earth bumblebee).

Wheatfen	M. J. D. C.	1942	(35)
	E. A. E.	1964	(1)

Bombus terrestris (Buff-tailed bumblebee).

Strumpshaw	M. B.	1980	(52)
Wheatfen	M. J. D. C.	1933	(1)
	R. C. P.	1964	(35)

Bombus lapidarius (Large red-tailed bumblebee).

Strumpshaw	E. A. E.	1956	(3)
Wheatfen	E. A. E.	1935	(1)
	R. C. P.	1963	(1)

Bombus jonellus (Heath bumblebee).

Wheatfen	M. J. D. C.	1944	(35)
	R. C. P.	1964	(1)

A local species usually found on heathland; the Mid-Yare contains one of its few wetland sites.

Bombus pratorum (Early bumblebee).

Strumpshaw	M. B.	1980	(52)
Wheatfen	M. J. D. C.	1941	(35)
	R. C. P.	1964	(35)

Bombus hortorum (Small garden bumblebee).

Wheatfen	E. A. E.	1938	(1)
	R. C. P.	1963	(1)

Bombus ruderatus (Large garden bumblebee).

Wheatfen	M. J. D. C.	1937	(1)
	M. J. D. C.	1943	(35)

N/b

A local bumble bee associated with flower-rich coastal sites, including saltmarshes. Nests are of a deep construction, often in small mammal burrows. Flowers with a long corolla tube are preferred. The largest British bumblebee. In the Mid-Yare this species relies on the flower rich meadows and reedbeds. Scrub encroachment and loss of floral diversity would reduce the area of suitable habitat in the valley. A large area is apparently needed for the survival of this species at a site.

Bombus muscorum (Moss carder bee).

Wheatfen	M. J. D. C.	1937	(1)
	R. S.	1938	(1)

Rather local.

<i>Bombus pascuorum</i>				
	Strumpshaw	M. B.	1980	(52)
	Wheatfen	E. A. E.	1935	(1)
		R. C. P.	1964	(35)
<i>Bombus ruderarius</i>				
	Surlingham	R. C. P.	1963	(35)
	Wheatfen	R. C. P.	1964	(35)
<i>Bombus sylvarum</i> (Shrill carder bumblebee)				
	Wheatfen	E. A. E.	1935	(1)
		E. A. E.	1957	(3)
	Requires large expanses of suitable habitat, this includes saltmarshes and flower-rich grassland. Visits a wide variety of flowers. Scrub encroachment and loss of floral diversity would reduce the area of habitat suitable for this species.			
<i>Psithyrus bohemicus</i>				
	Wheatfen	M. J. D. C.	1944	(35)
	A local cuckoo bee. Bees of this genus are parasitic on bees of the genus <i>Bombus</i> .			
<i>Psithyrus campestris</i> (Field cuckoo bee).				
	Wheatfen	M. J. D. C.	1937	(1)
		R. C. P.	1963	(1)
<i>Psithyrus rupestris</i> (Hill cuckoo bee)				
	Wheatfen	E. A. E.	1935	(1)
		M. J. D. C.	1937	(1)
	Parasitic on <i>Bombus lapidarius</i> which it resembles. Found in a variety of flower rich habitats where its host occurs. This species has declined nationally and it may now be extinct in the valley. Management for <i>Bombus spp.</i> will also benefit the species of this genus.			
<i>Psithyrus sylvestris</i> (Four-coloured cuckoo bee).				
	Wheatfen	M. J. D. C.	1941	(35)
		R. C. P.	1964	(35)
<i>Psithyrus vestalis</i> (Vestal cuckoo bee).				
	Strumpshaw	M. B.	1980	(52)
	Wheatfen	M. J. D. C.	1940	(35)
		R. C. P.	1964	(35)
<i>Apis mellifera</i> (Honey bee).				
	Wheatfen	M. J. D. C.	1935	(1)
		E. A. E.	1962	(3)

Handwritten notes:
 1941
 1940
 1964

Order Raphidicoidea (Snakeflies).

Family RAPHIDIIDAE

<i>Raphidia xanthostigma</i>					Common
	Wheatfen	E. A. E. + E. T. D.	1938	(1)	

Order Neuroptera (Lacewings, ant lions and allies).

Family SISYRIDAE (Sponge-flies).

<i>Sisyra fuscata</i>					Local
	Wheatfen	E. A. E.	1938	(4)	
		E. A. E.	1942	(1)	
Riverbanks on alders and willows, larvae feed on freshwater sponges.					

Family HEMEROBIIDAE (Brown lacewings).

<i>Hemerobius lutescens</i>					Common
	Rockland	E. T. D.	1938	(4)	
Frequents deciduous woods.					
<i>Hemerobius stigma</i>					Common
	Wheatfen	E. A. E.	1938	(4)	
On conifers, preferring Scots pine (<i>Pinus sylvestris</i>).					
<i>Psectra diptera</i>					Local
	Strumpshaw	C. W. P.	1989	(51)	
Flightless and ground-living amongst dense vegetation.					
<i>Kimminsia subnebulosa</i>					Common
	Wheatfen	M. J. D. C.	1938	(1)	
<i>Micromus paganus</i>					Common
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Micromus variegatus</i>					Common
	Rockland	E. T. D.	1938	(4)	
	Wheatfen	E. A. E.	1938	(4)	
		K. C. D.	1971	(4)	

Family CHRYSOPIDAE (Green lacewings).

<i>Chrysopa (=Cunctochrysa) albolineata</i>					Common
Wheatfen	E. A. E.	1938	(4)		
<i>Chrysopa (=Chrysoperla) carnea</i>					Common
Wheatfen	E. A. E.	1937	(4)		
	K. C. D.	1971	(4)		
<i>Chrysopa (=Chrysopidia) ciliata</i>					Common
Wheatfen	E. A. E.	1938	(4)		
<i>Chrysopa (=Nineta) flava</i>					Common
Wheatfen	E. A. E.	1936	(4)		
	E. A. E.	1938	(4)		
<i>Chrysopa perla</i>					Common
Strumpshaw	K. C. D.	1971	(4)		
Wheatfen	E. A. E.	1936	(4)		
<i>Chrysopa phyllochroma</i>					Local
Wheatfen	M. J. D. C.	1936	(1)		
<i>Chrysopa (=Nineta) vittata</i>					Common
Wheatfen	E. A. E.	1938	(4)		

Order Megaloptera (Alderflies).

Family SIALIDAE

<i>Sialis lutaria</i> (Alder fly).					Common
Strumpshaw	P. D. W.	1979	(6)		
	J. B.	1989	(18)		
Rockland Broad	E. T. D.	1958	(46)		
Wheatfen	M. J. D. C.	1937	(1)		
	R. B.	1994	(54)		
<i>Sialis fuliginosa</i>					Local
Strumpshaw	P. D. W.	1979	(6)		
A rarer species of alder fly, associated with running water, this record requires confirmation.					

Order Mecoptera (Scorpion flies).

Family PANORPIDAE (True scorpion flies).

<i>Panorpa communis</i>					Common
	Wheatfen	E. A. E.	1938	(1)	
		E. A. E.	1962	(3)	
<i>Panorpa germanica</i>					Common
	Wheatfen	E. A. E.	1938	(1)	
		E. A. E.	1962	(3)	

Order Diptera (True flies).

Present status from S. Falk (1991). Notable a and Notable b designations are not divided.

Family TIPULIDAE (Crane-flies).

<i>Nephrotoma analis</i>	Buckenham	A. E. S. + M. N. P.	1993	(61)	Local
<i>Nephrotoma appendiculata</i>	Wheatfen	M. J. D. C.	1937	(1)	
		M. J. D. C.	1939	(1)	
<i>Nephrotoma crocata</i>	Surlingham	R. S. M.	1949	(62)	RDB 3
Found in heathy or fen woodland. This striking yellow and black crane-fly has undergone a marked decline. Only 15 post 1960 sites are known.					
<i>Nephrotoma flavescens</i>	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1939	(1)	
<i>Nephrotoma flavipalpis</i>	Wheatfen	E. A. E.	1936	(1)	
<i>Nephrotoma guesstfialica</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Local
<i>Nephrotoma lunulicornis</i>	Strumpshaw	P. J. C.	1989	(51)	RDB 3
	Wheatfen	M. J. D. C.	1938	(1)	(N)
Normally associated with sandy riverbanks in the west and north of the UK. The presence of this species at an eastern site with so few sandy riverbanks is very unusual.					
<i>Tipula nigra</i>	Cantley	J. B.	1993	(50)	
	Wheatfen	E. A. E.	1939	(1)	
		E. A. E.	1943	(1)	
<i>Tipula varlicornis</i>	Wheatfen	M. J. D. C.	1937	(1)	
		M. J. D. C.	1939	(1)	
<i>Tipula marmorata</i>	Wheatfen	M. J. D. C.	1938	(1)	
		M. J. D. C.	1939	(1)	

<i>Tipula pagana</i>	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1939	(1)	
<i>Tipula signata</i>	Wheatfen	M. J. D. C.	1938	(1)	
		M. J. D. C.	1939	(1)	
<i>Tipula varipennis</i>	Wheatfen	M. J. D. C.	1937	(1)	
		M. J. D. C.	1939	(1)	
<i>Tipula unca</i>	Buckenham	A. E. S. +M. N. P.	1993	(61)	Common
<i>Tipula scripta</i>	Buckenham	A. E. S. +M. N. P.	1993	(61)	Common
	Wheatfen	M. J. D. C.	1937	(1)	
		M. J. D. C.	1939	(1)	
<i>Tipula lunata</i>	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1939	(1)	
<i>Tipula peliostigma</i>	Wheatfen	M. J. D. C.	1936	(1)	RDB 3 (N)
	<p>This crane-fly has a southern distribution, with most records being from East Anglia. Larvae have been recorded from birds nests in hedgerows and trees. Only ever present in small numbers, this species will benefit from maintenance of hedges and woodland for nesting small birds. There are only seven post 1960 known sites.</p>				
<i>Tipula oleracea</i>	Buckenham	A. E. S. +M. N. P.	1993	(61)	Common
	Wheatfen	M. J. D. C.	1936	(1)	
		E. A. E.	1949	(3)	
<i>Tipula paludosa</i>	Wheatfen	M. J. D. C.	1937	(1)	
		M. J. D. C.	1939	(1)	
<i>Tipula fulvipennis</i>	Wheatfen	M. J. D. C.	1938	(1)	
<i>Tipula luna</i>	Wheatfen	M. J. D. C.	1936	(1)	
		E. A. E.	1939	(1)	

<i>Tipula maxima</i>	Wheatfen	M. J. D. C.	1938	(1)		
<i>Tipula vittata</i>	Wheatfen	M. J. D. C.	1939	(1)		
<i>Cylindrotoma distinctissima</i>	Wheatfen	M. J. D. C.	1936	(1)		
<i>Limonia flavipes</i>	Wheatfen	M. J. D. C.	1936	(1)		
		M. J. D. C.	1937	(1)		
<i>Limonia macrostigma</i>	Buckenham	A. E. S. + M. N. P.	1993	(61)	Common	
	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)		
		C. M. D. et al.	1993	(61)		
<i>Limonia nigropunctata</i>	Wheatfen	E. A. E.	1939	(1)		
<i>Limonia nubeculosa</i>	Wheatfen	M. J. D. C.	1936	(1)		
		M. J. D. C.	1937	(1)		
<i>Limonia tripunctata</i>	Wheatfen	M. J. D. C.	1937	(1)		
		M. J. D. C.	1939	(1)		
<i>Limonia inusta</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Local	
<i>Limonia chorea</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Common	
		Wheatfen	M. J. D. C.	1937		(1)
			M. J. D. C.	1939		(1)
<i>Limonia danica</i>	Strumpshaw	A. E. S.	1988	(51)	RDB 2 (RDB 3)	
			C. M. D. et al.	1993		(61)
		S. Church Marsh	S. G. B. et al.	1993		(61)

A brackish marshland crane-fly found in about thirteen south-eastern localities. Usually coastal. Larvae develop in sparsely vegetated mud. The biggest threats to this species are the potential loss of a brackish influence; insensitive dyke management systems; and falling water levels. Also recorded in 1989 and 1990 at Strumpshaw by A. E. Stubbs (51).

<i>Limonia modesta</i>				Common
	Strumpshaw	A. P. F. +D. A. P.	1988-90 (51)	
<i>Helius flavus</i>				Local
	Buckenham	A. E. S. +M. N. P.	1993 (61)	
<i>Helius longirostris</i>				Common
	Buckenham	A. E. S. +M. N. P.	1993 (61)	
	Strumpshaw	A. P. F. +D. A. P.	1988-90 (51)	
		C. M. D. et al.	1993 (61)	
<i>Pedicia immaculata</i>				Common
	Strumpshaw	A. P. F. +D. A. P.	1988-90 (51)	
	Wheatfen	M. J. D. C.	1936 (1)	
		M. J. D. C.	1939 (1)	
<i>Austrolimnophila ochracea</i>				Common
	Buckenham	A. E. S. +M. N. P.	1993 (61)	
<i>Limnophila ferruginea</i>				Common
	Strumpshaw	A. P. F. +D. A. P.	1988-90 (51)	
		C. M. D. et al.	1993 (61)	
	Wheatfen	E. A. E.	1939 (1)	
<i>Limnophila fulvonervosa</i>				Common
	Buckenham	A. E. S. +M. N. P.	1993 (61)	
	Strumpshaw	C. M. D. et al.	1993 (61)	
<i>Limnophila nemoralis</i>				Common
	Strumpshaw	A. P. F. +D. A. P.	1988-90 (51)	
<i>Pilaria discicollis</i>				Common
	Buckenham	A. E. S. +M. N. P.	1993 (61)	
	Strumpshaw	C. M. D. et al.	1993 (61)	
<i>Pilaria scutellata</i>				N
	S. Church Marsh	S. G. B. et al.	1993 (61)	
	Larvae are semi-aquatic and associated with bare mud at eutrophic sites on acid soils or poor fen. Found in open habitats and carr.			
<i>Gnophomyia viridipennis</i>				RDB 3
	Wheatfen	H. E. J. B.	1951 (8)	(N)
	Larvae develop under the bark of recently fallen trees, especially poplars (<i>Populus spp.</i>), but probably other members of the willow family (<i>Salicaceae</i>). About 15 post 1960 sites are known. The lack of continuity of suitable fallen trees is a major problem.			

<i>Gonomyia lateralis</i>	Buckenham	A. E. S. +M. N. P.	1993	(61)	Local
<i>Erioptera stictica</i>	Strumpshaw	A. P. F. +D. A. P.	1988-90	(51)	Common
	S. Church Marsh	S. G. B. et al.	1993	(61)	
<i>Erioptera hybrida</i>	Strumpshaw	A. E. S.	1988	(51)	Local
	Larvae live in the soil on wet meadows.				
<i>Erioptera gemina</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Local
<i>Erioptera trivialis</i>	Strumpshaw	A. P. F. +D. A. P.	1988-90	(51)	Common
	S. Church Marsh	S. G. B. et al.	1993	(61)	
<i>Ormosia lineata</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Molophilus medius</i>	Strumpshaw	A. P. F. +D. A. P.	1988-90	(51)	Common
		C. M. D. et al.	1993	(61)	
<i>Molophilus obscurus</i>	Strumpshaw	A. P. F. +D. A. P.	1988-90	(51)	Common
<i>Molophilus pleuralis</i>	Strumpshaw	A. E. S.	1988	(51)	Local
		A. E. S.	1990	(51)	
	Occurs in wet brackish conditions, usually coastal.				

Family PSYCHODIDAE (Owl midges and moth flies).

A very under-studied group nationally. As a result there are no RDB status designations available and little is known of the ecology of many species. However it is very clear that the Mid-Yare is of great importance to several rare species. The composition and richness of the moth-fly fauna in this area is unique and deserves a more thorough study. The partially brackish nature of the Mid-Yare system probably contributes to the number of exceptional species found here.

Taxonomy follows Withers (1989).

- Sycorax silacea*
Wheatfen P. Withers 1986 (63)
Larvae live in moss around springs or trickles,
adult females bloodsuck amphibia.
- Sycorax similis*
Wheatfen P. Withers 1990 (63)
Larvae live in moss around springs or trickles,
adult females have been found containing vertebrate
blood.
- Clytocybus (Boreoclytocybus) ocellaris*
Wheatfen P. Withers 1987 (63)
Larvae are aquatic saprophages.
- Clytocybus (Boreoclytocybus) rivosus*
Wheatfen P. Withers 1986 (63)
Larvae are aquatic saprophages. Only other known
site is at Reedham marshes.
- Pericoma nubila*
Wheatfen P. Withers 1988 (63)
- Pericoma pilularia*
Wheatfen P. Withers 1988 (63)
- Atrichobrunettia augustipennis*
Wheatfen P. Withers 1986 (63)
The larva is a specialist of limestone depositions
associated with caves and springs (tufa formations
or travertines). Its presence in this area is
puzzling.
- Philosepedon humeralis*
Wheatfen P. Withers 1988 (63)
Larvae occur in the tissues of terrestrial snails.
- Psychoda cinerea*
Wheatfen P. Withers 1990 (63)
- Psychoda minuta*
Wheatfen P. Withers 1986 (63)
- Feuerborniella obscura*
Wheatfen P. Withers 1986 (63)
Larvae are found in dead leaves by streams.

Telmatoscopus ellisi

Wheatfen P. Withers 1986 (9)

This moth fly was first described from Wheatfen, and is only known from three other sites in the UK. Some of the other sites also contain alder carr with a brackish influence (P. Withers pers. comm.). The ecology of this genus is almost unknown; in some species the larvae are aquatic, while others feed on decaying matter, especially in wet situations.

Telmatoscopus labeculosus

Wheatfen P. Withers 1986 (63)

Telmatoscopus longicornis

Wheatfen P. Withers 1987 (63)
P. Withers 1990 (63)

Telmatoscopus maynei

Wheatfen P. Withers 1986 (9)

This species has one other known colony, at Upton Broad.

Telmatoscopus morulus

Wheatfen P. Withers 1986 (63)

Telmatoscopus pseudolongicornis

Wheatfen P. Withers 1986 (63)

Telmatoscopus vaillanti

Wheatfen P. Withers 1986 (9)

This species has two other known colonies; Upton Broad and Malham Tarn.

Threticus balkanecoalpinus

Wheatfen P. Withers 1990 (63)

Only known from Wheatfen.

Threticus lucifugus

Wheatfen P. Withers 1990 (63)

Larvae have been recorded from rotting leaves at stream margins.

Family PTYCHOPTERIDAE (Black and yellow crane-flies).

Ptychoptera albimana

Wheatfen M. J. D. C. 1937 (1)
P. Withers 1989 (63)

<i>Ptychoptera contaminata</i>					Local
	Strumpshaw	A.E.S.	1988	(51)	
		C.M.D. et al.	1993	(61)	
	S.Church Marsh	S.G.B. et al.	1993	(61)	
	Wheatfen	M.J.D.C.	1936	(1)	
		P.Withers	1990	(63)	

Found in wetland areas, larvae are aquatic.

<i>Ptychoptera lacustris</i>					
	Wheatfen	R.L.C.	1936	(1)	
		R.L.C.	1939	(1)	

<i>Ptychoptera minuta</i>					Local
	S.Church Marsh	S.G.B. et al.	1993	(61)	

<i>Ptychoptera scutellaris</i>					
	Wheatfen	R.L.C.	1936	(1)	
		E.A.E.	1940	(1)	

Family DIXIDAE (Meniscus midges).

The larvae of this family live on the surface of water, often associated with emergent vegetation. Shading by trees encourages some species. Most species occur in small, isolated areas and can be sensitive to various management practices (E.K.Goldie-Smith pers. comm.).

<i>Dixa nebulosa</i>					Common
	Strumpshaw	E.K.G.	1993	(61)	

<i>Dixella amphibia</i>					Common
	Strumpshaw	E.K.G.	1988	(51)	
		E.K.G.	1993	(61)	

<i>Dixella autumnalis</i>					Local
	Strumpshaw	E.K.G.	1988	(51)	
		E.K.G.	1993	(61)	

Associated with emergent vegetation.

<i>Dixella serotina</i>					RDB 3 (N)
	Strumpshaw	E.K.G.	1988	(51)	
		E.K.G.	1989	(51)	

Found in fenland areas. Only four specimens were recorded. As the area was later turned into a wader scrape, it remains to be seen whether this species is still present in the Valley.

Family CHAOBORIDAE (Phantom midges).

<i>Chaoborus crystallinus</i>				
	Strumpshaw	P. D. W.	1979	(6)
Larvae aquatic.				

Family CULICIDAE (Mosquitoes).

<i>Anopheles atroparvus</i> (Malaria mosquito).				
	Wheatfen	M. J. D. C.	1936	(1)
		E. A. E.	1938	(1)
<i>Anopheles claviger</i> (Malaria mosquito).				
	Strumpshaw	E. A. E.	1943	(29)
	Wheatfen	M. J. D. C.	1938	(1)
		E. A. E.	1943	(29)
<i>Mansonia richardii</i>				
	Yare Broads	E. A. E.	pre. 1965	(64)
Larvae tap the supplies of air in the under water parts of plants.				
<i>Aedes annulipes</i>				
	Wheatfen	P. Withers	1990	(63)
<i>Aedes detritus</i>				
	Strumpshaw	E. A. E.	1943	(29)
	Wheatfen	E. A. E.	1944	(1)
		E. A. E.	1943	(29)
A brackish water species.				
<i>Aedes geniculatus</i>				
	Wheatfen	E. A. E.	1939	(1)
<i>Culiseta annulata</i>				
	Wheatfen	M. J. D. C.	1936	(1)
		E. A. E.	1957	(3)
<i>Culex pipiens</i>				
	Wheatfen	M. J. D. C.	1936	(1)
		E. A. E.	1938	(1)
<i>C. pipiens f. molestus</i>				
	Wheatfen	M. J. D. C.	1938	(1)
		M. J. D. C.	1939	(1)

Family CHIRONOMIDAE (Non-biting midges).

<i>Chironomus plumosus</i>	Wheatfen	M. J. D. C.	1936	(1)
Larvae aquatic.				
<i>Glyptotendipes pallens f. glaucus</i>	Wheatfen	H. E. J. B.	1951	(8)

Family ANISOPODIDAE (Window-midges).

Larvae often feed in damp, decaying matter.

<i>Sylvicola cinctus</i>	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	Local
<i>Sylvicola (=Anisopus) punctatus</i>	Wheatfen	M. J. D. C.	1937	(1)	
		P. Withers	1989	(63)	

Family BIBIONIDAE (March-flies).

<i>Biblio hortulanus</i>	Wheatfen	M. J. D. C.	1939	(1)
<i>Biblio marci</i> (St. Mark's fly).	Wheatfen	E. A. E.	1937	(1)
		E. A. E.	1962	(3)
Larvae feed in soil and rotting vegetation.				
<i>Dilophus febrilis</i> (Fever fly).	Wheatfen	E. A. E.	1939	(1)
		P. Withers	1986	(63)

Family MYCETOPHILIDAE (Fungus-gnats).

The larvae of this family live and feed in fungi. Very little is known about their ecology, many species may be specific to certain species or groups of fungi.

<i>Mycomya affinis</i>	Strumpshaw	P. J. C.	1988-90	(51)	Common
<i>Mycomya brittani</i>	Strumpshaw	P. J. C.	1988	(51)	RDB 1 (RDB 2)

<i>Mycomya fimbriata</i>					Local
	Strumpshaw	P. J. C.	1988	(51)	
	Wheatfen	P. Withers	1986	(63)	
A southern species.					
<i>Mycomya maura</i>					Unknown
	Strumpshaw	P. J. C.	1988-90	(51)	
<i>Acnemia nitidicollis</i>					Common
	Strumpshaw	P. J. C.	1988-90	(51)	
<i>Apolephthisa subincana</i>					
	Wheatfen	P. Withers	1989	(63)	
<i>Leia bimaculata</i>					
	Wheatfen	P. Withers	1986	(63)	
Specimen emerged from the toadstool <i>Russula atropurpurea</i> .					
<i>Leia longiseta</i>					RDB 2
	Strumpshaw	P. J. C.	1988	(51)	
		P. J. C.	1990	(51)	
Also recorded by P. Chandler in 1989. A rare fungus gnat, only recently discovered in the East Anglian fens and Welsh wetlands.					
<i>Tetragoneura sylvatica</i>					Common
	Strumpshaw	P. J. C.	1988-90	(51)	
<i>Anatella flavomaculata</i>					Common
	Strumpshaw	P. J. C.	1988-90	(51)	
<i>Anatella setigera</i>					Common
	Strumpshaw	P. J. C.	1988-90	(51)	
<i>Anatella unguigera</i>					Common
	Strumpshaw	P. J. C.	1988-90	(51)	
<i>Rymosia bifida</i>					Local
	Strumpshaw	P. J. C.	1989	(51)	
<i>Rymosia sp.</i>					Unknown
	Mid-Yare	P. J. C.	1993		
This species was collected during the Dipterists' Summer meeting and is soon to be described as new to Britain.					
<i>Exechia fusca</i>					Common
	Strumpshaw	P. J. C.	1988-90	(51)	

<i>Exechia pseudofestiva</i>					N
	Strumpshaw	P. J. C.	1988	(51)	
	Larvae may feed in soft fungi.				
<i>Exechia repanda</i>					Local
	Strumpshaw	P. J. C.	1988	(51)	
<i>Exechia spinuligera</i>					Common
	Strumpshaw	P. J. C.	1988-90	(51)	
<i>Exechiopsis hammi</i>					Local
	Strumpshaw	P. J. C.	1988	(51)	
		P. J. C.	1989	(51)	
<i>Pseudexechia parallela</i>					RDB 1
	Strumpshaw	P. J. C.	1988	(51)	Extinct
		P. J. C.	1989	(51)	
<i>Pseudexechia trisignata</i>					Local
	Strumpshaw	P. J. C.	1988	(51)	
<i>Pseudexechia trivittata</i>					Common
	Strumpshaw	P. J. C.	1988-90	(51)	
<i>Allodia ornaticollis</i>					Common
	Strumpshaw	P. J. C.	1988-90	(51)	
<i>Allodia barbata</i>					RDB 3
	Strumpshaw	P. J. C.	1988	(51)	(N)
		P. J. C.	1989	(51)	
	Has been reared from the cup fungus <i>Peziza repanda</i> .				
<i>Allodia embla</i>					RDB 3
	Strumpshaw	P. J. C.	1988	(51)	
<i>Allodia silvatica</i>					N
	Surlingham	J. W. I.	1976	(62)	
	Wheatfen	P. Withers	1986	(63)	
	Occurs mainly in woodland. Larvae have been reared from the cup fungus <i>Peziza repanda</i> .				
<i>Brevicornu auriculatum</i>					Local
	Strumpshaw	P. J. C.	1988	(51)	
<i>Brevicornu griseicolle</i>					Common
	Strumpshaw	P. J. C.	1988-90	(51)	
<i>Brevicornu sericoma</i>					Unknown
	Strumpshaw	P. J. C.	1988-90	(51)	

<i>Cordyla crassicornis</i>	Strumpshaw	P. J. C.	1988-90	(51)	Common
<i>Cordyla fusca</i>	Wheatfen	P. Withers	1986	(63)	
Specimen emerged from the toadstool <i>Russula atropurpurea</i> .					
<i>Trichonta icenica</i>	Strumpshaw	P. J. C.	1988	(51)	RDB 3
<i>Trichonta terminalis</i>	Strumpshaw	P. J. C.	1988-90	(51)	Common
<i>Phronia nitidiventis</i>	Strumpshaw	P. J. C.	1988-90	(51)	Unknown
<i>Phronia tenuis</i>	Strumpshaw	P. J. C.	1988-90	(51)	Common
<i>Dynatosoma fuscicornis</i>	Wheatfen	P. Withers	1986	(63)	
Found on the bracket fungus <i>Grifola frondosa</i> .					
<i>Mycetophila cingulum</i>	Strumpshaw	P. J. C.	1988	(51)	Local
Feeds on dryad's saddle (<i>Polyporus squamosus</i>) and other common members of this genus.					
<i>Mycetophila confusa</i>	Strumpshaw	P. J. C.	1988	(51)	RDB 2 (RDB 3)
Found in fens and wet woodland in East Anglia.					
<i>Mycetophila fungorum</i>	Strumpshaw	P. J. C.	1988-90	(51)	Common
<i>Mycetophila marginata</i>	Wheatfen	P. Withers	1986	(63)	
<i>Mycetophila ocellus</i>	Strumpshaw	P. J. C.	1988-90	(51)	Unknown
<i>Mycetophila pumila</i>	Strumpshaw	P. J. C.	1988-90	(51)	Unknown
<i>Mycetophila sordida</i>	Strumpshaw	P. J. C.	1988	(51)	Local
<i>Mycetophila unicolor</i>	Strumpshaw	P. J. C.	1988-90	(51)	Unknown

<i>Zygomya notata</i>					Common
	Strumpshaw	A. P. F. +D. A. P.	1988-90	(51)	
<i>Zygomya valida</i>					Common
	Strumpshaw	P. J. C.	1988-90	(51)	
<i>Sceptonia costata</i>					N
	Strumpshaw	P. J. C.	1989	(51)	
<i>Epicypta limnophila</i>					N
	Strumpshaw	P. J. C.	1988	(51)	
		P. J. C.	1989	(51)	
Biology uncertain, but larvae are likely to feed on fungal growth on water-side plants. A southern gnat.					
<i>Platurocypta testata</i>					Unknown
	Strumpshaw	P. J. C.	1988-90	(51)	
<i>Clastobasis alternans</i>					Unknown
	Wheatfen	P. J. C.	1993		
This species of a genus new to Britain was collected by I. Perry on 10. July.					

Family SCIARIDAE (Fungus-gnats).

<i>Sciara nursei</i>					
	Wheatfen	P. Withers	1986	(63)	
<i>Sciara thomae</i>					Unknown
	Wheatfen	M. J. D. C.	1936	(1)	
		I. P.	1993	(47)	
<i>Trichosia pilosa</i>					
	Wheatfen	P. Withers	1990	(63)	
<i>Schwenckfeldina carbonaria</i>					Common
	Strumpshaw	A. P. F. +D. A. P.	1988-90	(51)	
	Wheatfen	P. Withers	1987	(63)	
<i>Corynoptera forcipata</i>					
	Wheatfen	P. Withers	1990	(63)	
<i>Lycoriella conspicua</i>					Unknown
	Strumpshaw	A. P. F. +D. A. P.	1988-90	(51)	
	Wheatfen	P. Withers	1990	(63)	
<i>Lycoriella auripila</i>					Unknown
	Strumpshaw	A. P. F. +D. A. P.	1988-90	(51)	

<i>Phytosciara flavipes</i>					Common
	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	
<i>Bradysia aprica</i>					
	Wheatfen	P. Withers	1988	(63)	
		P. Withers	1989	(63)	
<i>Bradysia fimbricauda</i>					
	Wheatfen	P. Withers	1988	(63)	
<i>Bradysia subtilis</i>					Unknown
	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	
<i>Scatopsiara pusilla</i>					Unknown
	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	
	Wheatfen	P. Withers	1990	(63)	

Family SCATOPSIDAE

<i>Scatopse notata</i>					
	Wheatfen	P. Withers	1988	(63)	
		P. Withers	1990	(63)	
<i>Apiloscatopse picea</i>					
	Wheatfen	P. Withers	1988	(63)	
<i>Apiloscatopse scutellata</i>					
	Wheatfen	P. Withers	1988	(63)	
<i>Anapausis soluta</i>					
	Wheatfen	P. Withers	1990	(63)	

Family CECIDOMYIDAE (Gall midges).

<i>Brachineura peniophorae</i>					
	Wheatfen	R. E.	1988	(55)	
A new species whose larva produces a gall on various resupinate fungi (recorded at Wheatfen on <i>Peniophora cinerea</i>).					
<i>Cystiphora sonchi</i>					
	Wheatfen	L. E.	1993	(55)	
Galls on the leaves of corn sow-thistle (<i>Sonchus sp.</i>).					

<i>Dasineura acrophila</i>	Wheatfen	E. A. E.	1956	(3)
Galls on ash (<i>Fraxinus excelsior</i>).				
<i>Dasineura ulmaria</i>	Wheatfen	M. J. D. C.	1938	(1)
		L. E.	1993	(55)
Galls on meadowsweet (<i>Filipendula ulmaria</i>).				
<i>Dasineura urticae</i>	Wheatfen	M. J. D. C.	1938	(1)
		L. E.	1991	(55)
Galls on nettle (<i>Urtica</i> spp.).				
<i>Giraudiella inclusa</i>	Wheatfen	E. A. E.	pre. 1946	(1)
Galls on <i>Phragmites australis</i> , often within the galls of <i>Lipara lucens</i> (Diptera).				
<i>Helicomyia saliciperda</i>	Wheatfen	M. J. D. C.	pre. 1946	(1)
Galls on willow (<i>Salix</i> spp.) twigs.				
<i>Iteomyia capreae</i>	Wheatfen	M. J. D. C.	pre. 1946	(1)
Galls on willow (<i>Salix</i> spp.) leaves.				
<i>Rondaniola bursaria</i>	Wheatfen	M. J. D. C.	1935	(1)
Galls on ground ivy (<i>Glechoma hederacea</i>).				
<i>Wachtliella persicariae</i>	Wheatfen	M. J. D. C.	pre. 1946	(1)
Galls on redshank (<i>Polygonum persicaria</i>).				
<i>Ametrodiplosis thalictricola</i>	Rockland	E. A. E.	1935	(3)
	Wheatfen	M. J. D. C.	pre. 1946	(1)
Galls on meadow rue (<i>Thalictrum</i> spp.).				
<i>Contarinia coryli</i> (=corylina)	Wheatfen	A. E. M.	1935	(44)
		L. E.	1993	(55)
Galls on hazel (<i>Corylus avellana</i>).				
<i>Contarinia steini</i>	Wheatfen	L. E.	1991	(55)

Family STRATIOMYIDAE (Soldier-flies).

<i>Beris chalybeata</i>	Wheatfen	P. Withers	1986	(63)	
<i>Beris clavipes</i>	Wheatfen	M. J. D. C.	1936	(1)	N
	Found in marshes and fens. Larvae develop in wet moss and decaying vegetable matter.				
<i>Beris geniculata</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Common
	Wheatfen	H. E. J. B.	1951	(8)	
		P. Withers	1987	(63)	
<i>Beris vallata</i>	Strumpshaw	A. G. I.	1980	(57)	Common
		C. M. D. et al.	1993	(61)	
	Wheatfen	K. C. D.	1969	(57)	
		I. P.	1993	(47)	
<i>Nemotelus nigrinus</i>	Strumpshaw	A. P. F.	1988	(51)	Local
		C. M. D. et al.	1993	(61)	
	S. Church Marsh	S. G. B. et al.	1993	(61)	
	Wheatfen	E. A. E.	1939	(1)	
	Larvae live in detritus in marshy areas.				
<i>Nemotelus notatus</i>	Buckenham	A. E. S. + M. N. P.	1993	(61)	Local
	Strumpshaw	C. M. D. et al.	1993	(61)	
	Wheatfen	E. A. E.	1939	(1)	
	A soldier fly of coastal salt marshes, where the larvae live in brackish pools.				
<i>Nemotelus pantherinus</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Local
	S. Church Marsh	S. G. B. et al.	1993	(61)	
	Wheatfen	M. J. D. C.	1939	(1)	
		H. E. J. B.	1951	(8)	
<i>Nemotelus uliginosus</i>	Strumpshaw	J. B.	1993	(50)	Local
	Wheatfen	M. J. D. C.	1937	(1)	
<i>Oxycera formosa</i>	Wheatfen	P. Withers	1986	(63)	
		P. Withers	1987	(63)	

<i>Oxycera nigricornis</i>					Local
	Strumpshaw	C.M.D. et al.	1993	(61)	
	Wheatfen	I.P.	1993	(47)	
<i>Oxycera pulchella</i>					
	Wheatfen	M.J.D.C.	1936	(1)	
		M.J.D.C.	1937	(1)	
<i>Oxycera rara</i>					Local
	Strumpshaw	A.P.F.	1989	(51)	
	Wheatfen	P.Withers	1989	(63)	
		I.P.	1993	(47)	
<i>Oxycera trilineata</i>					Local
	Wheatfen	E.A.E.	1936	(57)	
		P.Withers	1986	(63)	
	Larvae found in moss in flowing water in marshes.				
<i>Vanoyia tenuicornis</i>					N
	Strumpshaw	A.G.I.	1980	(57)	
	Internationally scarce; in fens and coastal areas of western Europe. Larvae found in damp soil.				
<i>Pachygaster atra</i>					Common
	Buckenham	A.E.S.+M.N.P.	1993	(61)	
	Strumpshaw	C.M.D. et al.	1993	(61)	
<i>Pachygaster (=Praomyia) leachii</i>					Local
	Strumpshaw	C.M.D. et al.	1993	(61)	
	Wheatfen	P.Withers	1989	(63)	
		I.P.	1993	(47)	
<i>Chloromyia formosa</i>					Common
	Buckenham	J.B.	1993	(50)	
	Cantley	J.B.	1993	(50)	
	Strumpshaw	C.M.D. et al.	1993	(61)	
	S.Church Marsh	S.G.B. et al.	1993	(61)	
	Wheatfen	E.A.E.	1936	(57)	
		I.P.	1993	(47)	
<i>Microchrysa flavicornis</i>					
	Surlingham	E.N.B.	1903	(16)	
		C.M.	1915	(17)	
<i>Microchrysa polita</i>					
	Surlingham	C.M.	1915	(17)	
	Wheatfen	M.J.D.C.	1939	(1)	
		A.G.I.	1989	(57)	

<i>Sargus bipunctatus</i>	Wheatfen	E. A. E.	1936	(57)	
<i>Sargus iridatus</i>	Buckenham	A. E. S. + M. N. P.	1993	(61)	Common
<i>Odontomyia argentata</i>	Wheatfen	R. L. C.	1939	(1)	RDB 2
<p>Found in fen and carr, associated with well vegetated dykes. Only known from six post 1960 sites, none of which are in Norfolk. May well be rediscovered as it has an early flight period and can therefore be overlooked. High, stable water levels; rotational dyke management; and shallowed dyke margins would benefit this fly.</p>					
<i>Odontomyia tigrina</i>	Strumpshaw	C. M. D. et al.	1993	(61)	N
<p>A wetland species found to prefer narrow dykes with emergent vegetation. Not found in wide, recently dredged or choked dykes.</p>					
<i>Odontomyia (=Oplodontha) viridula</i>	Buckenham	A. E. S. + M. N. P.	1993	(61)	Local
	Cantley	J. B.	1993	(50)	
	Wheatfen	M. J. D. C.	1936	(1)	
		I. P.	1993	(47)	
<p>Found on marshes or near ponds. Larvae aquatic.</p>					
<i>Stratiomys furcata (=singularior)</i>	Buckenham	J. B.	1993	(50)	N
	Strumpshaw	A. P. F.	1988	(51)	
	Wheatfen	M. J. D. C.	1936	(1)	
<p>Larvae develop in pools, wet mud and on vegetation. Usually found in coastal marshes or more rarely in inland areas with a brackish influence. Management for this species should include maintenance of a saline influence, and rotational dyke management.</p>					
<i>Stratiomys potamida</i>	Wheatfen	M. J. D. C.	1936	(1)	N
		E. A. E.	1976	(57)	
<p>A wetland species. The larvae develop in wet mud, taking three or four years to reach maturity. Rotational dyke management; standing water; and shallowed dyke margins would benefit this fly.</p>					

Family RHAGIONIDAE (Snipe-flies).

<i>Chrysopilus asiliformis</i>				Common
Strumpshaw	C.M.D. et al.	1993	(61)	
Surl. Broad	D.A.S.+S.G.B.	1993	(61)	
S.Church Marsh	S.G.B. et al.	1993	(61)	
<i>Chrysopilus aureus</i>				
Surlingham	E.N.B.	1903	(16)	
Wheatfen	M.J.D.C.	1936	(1)	
	M.J.D.C.	1943	(1)	
<i>Chrysopilus cristatus</i>				Common
Buckenham	A.E.S.+M.N.P.	1993	(61)	
Strumpshaw	A.P.F.+D.A.P.	1988-90	(51)	
	C.M.D. et al.	1993	(61)	
S.Church Marsh	S.G.B. et al.	1993	(61)	
Wheatfen	E.A.E.	1936	(57)	
	I.P.	1993	(47)	
<i>Rhagio lineola</i>				Common
Buckenham	A.E.S.+M.N.P.	1993	(61)	
Strumpshaw	C.M.D. et al.	1993	(61)	
Wheatfen	E.A.E.	1928	(57)	
	I.P.	1993	(47)	
<i>Rhagio scolopacea</i> (Snipe-fly).				Common
Buckenham	A.E.S.+M.N.P.	1993	(61)	
Strumpshaw	C.M.D. et al.	1993	(61)	
S.Church Marsh	S.G.B. et al.	1993	(61)	
Wheatfen	E.A.E.	1936	(57)	
	M.J.D.C.	1945	(1)	
<i>Rhagio tringarius</i>				Common
Strumpshaw	C.M.D. et al.	1993	(61)	
S.Church Marsh	S.G.B. et al.	1993	(61)	
Wheatfen	M.J.D.C.	1941	(1)	
	I.P.	1993	(47)	

Family TABANIDAE (Horse-flies).

<i>Chrysops caecutiens</i>			
Wheatfen	E.A.E.	1944	(1)
	E.A.E.	1946	(1)
<i>Chrysops relictus</i>			
Wheatfen	E.A.E.	1957	(3)

<i>Chrysops viduatus</i>					Local
	Buckenham	A. E. S. +M. N. P.	1993	(61)	
	Wheatfen	E. A. E.	1937	(57)	
<i>Haematopota crassicornis</i>					
	Wheatfen	E. A. E.	1941	(57)	
<i>Haematopota pluvialis</i> (Cleg-fly/Gad-fly)					Common
	Buckenham	A. E. S. +M. N. P.	1993	(61)	
	Surlingham	C. M.	1915	(17)	
	S. Church Marsh	S. G. B. et al.	1993	(61)	
	Wheatfen	M. J. D. C.	1937	(1)	
		K. C. D.	1969	(57)	
<i>Hybomitra bimaculata</i>					
	Wheatfen	E. A. E.	1940	(1)	
		E. A. E.	1943	(57)	
<i>Hybomitra distinguenda</i>					Common
	Buckenham	A. E. S. +M. N. P.	1993	(61)	
	Strumpshaw	C. M. D. et al.	1993	(61)	
	Wheatfen	E. A. E.	1936	(57)	
		E. A. E.	1940	(1)	
<i>Hybomitra muhlfeldi</i>					RDB 3
	Buckenham	A. E. S. +M. N. P.	1993	(61)	
	S. Church Marsh	E. A. E.	1943	(57)	
	Wheatfen	M. J. D. C.	1936	(1)	
		H. E. J. B.	1950	(57)	
Larvae are predators of other invertebrates in mud and adult females suck the blood of mammals including man. There are only six post 1960 sites, all being bogs or fens. Its strongholds are the Broads and the South Wales coast. It may be sensitive to eutrophication. Stable water levels, increased water quality and rotational dyke management may encourage this species to flourish in areas isolated from the river.					
<i>Hybomitra solstitialis</i>					
	Wheatfen	M. J. D. C.	1939	(1)	
<i>Tabanus autumnalis</i>					
	Rockland	E. A. E.	1955	(57)	
	Wheatfen	H. E. J. B.	1950	(1)	

Family ASILIDAE (Robber-flies).

<i>Neotamus cyanurus</i>					Local
	Wheatfen	I. P.	1993	(47)	
<i>Leptogaster cylindrica</i>					Common
	Buckenham	A. E. S. + M. N. P.	1993	(61)	
<i>Dioctria atricapilla</i>					
	Wheatfen	P. Withers	1986	(63)	
<i>Dioctria baumhaveri</i>					
	Wheatfen	M. J. D. C.	1936	(1)	
		A. G. I.	1982	(57)	
<i>Dioctria rufipes</i>					
	Rockland	C. M.	1915	(17)	
	Wheatfen	E. A. E.	1939	(1)	

Family THEREVIDAE

<i>Thereva nobilitata</i>					Common
	Strumpshaw	C. M. D. et al.	1993	(61)	

Family BOMBYLIIDAE (Bee-flies).

<i>Bombylius major</i>					
	Wheatfen	E. A. E.	1937	(1)	
		E. A. E.	1945	(1)	

Family EMPIDIDAE (Dance-flies).

<i>Drapetis simulans</i>					N
	Wheatfen	I. P.	1993	(47)	
<i>Drapetis ephippiata</i>					Local
	Wheatfen	I. P.	1993	(47)	
<i>Tachydromia (=Tachypeza) aemula</i>					Common
	Wheatfen	I. P.	1993	(47)	
<i>Platypalpus candicans</i> var. <i>minor</i>					
	Wheatfen	H. E. J. B.	1951	(8)	
<i>Platypalpus longisetus</i>					Common
	Strumpshaw	C. M. D. et al.	1993	(61)	

<i>Platypalpus niger</i>	Wheatfen	I.P.	1993	(47)	N
<i>Platypalpus pallidicornis</i>	Strumpshaw	C.M.D. et al.	1993	(61)	Local
	Wheatfen	I.P.	1993	(47)	
<i>Symballopthalmus dissimilis</i>	Wheatfen	I.P.	1993	(47)	N
<i>Hybos femoratus</i>	Strumpshaw	C.M.D. et al.	1993	(61)	Common
	Wheatfen	P. Withers	1987	(63)	
<i>Bicellaria vana</i>	Strumpshaw	C.M.D. et al.	1993	(61)	Common
<i>Leptopeza flavipes</i>	Wheatfen	P. Withers	1988	(63)	Local
		I.P.	1993	(47)	
<i>Trichomyia flavipes</i>	Wheatfen	P. Withers	1988	(63)	
<i>Trichina clavipes</i>	Strumpshaw	C.M.D. et al.	1993	(61)	Common
<i>Trichina pallipes</i>	Wheatfen	I.P.	1993	(47)	N
<i>Oedalea tibialis</i>	Wheatfen	I.P.	1993	(47)	N
<i>Microphorus anomalus</i>	Strumpshaw	A.G.I.	1980	(62)	N
	Wheatfen	P. Withers	1986	(63)	
		I.P.	1993	(47)	
Also recorded at Wheatfen by P. Withers in 1987. A wetland fly.					
<i>Rhamphomyia (=Megacyttarus) crassirostris</i>	Wheatfen	P. Withers	1990	(63)	
<i>Rhamphomyia (=Holoclera) caliginosa</i>	Wheatfen	I.P.	1993	(47)	N
<i>Rhamphomyia (=Holoclera) flava</i>	Strumpshaw	C.M.D. et al.	1993	(61)	Common
	Wheatfen	P. Withers	1986	(63)	
		I.P.	1993	(47)	

<i>Rhamphomyia (=Holoclera) nigripennis</i>					Common
	Strumpshaw	C.M.D. et al.	1993	(61)	
	Wheatfen	H.E.J.B.	1951	(8)	
		I.P.	1993	(47)	
<i>Rhamphomyia (=Holoclera) sciarina</i>					Unknown
	Wheatfen	I.P.	1993	(47)	
<i>Empis trigramma</i>					
	Wheatfen	R.L.C.	1939	(1)	
<i>Empis livida</i>					Common
	Wheatfen	M.J.D.C.	1936	(1)	
		I.P.	1993	(47)	
<i>Empis tessellata</i>					
	Wheatfen	E.A.E.	1939	(1)	
<i>Empis aestiva</i>					Common
	Wheatfen	I.P.	1993	(47)	
<i>Empis nuntia</i>					
	Wheatfen	P.Withers	1990	(63)	
<i>Empis albivernis</i>					Local
	Wheatfen	I.P.	1993	(47)	
<i>Hilara clypeata</i>					N
	Wheatfen	P.Withers	1986	(63)	
<i>Hilara fuscipes</i>					Unknown
	Wheatfen	H.E.J.B.	1951	(8)	
		I.P.	1993	(47)	
<i>Hilara interstincta</i>					
	Wheatfen	P.Withers	1990	(63)	
<i>Hilara lurida</i>					Local
	Wheatfen	I.P.	1993	(47)	
<i>Hilara maura</i>					
	Wheatfen	M.J.D.C.	1939	(1)	
		P.Withers	1986	(63)	
<i>Hilara monedula</i>					Common
	Wheatfen	M.J.D.C.	1936	(1)	
		I.P.	1993	(47)	

<i>Hilara nigrina</i>	Wheatfen	H. E. J. B.	1951	(8)	
<i>Hilara nitidula</i>	Wheatfen	P. Withers	1990	(63)	
	Swarms over water.				
<i>Hilara rejecta</i>	Wheatfen	P. Withers	1989	(63)	Local
		I. P.	1993	(47)	
<i>Hilara thoracica</i>	Wheatfen	I. P.	1993	(47)	Local
<i>Dolichocephala guttata</i>	Wheatfen	P. Withers	1986	(63)	

Family DOLICHOPODIDAE (Long-legged-flies).

<i>Sciapus platypterus</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Common
<i>Dolichopus atratus</i>	Strumpshaw	B. R. L.	1988	(51)	Local
	A wetland fly.				
<i>Dolichopus brevipennis</i>	S. Church Marsh	S. G. B. et al.	1993	(61)	Local
<i>Dolichopus latelimbatus</i>	Strumpshaw	B. R. L.	1988	(51)	Local
	S. Church Marsh	S. G. B. et al.	1993	(61)	
	Wheatfen	I. P.	1993	(47)	
<i>Dolichopus longicornis</i>	Wheatfen	P. Withers	1986	(63)	
<i>Dolichopus longitarsis</i>	Strumpshaw	A. G. I.	1980	(62)	Local
	A wetland fly.				
<i>Dolichopus nubilis</i>	Strumpshaw	B. R. L.	1988-90	(51)	Common
<i>Dolichopus pennatus</i>	Strumpshaw	B. R. L.	1988-90	(51)	Common
	Wheatfen	P. Withers	1986	(63)	

<i>Dolichopus picipes</i>					Local
	Strumpshaw	C.M.D. et al.	1993	(61)	
<i>Dolichopus popularis</i>					Common/Unknown
	Strumpshaw	B.R.L.	1988-90	(51)	
		C.M.D. et al.	1993	(61)	
	Wheatfen	P. Withers	1986	(63)	
<i>Dolichopus simplex</i>					Common
	Strumpshaw	B.R.L.	1988-90	(51)	
<i>Dolichopus subpennatus</i>					
	Wheatfen	P. Withers	1989	(63)	
<i>Dolichopus ungulatus</i>					Common
	Strumpshaw	B.R.L.	1988-90	(51)	
		C.M.D. et al.	1993	(61)	
	S.Church Marsh	S.G.B. et al.	1993	(61)	
	Wheatfen	M.J.D.C.	1936	(1)	
		I.P.	1993	(47)	
<i>Dolichopus urbanus</i>					Common
	Strumpshaw	B.R.L.	1988-90	(51)	
	Wheatfen	I.P.	1993	(47)	
<i>Hercostomus aereus</i>					Common
	Strumpshaw	B.R.L.	1988-90	(51)	
	Wheatfen	P. Withers	1986	(63)	
		P. Withers	1987	(63)	
<i>Hercostomus assimilis</i>					Local
	Strumpshaw	B.R.L.	1988	(51)	
	Wheatfen	P. Withers	1986	(63)	
		P. Withers	1989	(63)	
Split into two species in 1990.					
<i>Hercostomus blankaartensis</i>					Unknown
	Strumpshaw	B.R.L.	1988-90	(51)	
	Wheatfen	I.P.	1993	(47)	
<i>Hercostomus celer</i>					Local
	Wheatfen	I.P.	1993	(47)	
<i>Hercostomus chalybeus</i>					N
	Strumpshaw	B.R.L.	1988	(51)	
	S.Church Marsh	S.G.B. et al.	1993	(61)	
	Wheatfen	P. Withers	1986	(63)	
		I.P.	1993	(47)	
Very local, with a southern distribution.					

<i>Hercostomus chrysozygus</i>					Local
	Strumpshaw	B.R.L.	1988	(51)	
		C.M.D. et al.	1993	(61)	
	Wheatfen	I.P.	1993	(47)	
Not found further north than Norfolk.					
<i>Hercostomus metallicus</i>					Common
	Strumpshaw	B.R.L.	1988-90	(51)	
	S.Church Marsh	S.G.B. et al.	1993	(61)	
	Wheatfen	I.P.	1993	(47)	
<i>Hypophyllus obscurellus</i>					Common
	Wheatfen	P. Withers	1986	(63)	
		I.P.	1993	(47)	
<i>Poecilobothrus nobilitatus</i>					Common
	Buckenham	J.B.	1993	(50)	
	Strumpshaw	C.M.D. et al.	1993	(61)	
	S.Church Marsh	S.G.B. et al.	1993	(61)	
	Wheatfen	I.P.	1993	(47)	
<i>Poecilobothrus principalis</i>					N
	Wheatfen	P. Withers	1987	(63)	
<i>Hydrophorus balticus</i>					Local
	Strumpshaw	C.M.D. et al.	1993	(61)	
	Wheatfen	P. Withers	1989	(63)	
		I.P.	1993	(47)	
<i>Medetera pallipes</i>					Local
	Wheatfen	I.P.	1993	(47)	
<i>Rhaphium albomaculatum</i>					
	Wheatfen	P. Withers	1986	(63)	
<i>Rhaphium appendiculatum</i>					
	Wheatfen	P. Withers	1986	(63)	
<i>Rhaphium caliginosum</i>					
	Wheatfen	P. Withers	1986	(63)	
<i>Rhaphium fasciatum</i>					Local
	Strumpshaw	B.R.L.	1988	(51)	
	Wheatfen	P. Withers	1990	(63)	
<i>Rhaphium monotrichum</i>					
	Wheatfen	P. Withers	1987	(63)	
		P. Withers	1990	(63)	

<i>Rhaphium nasutum</i>	Strumpshaw	?	1970	(62)	N
<i>Syntormon denticulatus</i>	S.Church Marsh	S.G.B. et al.	1993	(61)	Local
<i>Syntormon tarsatus</i>	Wheatfen	P.Withers	1986	(63)	
<i>Achalcus flavicollis</i>	Strumpshaw	B.R.L.	1988	(51)	Local
Found in marshy places.					
<i>Achalcus melanotrichus</i>	Strumpshaw	B.R.L.	1988	(51)	N
Has been raised from elm (<i>Ulmus spp.</i>) and horse chestnut (<i>Aesculus hippocastanum</i>) detritus.					
<i>Bathycranium bicolorellum</i>	Wheatfen	P.Withers	1986	(63)	
<i>Diaphorus oculus</i>	Strumpshaw	C.M.D. et al.	1993	(61)	Local
<i>Chrysotus gramineus</i>	Strumpshaw	C.M.D. et al.	1993	(61)	Common
	Wheatfen	M.J.D.C.	1937	(1)	
		I.P.	1993	(47)	
<i>Argyra argentella</i>	Wheatfen	P.Withers	1986	(63)	
<i>Argyra argentina</i>	Wheatfen	P.Withers	1986	(63)	Common
		I.P.	1993	(47)	
<i>Argyra leucocephala</i>	Wheatfen	P.Withers	1986	(63)	
<i>Argyra vestita</i>	Strumpshaw	C.M.D. et al.	1993	(61)	Local
	Wheatfen	I.P.	1993	(47)	
<i>Campsicnemus armatus</i>	Strumpshaw	B.R.L.	1988	(51)	Local
Found on areas of mud at the edges of ponds and ditches, and in cattle poached areas in fields.					
<i>Campsicnemus curvipes</i>	Strumpshaw	B.R.L.	1988-90	(51)	Common

<i>Campsicnemus picticornis</i>					Local
Strumpshaw	?		1970	(62)	
	B.R.L.		1988	(51)	
Wheatfen	I.P.		1993	(47)	
<i>Campsicnemus scambus</i>					Common
Strumpshaw	B.R.L.		1988-90	(51)	
S.Church Marsh	S.G.B. et al.		1993	(61)	
<i>Sympycnus desoutteri</i>					Common
Wheatfen	I.P.		1993	(47)	
<i>Teuchophorus simplex</i>					Local
Wheatfen	P.Withers		1989	(63)	
	I.P.		1993	(47)	
<i>Teuchophorus spinigerellus</i>					Local
Wheatfen	I.P.		1993	(47)	
	P.Withers		1989	(63)	
<i>Chrysotimus molliculus</i>					Local
Strumpshaw	C.M.D. et al.		1993	(61)	
Wheatfen	I.P.		1993	(47)	
<i>Lamprochromus elegans</i>					N
Wheatfen	P.Withers		1986	(63)	
	I.P.		1993	(47)	

Family LONCHOPTERIDAE (Pointed-wing flies).

<i>Lonchoptera furcata</i>					Common
S.Church Marsh	S.G.B. et al.		1993	(61)	
<i>Lonchoptera lutea</i>					Common
Wheatfen	P.Withers		1989	(63)	
<i>Lonchoptera scutellata</i>					RDB 3
Strumpshaw	A.P.F.+D.A.P.		1988-90	(51)	(N)
Surlingham	J.W.I.		1974	(63)	

Found at water margins, associated with *Carex riparia* and *Carex acutifolius*. Larvae probably feed on decaying matter.

Family PLATYPEZIDAE (Flat-footed flies).

Larvae are fungus feeders.

<i>Opetia nigra</i>	Wheatfen	P. Withers	1990	(63)	Common
		I. P.	1993	(47)	
<i>Protoclythia modesta</i>	Wheatfen	P. Withers	1988	(63)	
<i>Paraplatypeza atra</i>	Wheatfen	I. P.	1993	(47)	Local

Family PIPUNCULIDAE (Big-headed flies).

Larvae are internal parasites of other insects, especially Homoptera.

<i>Chalarus fimbriatus</i>	Wheatfen	P. Withers	1987	(63)	
<i>Verrallia aucta</i>	Wheatfen	I. P.	1993	(47)	Common
<i>Tomosvaryella littoralis</i>	Wheatfen	P. Withers	1990	(63)	
<i>Pipunculus varipes</i>	Wheatfen	P. Withers	1986	(63)	
<i>Cephalops perspicuus</i>	Strumpshaw	A. E. S.	1988	(51)	RDB 2
		A. E. S.	1989	(51)	
A fenland species also known from here, the Bure Marshes and Catfield Fen. The larvae are parasitic on plant hoppers (Homoptera; Delphacidae). The proposed Yare barrage may cause a loss of suitable habitat.					
<i>Cephalops semifumosus</i>	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	Common
<i>Eudorylas inferus</i>	Wheatfen	I. P.	1993	(47)	N
<i>Eudorylas zonellus</i>	Wheatfen	I. P.	1993	(47)	Unknown

Family SYRPHIDAE (Hover-flies).

<i>Syrphus ribesii</i>					Common
	Strumpshaw	C.M.D. et al.	1993	(61)	
	Buckenham	A.E.S.+M.N.P.	1993	(61)	
	Wheatfen	M.J.D.C.	1936	(1)	
		E.A.E.	1949	(3)	
<i>Syrphus vitripennis</i>					Common
	Strumpshaw	A.P.F.	1988-90	(51)	
	Wheatfen	M.J.D.C.	1938	(1)	
<i>Epistrophe eligans</i>					
	Wheatfen	M.J.D.C.	1937	(1)	
		M.J.D.C.	1939	(1)	
<i>Epistrophe grossulariae</i>					Local
	Buckenham	A.E.S.+M.N.P.	1993	(61)	
<i>Metasyrphus corollae</i>					Common
	Strumpshaw	A.P.F.	1988-90	(51)	
	Wheatfen	M.J.D.C.	1936	(1)	
		E.A.E.	1939	(1)	
<i>Metasyrphus latifasciatus</i>					Local
	Strumpshaw	C.M.D. et al.	1993	(61)	
	Wheatfen	M.J.D.C.	1936	(1)	
		M.J.D.C.	1938	(1)	
<i>Scaeva pyrastris</i>					
	Wheatfen	M.J.D.C.	1938	(1)	
<i>Leucozona laternarius (=Syrphus laternaria)</i>					Common
	Buckenham	A.E.S.+M.N.P.	1993	(61)	
	Wheatfen	M.J.D.C.	1938	(1)	
		P.Withers	1987	(63)	
<i>Leucozona lucorum</i>					
	Wheatfen	M.J.D.C.	1938	(1)	
		E.A.E.	1962	(3)	
<i>Melangyna umbellatarum</i>					
	Wheatfen	E.A.E.	1939	(1)	
<i>Melangyna (=Meligramma) guttata</i>					RDB 3
	Wheatfen	P.Withers	1986	(63)	(N)
	Larvae feed on aphids in the woodland canopy.				
	Adults frequent Umbellifer flowers.				

<i>Xanthogramma pedissequum</i>	Wheatfen	M. J. D. C.	1936	(1)	
<i>Meliscaeva auricollis</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Common
	Wheatfen	I. P.	1993	(47)	
<i>Episyrphus balteatus</i>	Buckenham	J. B.	1993	(50)	Common
	Strumpshaw	C. M. D. et al.	1993	(61)	
	Surl. Broad	D. A. S. + S. G. B.	1993	(61)	
	S. Church Marsh	S. G. B. et al.	1993	(61)	
	Wheatfen	M. J. D. C.	1936	(1)	
		I. P.	1993	(47)	
<i>Sphaerophoria scripta</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Common
	Wheatfen	E. A. E.	1956	(3)	
<i>Chrysotoxum bicinctum</i>	Wheatfen	M. J. D. C.	1936	(1)	
<i>Baccha elongata</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Common
<i>Xanthandrus comtus</i>	Strumpshaw	C. M. D. et al.	1993	(61)	RDB 2 (N)
	Larvae feed on micro-moth caterpillars. Appears to favour habitats containing shrubs and open areas.				
<i>Melanostoma mellinum</i>	Buckenham	A. E. S. + M. N. P.	1993	(61)	Common
	Strumpshaw	A. P. F.	1988-90	(51)	
		C. M. D. et al.	1993	(61)	
<i>Melanostoma scalare</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Common
	Wheatfen	M. J. D. C.	1936	(1)	
		I. P.	1993	(47)	
<i>Platycheirus albimanus</i>	Wheatfen	I. P.	1993	(47)	
<i>Platycheirus angustatus</i>	Buckenham	A. E. S. + M. N. P.	1993	(61)	Common
	S. Church Marsh	S. G. B. et al.	1993	(61)	
	Wheatfen	M. J. D. C.	1936	(1)	
		E. A. E.	1939	(1)	

<i>Platycheirus clypeatus sens. str.</i>					Common
	Strumpshaw	C.M.D. et al.	1993	(61)	
	S.Church Marsh	S.G.B. et al.	1993	(61)	
<i>Platycheirus cyaneus</i>					Common
	Strumpshaw	A.P.F.	1988-90	(51)	
		C.M.D. et al.	1993	(61)	
	S.Church Marsh	S.G.B. et al.	1993	(61)	
<i>Platycheirus fulviventris</i>					Local
	S.Church Marsh	S.G.B. et al.	1993	(61)	
<i>Platycheirus occultus</i>					Local
	Strumpshaw	C.M.D. et al.	1993	(61)	
<i>Platycheirus peltatus</i>					Common
	Strumpshaw	A.P.F.	1988-90	(51)	
<i>Platycheirus scambus</i>					Local
	Buckenham	A.E.S.+M.N.P.	1993	(61)	
<i>Platycheirus scutatus</i>					Common
	Buckenham	A.E.S.+M.N.P.	1993	(61)	
	Strumpshaw	C.M.D. et al.	1993	(61)	
<i>Pyrophaena granditarsa</i>					Common
	Strumpshaw	A.P.F.	1988-90	(51)	
	Rockland	C.M.	1915	(17)	
	Wheatfen	E.A.E.	1939	(1)	
		P.Withers	1986	(63)	
<i>Pyrophaena rosarum</i>					Local
	Strumpshaw	C.M.D. et al.	1993	(61)	
	Wheatfen	P.Withers	1986	(63)	
<i>Cheilosia illustrata</i>					Common
	Buckenham	A.E.S.+M.N.P.	1993	(61)	
<i>Cheilosia impressa</i>					Local
	Wheatfen	I.P.	1993	(47)	
<i>Cheilosia paganus</i>					Common
	Buckenham	A.E.S.+M.N.P.	1993	(61)	
	Strumpshaw	C.M.D. et al.	1993	(61)	
	S.Church Marsh	S.G.B. et al.	1993	(61)	
	Wheatfen	P.Withers	1986	(63)	
		I.P.	1993	(47)	

<i>Cheilosia proxima</i>					Common
	Buckenham	A. E. S. +M. N. P.	1993	(61)	
	Wheatfen	M. J. D. C.	1939	(1)	
		I. P.	1993	(47)	
<i>Cheilosia variabilis</i>					
	Wheatfen	M. J. D. C.	1938	(1)	
		M. J. D. C.	1939	(1)	
<i>Cheilosia vernalis</i>					Common
	Strumpshaw	A. P. F.	1988-90	(51)	
<i>Rhingia campestris</i>					Common
	Strumpshaw	A. P. F.	1988-90	(51)	
	Wheatfen	M. J. D. C.	1936	(1)	
		E. A. E.	1962	(3)	
<i>Ferdinandea cuprea</i>					
	Wheatfen	M. J. D. C.	1937	(1)	
<i>Ferdinandea ruficornis</i>					RDB 2
	Wheatfen	I. P.	1993	(47)	(N)
	Larvae develop in sap runs in old trees, in particular those created by goat moth (<i>Cossus cossus</i>) caterpillars. Recently revised from RDB 2, but appears to be declining in many areas. Removal of old and diseased trees destroys this species habitat.				
<i>Chrysogaster chalybeata</i>					
	Wheatfen	M. J. D. C.	1938	(1)	
		P. Withers	1986	(63)	
<i>Chrysogaster hirtella</i>					
	Wheatfen	M. J. D. C.	1938	(1)	
	Larvae are aquatic and breathe by tapping into the air spaces in water plants such as <i>Glyceria spp.</i>				
<i>Chrysogaster solstitialis</i>					Common
	Buckenham	A. E. S. +M. N. P.	1993	(61)	
	Strumpshaw	C. M. D. et al.	1993	(61)	
	Wheatfen	P. Withers	1989	(63)	
		I. P.	1993	(47)	

<i>Lejogaster splendida</i>					N
	Strumpshaw	C.M.D. et al.	1993	(61)	
	Wheatfen	I.P.	1993	(47)	
	Occurs on brackish and tidal marshes. Larvae probably associated with very wet vegetation mats. Isolation and non-rotational dyke management threaten the existence of this species.				
<i>Orthonevra splendens</i>	Wheatfen	M.J.D.C.	1938	(1)	
<i>Brachyopa scutellaris</i>	Wheatfen	M.J.D.C.	1936	(1)	
<i>Sphegina clunipes</i>	Wheatfen	P.Withers	1986	(63)	
		P.Withers	1989	(63)	
<i>Sphegina kimakowiczi</i>	Wheatfen	P.Withers	1986	(63)	
<i>Neoascia geniculata</i>					N
	S.Church Marsh	S.G.B. et al.	1993	(61)	
	Larvae are detritus feeders among lush emergent vegetation such as <i>Glyceria</i> swamp.				
<i>Neoascia interrupta</i>	Strumpshaw	C.M.D. et al.	1993	(61)	Local
<i>Neoascia meticulosa (=aenea)</i>					Local
	S.Church Marsh	S.G.B. et al.	1993	(61)	
	Wheatfen	H.E.J.B.	1951	(8)	
		P.Withers	1986	(63)	
<i>Neoascia podagrica</i>					Common
	Strumpshaw	A.P.F.	1988-90	(51)	
		C.M.D. et al.	1993	(61)	
	Wheatfen	M.J.D.C.	1937	(1)	
		M.J.D.C.	1939	(1)	
<i>Neoascia tenur</i>					Local
	Strumpshaw	A.P.F.	1988	(51)	
		C.M.D. et al.	1993	(61)	
	S.Church Marsh	S.G.B. et al.	1993	(61)	
	Wheatfen	I.P.	1993	(47)	
	Larvae are probably semi-aquatic. Often common in areas of rich marsh vegetation.				

<i>Eumerus strigatus</i>					Common
	Strumpshaw	A.P.F.	1988-90	(51)	
<i>Volucella bombylans</i>					Common
	Strumpshaw	C.M.D. et al.	1993	(61)	
	Wheatfen	M.J.D.C.	1936	(1)	
		E.A.E.	1957	(3)	
<i>Volucella pellucens</i>					Common
	Buckenham	A.E.S.+M.N.P.	1993	(61)	
	Strumpshaw	C.M.D. et al.	1993	(61)	
	Wheatfen	M.J.D.C.	1937	(1)	
		I.P.	1993	(47)	
<i>Xylota abiens</i>					N
	Strumpshaw	A.P.F.	1988	(51)	
	Wheatfen	P.Withers	1989	(63)	
		I.P.	1993	(47)	
Larvae live in damp, decaying alder (<i>Alnus glutinosa</i>). A woodland and carr species.					
<i>Xylota segnis</i>					Common
	Strumpshaw	A.P.F.	1988-90	(51)	
		C.M.D. et al.	1993	(61)	
	Wheatfen	E.A.E.	1937	(3)	
		I.P.	1993	(47)	
<i>Xylota sylvarum</i>					Local
	Buckenham	A.E.S.+M.N.P.	1993	(61)	
	Strumpshaw	A.P.F.	1988	(51)	
		C.M.D. et al.	1993	(61)	
	Wheatfen	M.J.D.C.	1939	(1)	
		I.P.	1993	(47)	
Larvae live in dead wood. National distribution appears to be contracting.					
<i>Chalcosyrphus (=Xylotomima) nemorum</i>					Local
	Buckenham	A.E.S.+M.N.P.	1993	(61)	
	Strumpshaw	C.M.D. et al.	1993	(61)	
<i>Syritta pipiens</i>					Common
	Strumpshaw	A.P.F.	1988-90	(51)	
		C.M.D. et al.	1993	(61)	
	Wheatfen	M.J.D.C.	1936	(1)	
		I.P.	1993	(47)	

<i>Tropidia scita</i>				Local
Buckenham	A. E. S. + M. N. P.	1993	(61)	
Strumpshaw	A. P. F.	1988	(51)	
	C. M. D. et al.	1993	(61)	
Wheatfen	M. J. D. C.	1936	(1)	
	I. P.	1993	(47)	
Found on fens and marshes. Larvae feed on decaying plant matter.				
<i>Helophilus hybridus</i>				Local
Strumpshaw	A. P. F.	1988	(51)	
	C. M. D. et al.	1993	(61)	
Wheatfen	M. J. D. C.	1937	(1)	
	I. P.	1993	(47)	
Adults typically found at water margins, where submerged grass grows on blackish mud. Larvae are aquatic and probably feed on decaying <i>Typha</i> material.				
<i>Helophilus parallelus (=trivittatus)</i>				Local
Strumpshaw	C. M. D. et al.	1993	(61)	
<i>Helophilus pendulus</i>				Common
Buckenham	A. E. S. + M. N. P.	1993	(61)	
Strumpshaw	A. P. F.	1988-90	(51)	
	C. M. D. et al.	1993	(61)	
Surl. Broad	D. A. S. + S. G. B.	1993	(61)	
S. Church Marsh	S. G. B. et al.	1993	(61)	
Wheatfen	M. J. D. C.	1936	(1)	
	I. P.	1993	(47)	
<i>Anasimyia contracta</i>				Local
Strumpshaw	A. P. F.	1988	(51)	
Larvae are aquatic and strongly associated with <i>Typha</i> . They appear to live between submerged leaves.				
<i>Anasimyia interpuncta</i>				RDB 2 (RDB 3)
Strumpshaw	A. P. F.	1988	(51)	
	C. M. D. et al.	1993	(61)	
S. Church Marsh	S. G. B. et al.	1993	(61)	
Wheatfen	P. Withers	1990	(63)	
A south-eastern wetland hoverfly. The larvae are aquatic and appear to be associated with <i>Glyceria</i> spp. This hoverfly is normally found at nutrient rich sites which have winter flooding. It is however intolerant of industrial pollution. Also recorded at Strumpshaw by J. Bratton in 1989 (18).				

<i>Anasimyia lineata</i>					Local
	Strumpshaw	A.P.F.	1988	(51)	
		C.M.D. et al.	1993	(61)	
	Surlingham	E.N.B.	1903	(16)	
	S.Church Marsh	S.G.B. et al.	1993	(61)	
	Larvae aquatic and often associated with <i>Typha spp.</i>				
<i>Anasimyia lunulata</i>					N
	Wheatfen	P.Withers	1986	(63)	
	A northern species associated with boggy pools, often in heathland. Larvae develop in marginal vegetation.				
<i>Anasimyia transfuga</i>					Local
	Buckenham	J.B.	1993	(50)	
	Strumpshaw	A.P.F.	1988	(51)	
		C.M.D. et al.	1993	(61)	
	Surl. Broad	D.A.S.+S.G.B.	1993	(61)	
	S.Church Marsh	S.G.B. et al.	1993	(61)	
	Wheatfen	P.Withers	1986	(63)	
	Associated with emergent vegetation.				
<i>Lejops vittata</i>					RDB 2
	Wheatfen	M.J.D.C.	1938	(1)	
	Restricted to southern coastal marshes. Associated with sea club-rush (<i>Scripus maritimus</i>). Larvae are aquatic. This may have been a vagrant specimen or it is possible that the saline influence in the Mid-Yare is (or was) large enough to support this species.				
<i>Parhelophilus frutetorum</i>					Local
	Strumpshaw	C.M.D. et al.	1993	(61)	
	Wheatfen	M.J.D.C.	1937	(1)	
		M.J.D.C.	1938	(1)	
<i>Parhelophilus versicolor</i>					Local
	Buckenham	A.E.S.+M.N.P.	1993	(61)	
	Rockland	E.N.B.	1903	(16)	
	Strumpshaw	C.M.D. et al.	1993	(61)	
	Wheatfen	M.J.D.C.	1936	(1)	
		M.J.D.C.	1938	(1)	
<i>Eristalis abusivus</i>					Local
	Strumpshaw	A.P.F.	1988	(51)	
	Larvae live in mud at water margins, more frequently coastal.				

<i>Eristalis arbustorum</i>					Common
	Strumpshaw	A. P. F.	1988-90	(51)	
	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1939	(1)	
<i>Eristalis horticola</i>					Common
	Buckenham	A. E. S. + M. N. P.	1993	(61)	
	Wheatfen	M. J. D. C.	1936	(1)	
		I. P.	1993	(47)	
<i>Eristalis interrupta</i>					Common
	Buckenham	A. E. S. + M. N. P.	1993	(61)	
	Strumpshaw	C. M. D. et al.	1993	(61)	
<i>Eristalis intricarius</i>					Common
	Buckenham	A. E. S. + M. N. P.	1993	(61)	
	Strumpshaw	A. P. F.	1988-90	(51)	
		C. M. D. et al.	1993	(61)	
	Surl. Broad	D. A. S. + S. G. B.	1993	(61)	
	Wheatfen	M. J. D. C.	1936	(1)	
		I. P.	1993	(47)	
<i>Eristalis pertinax</i>					Common
	Buckenham	A. E. S. + M. N. P.	1993	(61)	
	Strumpshaw	C. M. D. et al.	1993	(61)	
	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1939	(1)	
<i>Eristalis tenax</i>					Common
	Strumpshaw	A. P. F.	1988-90	(51)	
		C. M. D. et al.	1993	(61)	
	Wheatfen	M. J. D. C.	1936	(1)	
		E. A. E.	1962	(3)	
<i>Eristalinus sepulchralis</i>					Local
	Strumpshaw	A. P. F.	1988	(51)	
		C. M. D. et al.	1993	(61)	
	S. Church Marsh	S. G. B. et al.	1993	(61)	
	Wheatfen	M. J. D. C.	1936	(1)	
	Larvae live in organically rich mud.				
<i>Myathropa florea</i>					Common
	Buckenham	A. E. S. + M. N. P.	1993	(61)	
	Strumpshaw	C. M. D. et al.	1993	(61)	
	Wheatfen	E. A. E.	1956	(3)	
		I. P.	1993	(47)	

Family CONOPIDAE

Small flies, larvae are parasitic on bees and wasps.

<i>Conops flavipes</i>	Wheatfen	M. J. D. C.	1939	(1)	Common
		I. P.	1993	(47)	
<i>Myopa testacea</i>	Wheatfen	E. A. E.	1944	(1)	
<i>Thecophora atra</i>	Wheatfen	R. L. C.	1937	(1)	
<i>Sicus ferrugineus</i>	Buckenham	A. E. S. + M. N. P.	1993	(61)	Local

Family TEPHRTIDAE

Small flies with pictured wings.

<i>Myoleja caesia</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Local
<i>Euleia heraclei</i> (Celery-fly).	Wheatfen	E. A. E.	1944	(1)	
	Larvae recorded mining Cowbane (<i>Cicuta virosa</i>) at Wheatfen.				
<i>Trypeta zoe</i>	Wheatfen	I. P.	1993	(47)	Common
<i>Orellia</i> (= <i>Terellia</i>) <i>ruficauda</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Common
<i>Xyphosia miliaria</i>	Strumpshaw	C. M. D. et al.	1993	(61)	Common
	Wheatfen	M. J. D. C.	1936	(1)	
		R. L. C.	1938	(1)	
<i>Urophora jaceana</i>	Wheatfen	H. E. J. B.	1951	(8)	
<i>Urophora stylata</i>	Buckenham	J. B.	1993	(50)	
<i>Tephritis bardanae</i>	Strumpshaw	J. B.	1993	(50)	Common

Family PLATYSTOMATIDAE

Small flies with pictured wings.

<i>Rivellia syngenesiae</i>	Wheatfen	R. L. C.	1938	(1)	
-----------------------------	----------	----------	------	-----	--

Family OTITIDAE

Small flies with pictured wings.

<i>Seioptera vibrans</i>					Common
	Buckenham	A. E. S. + M. N. P.	1993	(61)	
	Wheatfen	M. J. D. C.	1936	(1)	

<i>Herina frondescens</i>					Unknown
	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	
		J. B.	1993	(50)	

<i>Otites guttata</i>	Wheatfen	H. E. J. B.	1951	(8)	
-----------------------	----------	-------------	------	-----	--

Family MICROPEZIDAE (Stilt-legged-flies).

<i>Calobata cibaria</i>	Wheatfen	P. Withers	1986	(63)	
-------------------------	----------	------------	------	------	--

<i>Calobata petronella</i>	Wheatfen	M. J. D. C.	1936	(1)	
		P. Withers	1987	(63)	

<i>Calobata sellata</i>	Wheatfen	R. L. C.	1938	(1)	
		P. Withers	1987	(63)	

Family PSILIDAE

Larvae feed on umbelliferous roots.

<i>Loxocera ichneumonea</i>	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1937	(1)	

<i>Loxocera sylvatica</i>	Surlingham	?	1936	(62)	Local
---------------------------	------------	---	------	------	-------

Larvae probably root or stem borers.

<i>Psila fimetaria</i>	Wheatfen	M. J. D. C.	1936	(1)	
		P. Withers	1987	(63)	
<i>Chyliza scutellata</i>	Wheatfen	I. P.	1993	(47)	Local
Family DRYOMYZIDAE					
<i>Dryomyza analis</i>	Wheatfen	M. J. D. C.	1937	(1)	
<i>Dryomyza flaveola</i>	Wheatfen	M. J. D. C.	1936	(1)	
Family CHAMAEMYIIDAE (Silverflies).					
<i>Chamaemyia herbarum</i>	Wheatfen	H. E. J. B.	1951	(8)	
Family LAUXANIIDAE					
<i>Minettia longipennis</i>	Wheatfen	P. Withers	1987	(63)	
<i>Sapromyza sordida</i>	Wheatfen	I. P.	1993	(47)	Unknown
<i>Peplomyza litura</i>	Buckenham	A. E. S. + M. N. P.	1993	(61)	Local
	Wheatfen	M. J. D. C.	1937	(1)	
		I. P.	1993	(47)	
<i>Lyciella decempunctata</i>	Wheatfen	P. Withers	1986	(63)	Common
		I. P.	1993	(47)	
<i>Lyciella rorida</i>	Wheatfen	E. A. E.	1939	(1)	
		P. Withers	1990	(63)	
<i>Tricholauxania praeusta</i>	Wheatfen	M. J. D. C.	1936	(1)	
<i>Calliopum elisae</i>	Wheatfen	I. P.	1993	(47)	Local

Lauxania cylindricornis
Wheatfen M. J. D. C. 1936 (1)

Family HELEOMYZIDAE

Suillia variegata Common
Strumpshaw A. P. F. + D. A. P. 1988-90 (51)
Wheatfen P. Withers 1986 (63)
I. P. 1993 (47)

The 1986 record was taken from a *Boletus* sp.
of toadstool.

Tephrochlamys rufiventris
Wheatfen M. J. D. C. 1939 (1)

Family SEPSIDAE (Ant-like flies).

Themira annulipes Common
Wheatfen P. Withers 1986 (63)
I. P. 1993 (47)

Nemopoda nitidula
Wheatfen R. L. C. 1938 (1)
P. Withers 1986 (63)

Sepsis fulgens Common
Wheatfen I. P. 1993 (47)

Family SCIOMYZIDAE (Snail-killing flies).

The Mid-Yare snail-killing fly fauna is very rich.
Many of the rarer species are specialists on aquatic
or marsh snails. The variety of wetland habitats
present in the valley offer a wide range of niches
for these flies.

Colobaea bifasciella RDB 3
Strumpshaw A. P. F. 1988 (51) (N)
A. P. F. 1990 (51)

Larvae parasitic on snails of the family Succineidae,
particularly *Lymnaea truncatula* and *Lymnaea*
palustris. Commonest in lush marginal vegetation in
the east of England. Also recorded by A. P. Foster in
1989.

<i>Colobaea distincta</i>					RDB 3
	Strumpshaw	A.P.F.	1989	(51)	(N)
	Larvae parasitic on snails, pupae have been found in the shells of <i>Anisus leucostoma</i> . May benefit from the presence of isolated areas of carr.				
<i>Pherbellia albocostata</i>					Common
	Strumpshaw	C.M.D. et al.	1993	(61)	
<i>Pherbellia nana</i>					N
	Strumpshaw	A.P.F.	1988	(51)	
	Larvae parasitic on a range of aquatic and terrestrial snails. May prefer temporary water bodies.				
<i>Pherbellia schoenherri</i>					Local
	Strumpshaw	A.P.F.	1988	(51)	
	Wheatfen	R.L.C.	1937	(1)	
		I.P.	1993	(47)	
	Larvae parasitic on snails of the genus <i>Succinea</i> . A single larvae requires a single host to complete development. Adults found on marginal vegetation.				
<i>Pherbellia ventralis</i>					
	Wheatfen	P. Withers	1989	(63)	
		P. Withers	1990	(63)	
<i>Pteromicra augustipennis</i>					Local
	Strumpshaw	A.P.F.	1988	(51)	
		A.P.F.	1990	(51)	
	Larvae parasitic on aquatic snails. A single larvae requires two to three snails to complete its development.				
<i>Sciomyza dryomyzina</i>					RDB 2
	Strumpshaw	A.P.F.	1988	(51)	
	Larvae have been found in snails of the genus <i>Oxyloma</i> . Only known from four post 1960 sites. Occurs near standing water in wetlands.				
<i>Sciomyza simplex</i>					RDB 3
	Strumpshaw	A.P.F.	1988	(51)	(N)
	This snail-killing fly is associated with reedbeds and <i>Glyceria</i> swamp where there is a fluctuating water table. Larvae are parasitic on marshland snails.				
<i>Sciomyza testacea</i>					Unknown
	Strumpshaw	A.P.F.	1988-90	(51)	

<i>Antichaeta brevipennis</i>					RDB 2
	Strumpshaw	A. P. F.	1988	(51)	
		A. P. F.	1989	(51)	
	Larvae feed on the egg masses of <i>Succinea</i> and <i>Lymnaea</i> spp.. Associated with dykes in unimproved grazing marshes. Prefers areas of light grazing/cutting, and dykes in the later stages of succession.				
<i>Elgiva cucularia</i>					Local
	Strumpshaw	A. P. F.	1988	(51)	
	Larvae predate aquatic pulmonate snails.				
<i>Elgiva sollicita</i>					Common
	Strumpshaw	C. M. D. et al.	1993	(61)	
<i>Elgiva sundewalli</i>					
	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1939	(1)	
<i>Euthycera fumigata</i>					Local
	Strumpshaw	C. M. D. et al.	1993	(61)	
<i>Hydromya dorsalis</i>					Common
	Strumpshaw	A. P. F.	1988-90	(51)	
	Wheatfen	P. Withers	1989	(63)	
		I. P.	1993	(47)	
<i>Knutsonia (=Ilione) albiseta</i>					Common
	Buckenham	A. E. S. + M. N. P.	1993	(61)	
	Strumpshaw	A. P. F.	1988-90	(51)	
		C. M. D. et al.	1993	(61)	
	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1938	(1)	
<i>Knutsonia (=Ilione) lineata</i>					Local
	Strumpshaw	A. P. F.	1989	(51)	
	Larvae attack pea mussels, each require 20-30 mussels to complete development.				
<i>Limnia paludicola</i>					Common
	Strumpshaw	A. P. F.	1988-90	(51)	
	Wheatfen	P. Withers	1989	(63)	
<i>Limnia unguicornis</i>					
	Wheatfen	P. Withers	1986	(63)	

<i>Pherbina coryleti</i>					Common
	Strumpshaw	A. P. F.	1988-90	(51)	
		C. M. D. et al.	1993	(61)	
	S. Church Marsh	S. G. B. et al.	1993	(61)	
	Wheatfen	E. A. E.	1939	(1)	
<i>Psacadina punctata</i>					
	Wheatfen	R. L. C.	1937	(1)	
<i>Psacadina verbekei</i>					N
	Strumpshaw	A. P. F.	1988	(51)	
		C. M. D. et al.	1993	(61)	
	Wheatfen	I. P.	1993	(47)	
A wetland species. Larvae parasitise <i>Lymnea</i> spp. snails at the margins of aquatic environments. Seasonally fluctuating water tables may be required by this species. Also recorded at Strumpshaw by A. Foster in 1989 (51)					
<i>Renocera (=Tetanocera) fuscinervis</i>					Local
	Strumpshaw	A. P. F.	1988	(51)	
		A. P. F.	1990	(51)	
Larvae predate aquatic pulmonate snails.					
<i>Renocera pallida</i>					
	Wheatfen	P. Withers	1986	(63)	
<i>Sepedon spinipes</i>					Local
	Strumpshaw	A. P. F.	1988	(51)	
Larvae have been observed attacking aquatic pulmonate snails and have been found in <i>Planorbis planorbis</i> .					
<i>Tetanocera arrogans</i>					Local
	Strumpshaw	A. P. F.	1988	(51)	
	Wheatfen	I. P.	1993	(47)	
Larvae are terrestrial and attack snails at water margins.					
<i>Tetanocera elata</i>					Common
	Buckenham	A. E. S. + M. N. P.	1993	(61)	
	Strumpshaw	A. P. F.	1988-90	(51)	
		C. M. D. et al.	1993	(61)	
	S. Church Marsh	S. G. B. et al.	1993	(61)	
	Wheatfen	M. J. D. C.	1936	(1)	
<i>Tetanocera ferruginea</i>					Common
	Strumpshaw	A. P. F.	1988-90	(51)	

<i>Tetanocera freyi</i>					RDB 3
	Strumpshaw	A.P.F.	1988	(51)	
	Wheatfen	P. Withers	1986	(63)	
Occurs in wetlands, biology unknown. Always at a low density.					
<i>Tetanocera hyalipennis</i>					Common
	Strumpshaw	A.P.F.	1988-90	(51)	
	Wheatfen	M.J.D.C.	1936	(1)	
		P. Withers	1987	(63)	
<i>Tetanocera robusta</i>					Common
	Strumpshaw	A.P.F.	1988-90	(51)	
<i>Tetanocera silvatica</i>					Common
	Strumpshaw	A.P.F.	1988-90	(51)	
	Wheatfen	P. Withers	1986	(63)	
<i>Trypetoptera punctulata</i>					
	Wheatfen	P. Withers	1986	(63)	

Family SPHAEROCERIDAE (Lesser dung-flies).

<i>Sphaerocera crenata</i>					Local
	Strumpshaw	J.V.	1989	(51)	
<i>Sphaerocera paracrenata</i>					Local
	Strumpshaw	J.V.	1988	(51)	
		J.V.	1989	(51)	
<i>Copromyza pedestris</i>					Local
	Strumpshaw	J.V.	1988	(51)	
		J.V.	1989	(51)	
	Wheatfen	H.E.J.B.	1951	(8)	
Associated with flood refuse at Wheatfen. May feed on the dung of small mammals.					
<i>Copromyza stercoraria</i>					Common
	Strumpshaw	J.V.	1988-90	(51)	
<i>Leptocera finalis</i>					Local
	Strumpshaw	J.V.	1988	(51)	
<i>Leptocera fontinalis</i>					Common
	Strumpshaw	J.V.	1988-90	(51)	
	Wheatfen	P. Withers	1989	(63)	
		P. Withers	1990	(63)	

<i>Leptocera lutosa</i>					Common
	Strumpshaw	J. V.	1988-90	(51)	
	Wheatfen	P. Withers	1990	(63)	
<i>Leptocera fenestralis</i>					Common
	Strumpshaw	J. V.	1988-90	(51)	
<i>Leptocera humida</i>					Common
	Strumpshaw	J. V.	1988-90	(51)	
<i>Leptocera (=Opacifrons) coxata</i>					Common
	Strumpshaw	J. V.	1988-90	(51)	
	Wheatfen	P. Withers	1989	(63)	
		P. Withers	1990	(63)	
<i>Leptocera clunipes</i>					Common
	Strumpshaw	J. V.	1988-90	(51)	
<i>Leptocera flavipes</i>					Local
	Strumpshaw	J. V.	1988	(51)	
<i>Leptocera luteilabris</i>					Common
	Strumpshaw	J. V.	1988-90	(51)	
<i>Leptocera nana</i>					Local
	Strumpshaw	J. V.	1989	(51)	
<i>Leptocera pullula</i>					Local
	Strumpshaw	J. V.	1988	(51)	
		J. V.	1989	(51)	
<i>Leptocera rufilabris</i>					Common
	Strumpshaw	J. V.	1988-90	(51)	
<i>Leptocera spinosa</i>					Unknown
	Strumpshaw	J. V.	1988-90	(51)	

Family PALLOPTERIDAE

<i>Palloptera ustulata</i>					Common
	Strumpshaw	C. M. D. et al.	1993	(61)	

Family LONCHAEIDAE

<i>Lonchaea sylvatica (=lucidiventris)k</i>					
	Wheatfen	P. Withers	1989	(63)	

<i>Lonchaea laxa</i>	Wheatfen	P. Withers	1989	(63)	N
Family OPOMYZIDAE					
<i>Geomyza tripunctata</i>	Wheatfen	I. P.	1993	(47)	Common
<i>Opomyza florum</i>	Wheatfen	K. C. D.	1970	(3)	
<i>Opomyza germinationis</i>	Wheatfen	M. J. D. C.	1936	(1)	Common
		I. P.	1993	(47)	
Family CLUSIIDAE					
<i>Clusiodes albimana</i>	Wheatfen	P. Withers	1986	(63)	Local
		I. P.	1993	(47)	
Family ODINIIDAE					
<i>Odinia boletina</i>	Wheatfen	P. Withers	1989	(63)	
Family ANTHOMYZIDAE					
<i>Anthomyza dissors</i>	Wheatfen	P. Withers	1987	(63)	
<i>Anthomyza gracilis</i>	Buckenham	A. E. S. + M. N. P.	1993	(61)	Common
<i>Anthomyza ungulata</i>	Wheatfen	P. Withers	1987	(63)	
Family ASTEIIDAE					
<i>Asteia amoena</i>	Wheatfen	I. P.	1993	(47)	Common

Family EPHYDRIDAE (Shore flies).

Members of this family are associated with water margins.

<i>Ditrichophora calceata</i>	Wheatfen	P. Withers	1986	(63)	
<i>Ochthera manicata</i>	Strumpshaw	A. P. F.	1988	(51)	RDB 3
		A. E. S.	1993	(50)	
	S. Church Marsh	S. G. B. et al.	1993	(61)	

A small shore fly, recorded from Norfolk and Suffolk fens. May be under-recorded.

Family DIASSTATIDAE

<i>Campichoeta obscuripennis</i>	Wheatfen	P. Withers	1988	(63)	
<i>Diastata adusta</i>	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	Unknown

Family DROSOPHILIDAE (Fruit flies).

<i>Steganina (=Stegana) coleoptrata</i>	Wheatfen	P. Withers	1986	(63)	N
<i>Drosophila phalerata</i>	Wheatfen	P. Withers	1986	(63)	
Taken from a <i>Boletus</i> sp. toadstool.					
<i>Drosophila andalusiaca</i>	S. Church Marsh	S. G. B. et al.	1993	(61)	Common
<i>Drosophila subobscura</i>	Wheatfen	P. Withers	1986	(63)	
Taken from a <i>Boletus</i> sp. toadstool.					

Family AGROMYZIDAE

<i>Phytomyza ilicis</i>	Wheatfen	L. E.	1991	(55)	
-------------------------	----------	-------	------	------	--

Family CHLOROPIDAE

Lipara lucens

Wheatfen	E. A. E.	1939	(1)
	E. A. E.	1944	(1)

Larvae create galls on *Phragmites australis*. These galls are often utilized by a variety of other invertebrates such as the rare bee *Hylaeus pectoralis*.

Elachiptera uniseta

Surlingham	J. W. I.	1974	(62)
------------	----------	------	------

N

Larvae are probably phytophagous, but has been bred from a reed buntings' (*Emberiza schoeniclus*) nest.

Platycephala planifrons

Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)
------------	---------------------	---------	------

Common

Family TACHINIDAE

Larvae are parasitic on invertebrates.

Dexia vacua

Wheatfen	P. Withers	1989	(63)
----------	------------	------	------

Thelaira nigripes

Wheatfen	M. J. D. C.	1937	(1)
----------	-------------	------	-----

Dexiosoma caninum

Wheatfen	M. J. D. C.	1936	(1)
	P. Withers	1986	(63)

Pelatachina tibialis

Wheatfen	H. E. J. B.	1951	(8)
----------	-------------	------	-----

Linnaemya vulpina

Wheatfen	M. J. D. C.	1936	(1)
	M. J. D. C.	1939	(1)

Burithia anthophila

Wheatfen	M. J. D. C.	1936	(1)
----------	-------------	------	-----

Exorista rustica

Wheatfen	M. J. D. C.	1936	(1)
----------	-------------	------	-----

Family RHINOPHORIDAE

Phyto melanocephala

Wheatfen M. J. D. C. 1937 (1)

Family SARCOPHAGIDAE (Flesh-flies).

Sarcophaga carnaria (Flesh-fly).

Wheatfen M. J. D. C. 1936 (1)

E. A. E. 1942 (1)

Family CALLIPHORIDAE (Blow-flies).

Calliphora vomitoria (Bluebottle).

Wheatfen M. J. D. C. 1936 (1)

Lucilia caesar (Greenbottle).

Wheatfen M. J. D. C. 1936 (1)

E. A. E. 1956 (3)

Lucilia sericata

Wheatfen M. J. D. C. 1936 (1)

M. J. D. C. 1939 (1)

Pollenia rudis (Cluster-fly).

Wheatfen M. J. D. C. 1936 (1)

M. J. D. C. 1939 (1)

Protocalliphora azurea

Wheatfen M. J. D. C. 1939 (1)

M. J. D. C. 1940 (1)

Family SCATHOPHAGIDAE (Dung-flies and allies).

Norellisoma lituratum

Strumpshaw S. J. F. 1988 (51)

Predatory fly found in lush vegetation in damp places.

Local

Norellisoma spinimanum

Wheatfen E. A. E. 1942 (1)

Cordilura aemula

Strumpshaw J. B. 1988 (51)

Wheatfen P. Withers 1986 (63)

Larvae develop in sedges. Most records are from East Anglian fens.

RDB 3

<i>Cordilura ciliata</i>					Local
	Strumpshaw	S. J. F.	1989	(51)	
		C. M. D. et al.	1993	(61)	
	Larvae have been recorded from the stems of large <i>Carex</i> spp. such as <i>Carex riparia</i> .				
<i>Cordilura impudica</i>					
	Wheatfen	P. Withers	1986	(63)	
		P. Withers	1990	(63)	
<i>Cordilura pubera</i>					Common
	S. Church Marsh	S. G. B. et al.	1993	(61)	
	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1939	(1)	
<i>Cordilura pudica</i>					
	Wheatfen	M. J. D. C.	1937	(1)	
		E. A. E.	1939	(1)	
<i>Cordilura albipes</i>					Local
	Rockland	E. N. B.	1903	(16)	
	Strumpshaw	S. J. F.	1988	(51)	
	Associated with wetlands.				
<i>Cleigastra apicalis</i>					Local
	S. Church Marsh	S. G. B. et al.	1993	(61)	
	Wheatfen	P. Withers	1986	(63)	
		I. P.	1993	(47)	
<i>Scathophaga furcata</i>					
	Wheatfen	P. Withers	1989	(63)	
<i>Scathophaga stercoraria</i> (Yellow dung-fly).					Common
	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	
	Wheatfen	E. A. E.	1937	(1)	
		E. A. E.	1957	(3)	
<i>Scathophaga suilla</i>					Common
	Strumpshaw	A. P. F. + D. A. P.	1988-90	(51)	
	Wheatfen	P. Withers	1986	(63)	
<i>Scathophaga tinctoria</i>					RDB 2
	Strumpshaw	S. J. F.	1988	(51)	
<i>Hydromyza livens</i>					
	Cantley	J. B.	1993	(50)	

Family ANTHOMYIIDAE

<i>Chirosia betuleti</i>	Wheatfen	L. E.	1989	(55)	
<i>Pegohylemyia fugax</i>	Wheatfen	M. J. D. C.	1936	(1)	
<i>Hylemya strenua</i>	Wheatfen	M. J. D. C.	1936	(1)	
<i>Pegomya bicolor</i>	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1937	(1)	

Family FANNIIDAE (Lesser house-flies).

<i>Piezura graminicola</i>	Wheatfen	I. P.	1993	(47)	Unknown
<i>Fannia armata</i>	Wheatfen	I. P.	1993	(47)	Common
<i>Fannia coracina</i>	Wheatfen	I. P.	1993	(47)	Unknown
<i>Fannia fuscua</i>	Wheatfen	I. P.	1993	(47)	Common
<i>Fannia pretiosa</i>	Wheatfen	M. J. D. C.	1936	(1)	
<i>Fannia serena</i>	Wheatfen	I. P.	1993	(47)	Common

Family MUSCIDAE (House-flies and allies).

<i>Mesembrina meridiana</i>	Wheatfen	M. J. D. C.	1936	(1)	
		E. A. E.	1962	(3)	

Larvae feed on other fly larvae. In 1937 specimens of this fly were collected at Wheatfen and were released on Fiji to control house-flies. By all accounts this was a success and they are still present on Fiji (3).

<i>Morellia hortorum</i>	Wheatfen	M. J. D. C.	1938	(1)	
--------------------------	----------	-------------	------	-----	--

<i>Musca autumnalis</i>	Wheatfen	M. J. D. C.	1936	(1)	
<i>Alloeostylus diaphanus</i>	Wheatfen	M. J. D. C.	1936	(1)	
<i>Hydrotaea bimaculata</i>	Wheatfen	P. Withers	1989	(63)	
<i>Hydrotaea irritans</i>	Wheatfen	M. J. D. C.	1936	(1)	
<i>Hydrotaea occulta (=floccosa)</i>	Wheatfen	I. P.	1993	(47)	Unknown
<i>Muscina stabulans</i>	Wheatfen	M. J. D. C.	1938	(1)	
		M. J. D. C.	1942	(1)	
<i>Phaonia errans</i>	Rockland	E. N. B.	1903	(16)	
	Surlingham	E. N. B.	1903	(16)	
<i>Phaonia pallida</i>	Wheatfen	M. J. D. C.	1938	(1)	
<i>Phaonia populi</i>	Wheatfen	M. J. D. C.	1939	(1)	
<i>Helina laetifica</i>	Wheatfen	M. J. D. C.	1938	(1)	
<i>Mydaea scutellaris</i>	Wheatfen	M. J. D. C.	1938	(1)	
<i>Mydaea urbana</i>	Surlingham	E. N. B.	1903	(16)	
	Wheatfen	M. J. D. C.	1937	(1)	
		M. J. D. C.	1939	(1)	
<i>Graphomya maculata</i>	Buckenham	A. E. S. + M. N. P.	1993	(61)	Common
	Wheatfen	M. J. D. C.	1936	(1)	
		E. A. E.	1939	(1)	
<i>Lispe tentaculata</i>	Wheatfen	P. Withers	1989	(63)	

<i>Lispe uliginosa</i>	S.Church Marsh	S.G.B. et al.	1993	(61)	N
<i>Coenosia flavicauda</i>	Wheatfen	P.Withers	1987	(63)	
<i>Coenosia mollicula</i>	Surlingham	E.N.B.	1903	(16)	
<i>Coenosia rutipalpis</i>	Wheatfen	P.Withers	1986	(63)	
		P.Withers	1989	(63)	
<i>Coenosia tigrina</i>	Wheatfen	M.J.D.C.	1937	(1)	
<i>Stomoxys calcitrans</i> (Stable-fly).	Wheatfen	M.J.D.C.	1936	(1)	
		M.J.D.C.	1939	(1)	

Order Siphonaptera (Fleas).

There are no status designations available for this group.

Family HYSTRICHOPSYLLIDAE

Hystrihopsylla talpae

Buckenham	J.G.G.	1971	(73)
Surlingham	A.Y.	1975	(73)
	A.Y.	1976	(73)
Wheatfen	J.G.G.	1971	(73)

All records are from moles (*Talpa europaea*).

Ctenophthalmus bisoctodentatus

Buckenham	J.G.G.	1971	(73)
Surlingham	A.Y.	1975	(73)
Wheatfen	J.G.G.	1971	(73)

All records are from moles (*Talpa europaea*).

Ctenophthalmus nobilis

Buckenham	J.G.G.	1971	(73)
Surlingham	S.B.	1966	(73)
	A.Y.	1976	(73)
Surl. Broad	?	1966	(73)
Wheatfen	J.G.G.	1971	(73)

Recorded in the Valley from woodmice (*Apodemus sylvaticus*), moles (*Talpa europaea*), water voles (*Arvicola terrestris*) and bank voles (*Clethrionomys glareolus*).

Palaeopsylla minor

Surlingham	A.Y.	1975	(73)
Wheatfen	J.G.G.	1971	(73)

All records are from moles (*Talpa europaea*).

Rhadinopsylla pentacantha

Surlingham	A.Y.	1975	(73)
Wheatfen	J.G.G.	1971	(73)

Has been recorded in the Mid-Yare from bank voles (*Clethrionomys glareolus*) and moles (*Talpa europaea*).

Family CERATOPHYLLIDAE

Amalaraeus penicilliger

Wheatfen	J.G.G.	1971	(73)
----------	--------	------	------

Recorded on a bank vole (*Clethrionomys glareolus*).

Megabothris walkeri

Surl. Broad S.B. 1966 (73)
Wheatfen J.G.G. 1971 (73)

Recorded on a water shrew (*Neomys fodiens*) at
Surlingham Broad, and a bank vole (*Clethrionomys
glareolus*) at Wheatfen.

Megabothris turbidus

Bradeston Marsh R.S.G. 1988 (73)
Wheatfen J.G.G. 1971 (73)

Recorded on a bank vole (*Clethrionomys glareolus*) at
Wheatfen.

Ceratophyllus garei

Bradeston Marsh R.S.G. 1989 (73)

Ceratophyllus gallinae

Wheatfen E.A.E. 1937 (73)

Ceratophyllus hirudinis

Surlingham E.A.E. 1953 (73)

Recorded on a house martin (*Delichon urbica*).

Ceratophyllus rusticus

Surlingham E.A.E. 1953 (73)

Recorded on a house martin (*Delichon urbica*).

Order Trichoptera (Caddis flies).

Larvae are aquatic omnivores. A more detailed investigation would reveal more species, probably including some Broadland rarities.

Status from Wallace (1991).

Family RHYACOPHILIDAE

<i>Rhyacophila dorsalis</i>					Common
	Wheatfen	H. C.	1937	(1)	

Family GLOSSOSOMATIDAE

<i>Agapetus fuscipes</i>					Common
	Surlingham	E. A. E.	pre.1965	(64)	
Found at Surlingham in freshwater tidal channels.					

Family POLYCENTROPIDAE

<i>Plectrocnemia conspersa</i>					Common
	Wheatfen	M. J. D. C.	1939	(1)	
		M. J. D. C.	1940	(1)	

<i>Cyrnus flavidus</i>					Common
	Strumpshaw	M. J.	1987	(14)	

Family PHRYGANEIDAE

<i>Phryganea grandis</i>					Local
	Rockland Broad	E. T. D.	?	(46)	
	Wheatfen	M. J. D. C.	1939	(1)	
Found in small numbers in weedy, slow moving or stagnant water.					

<i>Trichostegia minor</i>					Common
	Wheatfen	M. J. D. C.	1937	(1)	
		M. J. D. C.	1940	(1)	

<i>Agrypnia pagetana</i>					Local
	Wheatfen	M. J. D. C.	1940	(1)	
A fen species.					

Family LIMNEPHILIDAE

<i>Limnephilus affinis</i>					Common
	Wheatfen	M. J. D. C.	1939	(1)	
		M. J. D. C.	1940	(1)	
<i>Limnephilus auricula</i>					Common
	Wheatfen	M. J. D. C.	1937	(1)	
		K. C. D.	1968	(65)	
<i>Limnephilus centralis</i>					Common
	Wheatfen	K. C. D.	1990	(65)	
<i>Limnephilus flavicornis</i>					Common
	Wheatfen	M. J. D. C.	1937	(1)	
		R. B.	1994	(54)	
<i>Limnephilus griseus</i>					Common
	Rockland Broad	E. T. D.	?	(46)	
	Most common in upland areas.				
<i>Limnephilus incisus</i>					Common
	Surl. Broad	E. T. D.	?	(46)	
	Wheatfen	E. T. D.	1937	(1)	
		K. C. D.	1969	(65)	
<i>Limnephilus lunatus</i>					Common
	Rockland Broad	E. T. D.	1957	(46)	
	Wheatfen	E. A. E.	1938	(1)	
		R. B.	1994	(54)	
<i>Limnephilus luridus</i>					Common
	Wheatfen	M. J. D. C.	1937	(1)	
<i>Limnephilus sparsus</i>					Common
	Wheatfen	M. J. D. C.	1936	(1)	
		E. A. E.	1940	(1)	
<i>Grammotaulius nitidus</i>					RDB 1
	Wheatfen	E. A. E.	pre. 1965	(64)	
	Larvae probably breed in shallow overgrown pools. Found at a very few eastern and Somerset sites. Has not been recorded in the UK in recent years. May benefit from surface disturbance in reedbeds, creating shallow pools.				
<i>Glyptotaelius pellucidus</i>					Common
	Wheatfen	M. J. D. C.	1937	(1)	
		E. A. E.	1940	(1)	

Anabolia (=Phacopteryx) brevipennis N
 Wheatfen Broad J.A.R. 1946 (46)
 Larvae live in slowly flowing water in dense
 reedbeds or carr. Few recent records in Broadland.

Anabolia nervosa Common
 Surl. Broad J.A.R. ? (46)
 Wheatfen E.T.D. 1939 (1)
 R.B. 1994 (54)

Athripsodes aterrimus Common
 Rockland Broad E.T.D. 1955 (46)

Family LEPTOCERIDAE

Triaenodes bicolor Common
 Strumpshaw P.D.W. 1987 (6)

Family BERAEEIDAE

Beraea pullata Common
 Wheatfen K.C.D. 1969 (65)

Order Lepidoptera (Butterflies and moths).

Although moths and butterflies are often treated as separate groups there is no taxonomic basis for this division. After each family name it is indicated whether the members are commonly referred to as butterflies, moths or micro-moths.

Current status of macro-moths from Waring (1994).
Current status of pyralids from Parsons (1993).

Family HEPIALIDAE (Ghost moth and swifts (moths)).

Ghost moth/Otter moth (<i>Hepialus humuli s. humili</i>),				Common
Buckenham	K.G.S.	1994	(58)	
Coldham Hall	N.M.M.	1990	(13)	
Rockland	D.H.	1992	(53)	
Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
Surlingham	P.W.+A.G.I.	1987	(18)	
Wheatfen	M.J.D.C.	1937	(1)	
	N.M.M.	1992	(13)	
Caterpillar feeds on roots of plants.				
Orange swift (<i>Hepialus sylvina</i>),				Common
Rockland	C.R.	1990-2	(53)	
Strumpshaw	R.G.P.	1985	(15)	
	A.J.W.	1991	(12)	
Caterpillar feeds on roots of plants. Rather rare in the Mid-Yare.				
Gold swift (<i>Hepialus hecta</i>),				Local
Buckenham	K.G.S.	1994	(58)	
Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
Wheatfen	J.L.M.	1939	(1)	
	E.A.E.	1985	(3)	
Caterpillar feeds on low parts of bracken (<i>Pteridium aquilium</i>).				
Common swift (<i>Hepialus lupulinus</i>),				Common
Rockland	D.H.	1992	(53)	
Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
Wheatfen	E.A.E.	1944	(1)	
	T.N.D.P.	1971	(3)	
Caterpillar feeds on roots of plants.				

Map-winged swift (*Hepialus fusconebulosa*). Local
 Wheatfen T.N.D.P. 1971 (3)
 Caterpillar feeds on the roots of bracken
 (*Pteridium aquilium*) and probably other plants.
 Practically absent from East Anglia, probably a
 vagrant.

Family TISCHERIIDAE (Leaf-miners (micro-moths)).

Tischeria ekebladella Unknown
 Wheatfen M. J. D. C. 1938 (1)
 Identified from leaf mine.

Family INCURVARIIDAE (Bright moths (micro-moths)).

Nematopogon swammerdamella Unknown
 Wheatfen T. N. D. P. 1971-2 (56)
Nemophora degeerella Common
 Buckenham K. G. S. 1994 (58)

Family COSSIDAE (Leopard moths and allies (moths)).

Leopard moth (*Zeuzera pyrina*). Common
 Strumpshaw R. G. P. 1984 (15)
 Wheatfen R. S. 1937 (1)
 T. N. D. P. 1972 (3)
 Caterpillar feeds in a variety of woody plants.
 Recorded in willow (*Salix sp.*) in the Mid-Yare
 valley (1).

Goat moth (*Cossus cossus*). N/b
 Rockland B. A. E. 1977 (3)
 D. H. 1983-4
 Wheatfen T. N. D. P. 1971 (3)
 T. N. D. P. 1987 (62)

Caterpillar feeds internally on the wood of
 various trees including willows (*Salix spp.*),
 poplars (*Populus spp.*) and oak (*Quercus robur*). A
 very large moth, the caterpillars take four or five
 years to reach maturity. Occupied trees are often in
 stressed situations such as river-banks, and can be
 sometimes be located by their goat like smell.
 Several other species rely on the goat moth and its
 work for their existence, this includes the hoverfly
Ferdinandea ruficornis (RDB 2) which has been
 recorded from Wheatfen. The goat moth is very local,

with a south-eastern distribution. Despite its size and the unusual appearance of the larvae, recent British records are few and far between. The Rockland records are both of single larvae. The continued existence of large trees in stressed situations and the retention of standing timber and damaged trees will benefit this species.

Family ZYGAENIDAE (Foresters and burnets (moths)).

The forester (*Adscita statices*) (blue-green form). N/b
 Wheatfen R.S.M.B. 1942 (1)
 E.A.E. 1944 (1)
 Caterpillar feeds on sorrel (*Rumex acetosa*) and sheep's sorrel (*Rumex acetosella*).

Six-spot burnet (*Zygaena filipendulae s. stephensi*) Common
 Rockland D.H. 1992 (53)
 Caterpillar feeds on bird's-foot trefoil (*Lotus corniculatus*).

Five-spot burnet (*Zygaena trifolii (s. decreta?)*). Local
 Wheatfen E.A.E. 1935 (3)
 E.A.E. 1950 (3)

This species was regularly recorded at Wheatfen during the 1930's by Ted Ellis, B.A. Cooper and others. There is no record of which sub-species was found, although it was probably *Z. t. decreta* which feeds on greater bird's-foot trefoil (*Lotus uliginosus*) rather than *Z. t. palustrella* which feeds on bird's-foot trefoil (*Lotus corniculatus*) and is typically found on chalk downland.

In 1938 Ted Ellis records a "few specimens", but the numbers recorded declined and in 1944, 1945 and 1946 only one specimen was seen (1). Several were seen in 1950, but there have been no records since. There are few recent records of the five-spot burnet in East Anglia, and only three colonies known (Hickling, Horsey and Beeston Common (K. Saul pers. comm.)). It is probable that this species still occurs in the Mid-Yare.

Narrow-bordered five-spot burnet (*Zygaena lonicerae*). Common
 Coldham Hall D.Hipperson 1993
 Strumpshaw ? 1973 (57)
 A.J.W. 1991 (12) ?

Caterpillar feeds on a variety of trefoils, clovers, and vetches. In 1991 A.J.Whitehouse sighted a single five-spot burnet on cpt.30, as a result of

the rarity of *Zygaena trifolii* in Norfolk, the specimen was recorded as a narrow bordered five-spot burnet (*Zygaena lonicerae*) (12). With the benefit of Ted Ellis's records there would seem to be a possibility of *Z. trifolii* being present.

Family LIMACODIDAE (Festoon and triangle (moths)).

The festoon (*Apoda limacodes* (=avellana)). N/b
 Wheatfen R.E. 1991 (55)
 Caterpillar feeds on oak (*Quercus robur*) and beech (*Fagus sylvatica*). Local and south-eastern in distribution. Larval record.

Family PSYCHIDAE (Bagworms (micro-moths)).

Psyche casta Common
 Wheatfen E.A.E. 1939 (1)
 Larval case found on lichens.

Family TINEIDAE (Clothes moths and allied micro-moths).

Triaxomera parasitella Unknown
 Wheatfen T.N.D.P. 1971-2 (56)

Tapestry moth (*Trichophaga tapetzella*). N/b
 Wheatfen R.S. 1939 (1)
 Caterpillar feeds on horse hair and owl pellets.

Tinea trinotella Unknown
 Wheatfen M.J.D.C. 1937 (1)
 M.J.D.C. 1939 (1)

Family GRACILLARIIDAE (Midget moths (micro-moths)).

Caloptilia elongella Unknown
 Wheatfen T.N.D.P. 1971-2 (56)

Caloptilia alchimiella Unknown
 Wheatfen N.M.M. 1992 (13)

Parornix angelicella Unknown
 Wheatfen T.N.D.P. 1971-2 (56)

Parornix devoniella Unknown
 Wheatfen T.N.D.P. 1971-2 (56)

<i>Phyllonorycter harrisella</i>					Common
Wheatfen	T. N. D. P.	1971-2	(56)		
	N. M. M.	1992	(13)		
<i>Phyllonorycter quercifoliella</i>					Unknown
Wheatfen	T. N. D. P.	1971-2	(56)		
<i>Phyllonorycter sorbi</i>					Unknown
Wheatfen	T. N. D. P.	1971-2	(56)		
<i>Phyllonorycter blancardella</i>					Unknown
Wheatfen	T. N. D. P.	1971-2	(56)		
<i>Phyllonorycter viminetorum</i>					Unknown
Wheatfen	T. N. D. P.	1971-2	(56)		
<i>Phyllonorycter maestingella</i>					Unknown
Wheatfen	T. N. D. P.	1971-2	(56)		
<i>Phyllonorycter alnifoliella</i> (=strigulatella)					N/b
Wheatfen	T. N. D. P.	1971-2	(56)		
This record probably refers to <i>P. rafella</i> , a common species on alder (<i>Alnus glutinosa</i>).					

Family SESIIDAE (Clearwings (moths)).

Hornet moth (<i>Sesia apiformis</i>).					N/b
Rockland	D. H.	1992	(53)		
Wheatfen	E. A. E.	1965	(3)		
Caterpillar feeds in the trunks and upper roots of black poplar (<i>Populus nigra</i>) and occasionally other <i>Populus</i> spp..					
Lunar hornet moth (<i>Sesia bembeciformis</i>).					Common
Wheatfen	M. J. D. C.	1936	(1)		
Caterpillar feeds in the trunks and upper roots of willow (<i>Salix caprea</i>) and occasionally other <i>Salix</i> spp..					
Large red-belted clearwing (<i>Synanthedon culiciformis</i>).					N/b
Strumpshaw	M. E. A. S. + M. B. S.	1993			
Wheatfen	E. A. E.	1944	(1)		
Caterpillar feeds under the bark of birch (<i>Betula</i> spp.) and alder (<i>Alnus glutinosa</i>).					

Red tipped clearwing
Rockland DM 1996

In willow trunk

Family GLYPHIPTERIGIDAE (micro-moths).

<i>Anthophila fabriciana</i>					Common
	Buckenham	K. G. S.	1994	(58)	
	Strumpshaw	P. W.	1994	(78)	
	Wheatfen	M. J. D. C.	1937	(1)	
		E. A. E.	1939	(1)	
<i>Choreutis myllerana</i>					Local
	Wheatfen	M. J. D. C.	1936	(1)	
		M. J. D. C.	1939	(1)	
	Recorded as being rare at Wheatfen (1936 (1)).				
<i>Glyphipterix thrasonella</i>					Unknown
	Wheatfen	M. J. D. C.	1938	(1)	
		E. A. E.	1939	(1)	

Family YPONOMEUTIDAE (Small ermines (micro-moths)).

Apple fruit moth (<i>Argyresthia conjugella</i>).					Unknown
	Wheatfen	T. N. D. P.	1971-2	(56)	
Orchard ermine (<i>Yponomeuta padella</i>).					Common
	Wheatfen	T. N. D. P.	1971-2	(56)	
Willow ermine (<i>Yponomeuta rorrella</i>).					RDB 3
	Rockland Broad	J. C. F. F.	1936	(3)	
<i>Ypsolopha parenthesesella</i>					Common
	Wheatfen	T. N. D. P.	1971-2	(56)	
<i>Ypsolopha ustella</i>					Common
	Wheatfen	T. N. D. P.	1971-2	(56)	
<i>Plutella xylostella</i>					Migrant
	Wheatfen	T. N. D. P.	1971-2	(56)	
<i>Eidophasia messingiella</i>					Local
	Wheatfen	T. N. D. P.	1971-2	(56)	
<i>Orthotelia sparganella</i>					Unknown
	Surlingham	K. G. S.	1988	(13)	

Family SCHRECKENSTEINIIDAE (micro-moths).

<i>Schreckensteinia festaliella</i>					Unknown
	Wheatfen	M. J. D. C.	1938	(1)	

Family COLEOPHORIDAE (micro-moths).

Coleophora laricella ^{pc}
 Struss KGS 199
 on Birch

<i>Coleophora serratella</i>					Common
	Buckenham	K. G. S.	1994	(58)	
<i>Coleophora viminetella</i>					Common
	Buckenham	K. G. S.	1994	(58)	
<i>Coleophora ibipennella</i>					
	Strumpshaw	A. M. E.	1988	(58)	

Family ELACHISTIDAE (micro-moths).

<i>Elachista cerusella</i>					Local
	Surlingham	K. G. S.	1988	(13)	
	Wheatfen	N. M. M.	1991	(13)	
		N. M. M.	1992	(13)	
<i>Elachista luticomella</i>					Unknown
	Wheatfen	T. N. D. P.	1971-2	(56)	

Family OECOPHORIDAE (micro-moths).

<i>Endrosis sarcitrella</i>					Common
	Wheatfen	T. N. D. P.	1971-2	(56)	
<i>Carcina quercana</i>					Common
	Wheatfen	T. N. D. P.	1971-2	(56)	
		N. M. M.	1992	(13)	
<i>Diurnea fagella</i>					Unknown
	Wheatfen	T. N. D. P.	1971-2	(56)	
Brown house moth (<i>Hofmannophila pseudospretella</i>).					Common
	Wheatfen	N. M. M.	1990	(13)	
<i>Depressaria pastinacella</i>					Common
	Wheatfen	R. E.	1992	(55)	
<i>Agonopterix arenella</i>					Unknown
	Wheatfen	K. G. S.	1994		
<i>Agonopterix alstroemeriana</i>					Unknown
	Wheatfen	T. N. D. P.	1971-2	(56)	
<i>Agonopterix ocellana</i>					Local
	Wheatfen	T. N. D. P.	1971-2	(56)	
Caterpillars feed on willow (<i>Salix spp.</i>).					

<i>Agonopterix nervosa</i>					Local
	Wheatfen	N. M. M.	1990	(13)	
<i>Agonopterix angelicella</i>					Unknown
	Wheatfen	T. N. D. P.	1971-2	(56)	
		N. M. M.	1992	(13)	

Family GELECHIIDAE (Groundling moths and allies (micro-moths)).

<i>Metzneria metzneriella</i>					Unknown
	Wheatfen	T. N. D. P.	1971-2	(56)	
<i>Rhynchopacha (=Athrips) mouffetella</i>					Unknown
	Wheatfen	T. N. D. P.	1971-2	(56)	
<i>Teleiodes proximella</i>					Unknown
	Buckenham	K. G. S.	1994	(58)	
	Strumpshaw	N. M. M.	1991	(58)	
	Feeds on alder (<i>Alnus glutinosa</i>).				
<i>Teleiodes luculella</i>					Unknown
	Wheatfen	M. J. D. C.	1938	(1)	
* <i>Caryocolum (=Brachmia) blandella</i>					Unknown
	Wheatfen	N. M. M.	1991	(13)	
<i>Hypatima rhomboidella</i>					Unknown
	Wheatfen	T. N. D. P.	1971-2	(56)	
<i>Brachmia gerronella</i>					
	Wheatfen	T. N. D. P.	1971-2	(56)	
<i>Brachmia rufescens</i>					Local
	Surlingham	K. G. S.	1988	(13)	
	Wheatfen	T. N. D. P.	1971-2	(56)	
		N. M. M.	1992	(13)	

Family BLASTOBASIDAE (micro-moths).

<i>Blastobasis decolorella</i>					Local
	Buckenham	K. G. S.	1994	(58)	
	Strumpshaw	P. W.	1994	(78)	
	Wheatfen	N. M. M.	1991	(13)	
		N. M. M.	1992	(13)	

Family MOMPIDAE (micro-moths).

<i>Mompha ochraceella</i>					Local
	Wheatfen	T.N.D.P.	1971-2	(56)	
	Feeds on great willowherb (<i>Epilobium hirsutum</i>).				
<i>Mompha propinquella</i>					Unknown
	Wheatfen	T.N.D.P.	1971-2	(56)	
<i>Limnaecia phragmitella</i>					Unknown
	Surlingham	K.G.S.	1988	(13)	
	Wheatfen	N.M.M.	1992	(13)	
<i>Spuleria aurifrontella</i>					
	Wheatfen	M.J.D.C.	1938	(1)	

Family SCYTHRIDIDAE (micro-moths).

<i>Scythris grandipennis</i>					Unknown
	Wheatfen	M.J.D.C.	1939	(1)	

Family TORTRICIDAE (Tortrix moths (micro-moths)).

<i>Cydia splendana</i>					Common
	Surlingham	K.G.S.	1988	(13)	
	Wheatfen	N.M.M.	1992	(13)	
<i>Cydia aurana</i>					Unknown
	Buckenham	K.G.S.	1994	(58)	
<i>Cydia jungiella</i>					Unknown
	Wheatfen	T.N.D.P.	1971-2	(56)	
Bud moth (<i>Spilonota ocellana</i>).					Common
	Wheatfen	N.M.M.	1991	(13)	
<i>Eucosma hohenwartiana</i>					Unknown
	Wheatfen	T.N.D.P.	1971-2	(56)	
<i>Eucosma cana</i>					Unknown
	Wheatfen	N.M.M.	1991	(13)	
		N.M.M.	1992	(13)	
<i>Epiblema farfarae</i>					Unknown
	Strumpshaw	K.G.S.	1983	(58)	

<i>Epiblema turbidana</i>					N/b
	Wheatfen	T. N. D. P.	1971-2	(56)	
	Caterpillar feeds in the roots or crown of butterbur (<i>Petasites hybridus</i>). A wetland species.				
<i>Epiblema cynosbatella</i>					Common
	Buckenham	K. G. S.	1994	(58)	
Bramble shoot moth (<i>Epiblema uddmanniana</i>).					Common
	Wheatfen	T. N. D. P.	1971-2	(56)	
		N. M. M.	1991	(13)	
<i>Epiblema rosaecolana</i>					Local
	Wheatfen	N. M. M.	1991	(13)	
	Caterpillar feeds on rose (<i>Rosa spp.</i>) shoots.				
<i>Epiblema roborana</i>					Unknown
	Buckenham	K. G. S.	1994	(58)	
	Buckenham Carr	K. G. S.	1994	(58)	
Willow tortrix (<i>Epinotia cruciana</i>).					Unknown
	Wheatfen	N. M. M.	1991	(13)	
<i>Lobesia abscisana</i>					Unknown
	Wheatfen	N. M. M.	1992	(13)	
<i>Endothenia quadrimaculana</i>					Unknown
	Wheatfen	T. N. D. P.	1971-2	(56)	Local <i>gentiana dec</i>
	Feeds on marsh woundwort (<i>Stachys palustris</i>).				
					K.G.S 1991 <i>Strumpshaw</i>
Plum tortrix (<i>Hedya pruniana</i>).					Common
	Surlingham	K. G. S.	1988	(13)	
	Wheatfen	N. M. M.	1991	(13)	
<i>Hedya salicella</i>					Unknown
	Surlingham	K. G. S.	1988	(13)	
<i>Olethreutes olivana</i>					N/b
	Strumpshaw	P. W.	1994	(78)	
	Caterpillar feeds among low plants in wetland areas.				
<i>Olethreutes lacunana</i>					Common
	Buckenham	K. G. S.	1994	(58)	
	Strumpshaw	P. W.	1994	(78)	
	Wheatfen	T. N. D. P.	1971-2	(56)	
		N. M. M.	1992	(13)	
Chequered fruit-tree tortrix (<i>Pandemis corylana</i>).					Common
	Wheatfen	N. M. M.	1991	(13)	

Barred fruit-tree tortrix (<i>Pandemis cerasana</i>)					Common
Wheatfen	T. N. D. P.	1971-2	(56)		
	N. M. M.	1991	(13)		
Dark fruit-tree tortrix (<i>Pandemis heparana</i>).					Common
Surlingham	K. G. S.	1988	(13)		
Wheatfen	N. M. M.	1991	(13)		
Large fruit-tree tortrix (<i>Archips podana</i>).					Common
Wheatfen	T. N. D. P.	1971-2	(56)		
	N. M. M.	1991	(13)		
Recorded as <i>Archips oporana</i> by T. Peet, but the record almost certainly refers to this species (K. Saul pers. comm.).					
Timothy tortrix (<i>Aphelia paleana</i>).					Unknown
Wheatfen	T. N. D. P.	1971-2	(56)		
<i>Clepsis spectrana</i>					Common
Buckenham	K. G. S.	1994	(58)		
Strumpshaw	P. W.	1994	(78)		
Surlingham	K. G. S.	1988	(13)		
Wheatfen	T. N. D. P.	1971-2	(56)		
	N. M. M.	1992	(13)		
<i>Clepsis consimilana</i>					Common
Wheatfen	M. J. D. C.	1937	(1)		
	N. M. M.	1992	(13)		
<i>Ptycholoma lecheana</i>					Common
Buckenham Carr	K. G. S.	1994	(58)		
<i>Lozotaenia forsterana</i>					Local
Wheatfen	M. J. D. C.	1939	(1)		
	T. N. D. P.	1971-2	(56)		
<i>Epagoge grotiana</i>					Local
Surlingham	K. G. S.	1988	(13)		
Red-barred tortrix (<i>Ditula angustiorana</i>).					Unknown
Wheatfen	N. M. M.	1991	(13)		
<i>Pseudargyrotoza conwagana</i>					Common
Buckenham	K. G. S.	1994	(58)		
Wheatfen	T. N. D. P.	1971-2	(56)		
Grey tortrix (<i>Cnephasia stephensi</i>).					Common
Surlingham	K. G. S.	1988	(13)		
Wheatfen	N. M. M.	1991	(13)		
	N. M. M.	1992	(13)		

Flax tortrix (<i>Cnephasia interjectana</i>).					Common
	Surlingham	K.G.S.	1988	(13)	
Light grey tortrix (<i>Cnephasia incertana</i>).					Local
	Surlingham	K.G.S.	1988	(13)	
	Wheatfen	N.M.M.	1991	(13)	
<i>Tortricodes alternella</i>					Unknown
	Wheatfen	T.N.D.P.	1971-2	(56)	
<i>Aleimma loeflingiana</i>					Common
	Wheatfen	M.J.D.C.	1938	(1)	
		N.M.M.	1991	(13)	
Green oak tortrix (<i>Tortrix viridana</i>).					Common
	Wheatfen	M.J.D.C.	1937	(1)	
		N.M.M.	1991	(13)	
Caterpillar feeds on the buds and young leaves of oak (<i>Quercus robur</i>).					
<i>Croesia holmiana</i>					Unknown
	Wheatfen	T.N.D.P.	1971-2	(56)	
<i>Acleris latifasciana</i>					Common
	Wheatfen	T.N.D.P.	1971-2	(56)	
This record may refer to <i>A. literana</i> (K. Saul pers. comm.).					
Strawberry tortrix (<i>Acleris comariana</i>).					Common
	Surlingham	K.G.S.	1988	(13)	
	Wheatfen	T.N.D.P.	1971-2	(56)	
<i>Acleris literana</i>					Unknown
	Wheatfen	N.M.M.	1989	(13)	
Family COCHYLIDAE (Micro-moths).					
<i>Phalonidia manniana</i>					N/b
	Wheatfen	N.M.M.	1991	(13)	
Caterpillar feeds on water mint (<i>Mentha aquatica</i>) and gypsywort (<i>Lycopus europaeus</i>) in marshy areas.					
<i>Stenodes straminea</i>					
	Buckenham	K.G.S.	1994	(58)	
<i>Agapeta hamana</i>					Common
	Surlingham	K.G.S.	1988	(13)	
	Wheatfen	T.N.D.P.	1971-2	(56)	
		N.M.M.	1991	(13)	

<i>Agapeta zoegana</i>					Local
	Wheatfen	T. N. D. P.	1971-2	(56)	
Caterpillar feeds on the roots of composites, especially black knapweed (<i>Centaurea nigra</i>) and small scabious (<i>Scabiosa columbaria</i>).					
<i>Aethes cnicana</i>					
	Buckenham	K. G. S.	1994	(58)	
	Wheatfen	N. M. M.	1992	(13)	
<i>Eupoecilia angustana</i>					Local
	Wheatfen	T. N. D. P.	1971-2	(56)	
<i>Cochylidia rupicola</i>					Local
	Wheatfen	N. M. M.	1991	(13)	
Family PYRALIDAE (Pyralid moths (micro-moths)).					
<i>Chilo phragmitella</i>					Local
	Buckenham	K. G. S.	1994	(58)	
	Rockland	D. H.	1993	(53)	
	Strumpshaw	D. J. P. M.	1986	(15)	
		P. W.	1994	(78)	
	Surlingham	P. W. + A. G. I.	1987	(18)	
		K. G. S.	1988	(13)	
	Wheatfen	E. A. E.	1938	(3)	
		N. M. M.	1992	(13)	
Caterpillar feeds on <i>Phragmites australis</i> , <i>Glyceria maxima</i> and reed canary-grass (<i>Phalaris arundinacea</i>). A rather local pyralid found in large reedbeds.					
<i>Chrysoteuchia culmella s. culmella</i> (<i>Crambus hortuella</i>)					Common
	Buckenham	K. G. S.	1994	(58)	
	Surlingham	K. G. S.	1988	(13)	
	Wheatfen	E. A. E.	1936	(3)	
		N. M. M.	1992	(13)	
Caterpillar feeds on the culms of various grasses (Gramineae).					
<i>Crambus lathoniellus</i>					Common
	Buckenham	K. G. S.	1994	(58)	
<i>Crambus pascuella s. pascuella</i>					Common
	Strumpshaw	D. J. P. M.	1986	(15)	
	Wheatfen	E. A. E.	1939	(3)	
		T. N. D. P.	1971	(3)	
Caterpillar foodplant unknown.					

✓	Hook-streak grass-veneer (<i>Crambus pratella</i>).				N/b
	Wheatfen	E. A. E.	1939	(3)	
		T. N. D. P.	1971	(3)	
	Caterpillar feeds on the stem bases and roots of grasses (Gramineae). Prefers short turf in dry places. This record requires confirmation as it is more likely to be <i>C. lathoniellus</i> (K. Saul pers. comm.).				
	<i>Crambus perlella s. perlella</i>				Common
	Wheatfen	T. N. D. P.	1971	(3)	
		N. M. M.	1992	(13)	
	Caterpillar feeds on the stem bases grasses (Gramineae).				
	<i>Agriphila selasella</i>				Local
	Strumpshaw	D. J. P. M.	1986	(15)	
	Wheatfen	E. A. E.	1936	(3)	
		E. A. E.	1939	(3)	
	Caterpillar feeds on sheep's fescue (<i>Festuca ovina</i>). Found on fens and saltmarshes.				
	<i>Agriphila straminella</i>				Common
	Strumpshaw	D. J. P. M.	1986	(15)	
	Surlingham	K. G. S.	1988	(13)	
	Wheatfen	N. M. M.	1991	(13)	
		N. M. M.	1992	(13)	
	Caterpillar feeds on small grasses (Gramineae).				
	<i>Agriphila (=Crambus) tristella s. tristella</i>				Common
	Wheatfen	E. A. E.	1938	(3)	
	Caterpillar feeds on the stem bases grasses (Gramineae). Prefers tall grass.				
	<i>Agriphila (=Crambus) inquinatella s. inquinatella</i>				Common
	Rockland	D. H.	1992	(53)	
	Wheatfen	E. A. E.	1938	(3)	
		N. M. M.	1991	(13)	
	Caterpillar feeds on sheep's fescue (<i>Festuca ovina</i>) and other small grasses (Gramineae).				
	<i>Agriphila (=Crambus) latistria</i>				Local
	Rockland	D. H.	1992	(53)	
	Caterpillar feeds on grasses (Gramineae), especially <i>Bromus</i> spp.. Typically found in dry sandy areas.				
	<i>Agriphila (=Crambus) geniculea</i>				Common
	Rockland	D. H.	1992	(53)	
	Caterpillar feeds on grasses (Gramineae).				

<i>Catoptria pinella</i>					Local
	Strumpshaw	D. J. P. M.	1986	(15)	
	Caterpillar feeds on tall, dense grasses (Gramineae).				
<i>Catoptria falsella s. falsella</i>					Local
	Wheatfen	T. N. D. P.	1972	(3)	
	Caterpillar feeds on mosses, particularly <i>Tortula</i> spp. and <i>Barbula</i> spp.. Uncommon.				
<i>Platytes cerussella</i>					Local
	Wheatfen	E. A. E.	1938	(3)	
	Caterpillar feeds on small, stiff grasses (Gramineae) growing on sand. A possible vagrant from a Breckland or coastal colony.				
Gigantic water veneer (<i>Schoenobius gigantella</i>).					N/b
	Buckenham	K. G. S.	1994	(58)	
	Wheatfen	E. A. E.	1973	(3)	
		N. M. M.	1992	(13)	
	Caterpillar feeds in the stems of <i>Phragmites australis</i> and <i>Glyceria maxima</i> . Very local in large wet reed beds. Favoured by rotational management.				
<i>Schoenobius (=Donacaula) forficella</i>					Unknown
	Strumpshaw	D. J. P. M.	1986	(15)	
	Surlingham	K. G. S.	1988	(13)	
	Wheatfen	T. N. D. P.	1971-2	(56)	
	Caterpillar feeds in rolled shoots of <i>Phragmites</i> , <i>Glyceria maxima</i> , and sedges (<i>Carex</i> spp.). A wetland moth.				
<i>Donacaula mucronellus</i>					Local
	Strumpshaw	D. J. P. M.	1986	(15)	
	Caterpillar feeds in rolled shoots of <i>Phragmites</i> , <i>Glyceria maxima</i> , and sedges (<i>Carex</i> spp.). A moth of southern wetlands.				
Water veneer (<i>Acentria nivea (=ephemerella)</i>).					Common
	Wheatfen	N. M. M.	1992	(13)	
	Caterpillar is aquatic and feeds on various aquatic plants. Pupates underwater and wingless female remains there.				
<i>Scoparia ambigualis</i>					Common
	Buckenham	K. G. S.	1994	(58)	
	Buckenham Carr	K. G. S.	1994	(58)	
	Strumpshaw	D. J. P. M.	1986	(15)	
	Wheatfen	M. J. D. C.	1936	(1)	
		N. M. M.	1992	(13)	
	Caterpillar probably feeds on mosses.				

<i>Scoparia basistrigalis</i>					Unknown
	Strumpshaw	D. J. P. M.	1986	(15)	
Caterpillar foodplant unknown. A woodland species.					
<i>Eudonia pallida</i>					Local
	Strumpshaw	D. J. P. M.	1986	(15)	
Caterpillar feeds on mosses or lichens in wetlands. Recorded in the Mid-Yare from meadows and fens.					
<i>Eudonia crataegella (=Dipleurina lacustrata)</i>					Unknown
	Strumpshaw	D. J. P. M.	1986	(15)	
	Wheatfen	M. J. D. C.	1938	(1)	
Caterpillar feeds on mosses.					
Brown china mark (<i>Nymphula (=Elophila) nymphaeata</i>).					Common
	Rockland	D. H.	1992	(53)	
	Strumpshaw	K. G. S.	1982	(18)	
		D. J. P. M.	1986	(15)	
	Wheatfen	T. N. D. P.	1971	(3)	
Caterpillar is aquatic and feeds on pondweeds.					
Ringed china mark (<i>Parapocynx (=Nymphula) stratiotata</i>).					Local
	Strumpshaw	P. D. W.	1979	(6)	
		D. J. P. M.	1986	(15)	
	Wheatfen	E. A. E.	1939	(3)	
		T. N. D. P.	1971	(3)	
Caterpillar is aquatic and feeds on pondweeds.					
Beautiful china mark (<i>Parapocynx (=Nymphula) stagnata</i>).					Unknown
	Wheatfen	N. M. M.	1991	(13)	
Caterpillar feeds in the stems of bur-reeds (<i>Sparganium spp.</i>) and occasionally other aquatics and emergents.					
Small china mark (<i>Cataclysta lemnata</i>).					Common
	Buckenham	K. G. S.	1994	(58)	
	Strumpshaw	D. J. P. M.	1986	(15)	
		P. W.	1994	(78)	
	Surlingham	K. G. S.	1988	(13)	
	Wheatfen	E. A. E.	1939	(3)	
		N. M. M.	1992	(13)	
Caterpillar is aquatic and feeds on duckweeds (<i>Lemna spp.</i>).					

Garden pebble (<i>Evergestis</i> (= <i>Mesographe</i>) <i>forficalis</i>).				Common
Coldham Hall	N. M. M.	1990	(13)	
Rockland	D. H.	1992	(53)	
	D. H.	1993	(53)	
Strumpshaw	D. J. P. M.	1986	(15)	
Wheatfen	E. A. E.	1938	(3)	
	T. N. D. P.	1971-2	(56)	

Caterpillar feeds on crucifers.

<i>Evergestis pallidata</i>				Local
Strumpshaw	D. J. P. M.	1986	(15)	
Surlingham	K. G. S.	1988	(13)	
Wheatfen	T. N. D. P.	1971	(3)	
	T. N. D. P.	1972	(3)	

Caterpillar feeds on crucifers. Recorded at Strumpshaw from woodland.

<i>Pyrausta purpuralis</i>				Unknown
Wheatfen	E. A. E.	1938	(3)	
	E. A. E.	1972	(3)	

Caterpillar feeds on corn mint (*Mentha arvensis*) and thyme (*Thymus spp.*).

<i>Sitochroa</i> (= <i>Loxostege</i>) <i>verticalis</i>				Local
Wheatfen	E. A. E.	1938	(3)	

Caterpillar feeds on a variety of herbaceous plants. Once common but presently rather scarce.

Small magpie (<i>Eurrhynx hortulata</i>).				Common
Coldham Hall	N. M. M.	1990	(13)	
	M. E. A. S.	1993		
Rockland	C. R.	1990-2	(53)	
	D. H.	1993	(53)	
Strumpshaw	R. G. P.	1984	(15)	
	P. W.	1994	(78)	
Wheatfen	E. A. E.	1937	(3)	
	N. M. M.	1991	(13)	

Caterpillar feeds on nettle (*Urtica dioica*) and occasionally on Labiatae species.

<i>Eurrhynx</i> (= <i>Perinephela</i>) <i>lancealis</i>				Common
Buckenham Carr	K. G. S.	1994	(58)	
Strumpshaw	D. J. P. M.	1986	(15)	
Wheatfen	T. N. D. P.	1971-2	(56)	
	N. M. M.	1991	(13)	

Caterpillar feeds on hemp agrimony (*Eupatorium cannabinum*).

Eurrhynx (=Phlyctaenia) coronata Unknown
 Rockland C.R. 1990-2 (53)
 Strumpshaw D.J.P.M. 1986 (15)
 Wheatfen T.N.D.P. 1971-2 (56)
 Caterpillar feeds on elder (*Sambucus nigra*).

Ebulea crocealis Unknown
 Wheatfen T.N.D.P. 1971-2 (56)
 Caterpillar feeds in the shoots of common fleabane (*Pulicaria dysenterica*) and ploughman's-spikenard (*Inula conyza*).

Opsibotys fuscalis Unknown
 Wheatfen E.A.E. 1939 (3)
 E.A.E. 1974 (3)
 Feeds in the flowers and seed capsules of yellow rattle (*Rhinanthus minor*) and common cow-wheat (*Melampyrum pratense*).

✓ Orange rayed pearl (*Nascia (=Pyrausta) cillialis*). N/a
 Buckenham K.G.S. 1994 (58)
 Strumpshaw D.J.P.M. 1986 (15)
 P.W. 1994 (78)
 Wheatfen T.N.D.P. 1971 (56)
 E.A.E. 1974 (3)
 Caterpillar feeds on large sedges (*Cladium* and *Carex spp.*). Recorded at Strumpshaw from meadows and woodland. Also recorded in 1972 by T. Peet. Very local in eastern fens. High water tables and the rotational management of areas of sedge will benefit this species.

Udea lutealis (=elutalis) Common
 Strumpshaw D.J.P.M. 1986 (15)
 Surlingham K.G.S. 1988 (13)
 Wheatfen T.N.D.P. 1971 (3)
 T.N.D.P. 1972 (3)
 Caterpillar feeds on a variety of herbaceous plants.

Udea olivalis Common
 Buckenham K.G.S. 1994 (58)
 Strumpshaw D.J.P.M. 1986 (15)
 P.W. 1994 (78)
 Wheatfen T.N.D.P. 1971 (3)
 N.M.M. 1991 (13)
 Caterpillar feeds on a variety of herbaceous plants.

Rush veneer (<i>Nomophila noctuella</i>).					Migrant
Wheatfen	T. N. D. P.	1971	(3)		
Caterpillar feeds on clover (<i>Trifolium spp.</i>) and occasionally knotgrass (<i>Polygonum aviculare</i>) or grasses (Gramineae). A common migrant.					
Mother-of-pearl (<i>Pleuroptya (=Sylepta) ruralis</i>).					Common
Coldham Hall	M. E. A. S.	1993			
Rockland	D. H.	1992	(53)		
	D. H.	1993	(53)		
Strumpshaw	R. G. P.	1984	(15)		
	M. E. A. S.	1993			
Surlingham	K. G. S.	1988	(13)		
S. Church Marsh	A. R. B.	1986	(14)		
	N. M. M.	1989	(13)		
Wheatfen	E. A. E.	1936	(3)		
	N. M. M.	1992	(13)		
Caterpillar feeds on nettles (<i>Urtica dioica</i>). Abundant in the Mid-Yare Valley.					
Gold triangle (<i>Hypsopygia costalis</i>).					Common
Strumpshaw	D. J. P. M.	1986	(15)		
Surlingham	K. G. S.	1988	(13)		
Wheatfen	E. A. E.	1936	(3)		
	E. A. E.	1982	(3)		
Caterpillar feeds on dead leaves.					
<i>Orthopygia (=Herculia) glaucinalis</i>					Common
Rockland	D. H.	1992	(53)		
Strumpshaw	D. J. P. M.	1986	(15)		
Surlingham	K. G. S.	1988	(13)		
Caterpillar feeds on decaying plants.					
Meal moth (<i>Pyralis farinalis</i>).					Unknown
Wheatfen	E. A. E.	1936	(3)		
	E. A. E.	1976	(3)		
Caterpillar feeds on stored grain.					
Small tabby (<i>Aglossa caprealis</i>).					Local
Rockland	D. H.	1992	(53)		
Caterpillar feeds on vegetable debris.					
Large tabby (<i>Aglossa pinguinalis s. pinguinalis</i>).					Local
Rockland	D. H.	1993	(53)		
Wheatfen	E. A. E.	1937	(3)		
	T. N. D. P.	1971	(3)		
Caterpillar feeds on vegetable debris.					

<i>Endotricha flammealis</i>					Common
	Strumpshaw	D.J.P.M.	1986	(15)	
Caterpillar feeds on greater bird's-foot trefoil (<i>Lotus uliginosus</i>).					
Bee moth (<i>Aphomia sociella</i>).					Common
	Rockland	E.A.E.	1961	(3)	
	Strumpshaw	D.J.P.M.	1986	(15)	
	Wheatfen	T.N.D.P.	1971	(3)	
		E.A.E.	1973	(3)	
Caterpillar lives in bees and wasps nests and feeds on detritus, comb and brood.					
<i>Eurhodope (=Numonia) advenella</i>					Local
	Surlingham	K.G.S.	1988	(13)	
	Wheatfen	T.N.D.P.	1971	(56)	
Caterpillar feeds on hawthorn (<i>Crataegus spp.</i>) and rowan (<i>Sorbus aucuparia</i>). Occurs most commonly in old, uncut hedges.					
<i>Oncocera (=Pempelia) formosa</i>					N/b
	Wheatfen	T.N.D.P.	1971-2	(56)	
Caterpillar feeds on elm (<i>Ulmus spp.</i>), usually in hedges. Local and south eastern.					
<i>Phycita roborella (=spissicella)</i>					Unknown
	Wheatfen	T.N.D.P.	1971	(3)	
Caterpillar feeds in the spun leaves of oak (<i>Quercus robur</i>).					
Thistle ermine (<i>Myelois cribrella</i>).					Local
	Wheatfen	T.N.D.P.	1972	(3)	
		N.M.M.	1992	(13)	
Caterpillar feeds in the heads of various thistles, hibernates in the stem. Locally common.					
<i>Euzophera pinguis</i>					Unknown
	Strumpshaw	D.J.P.M.	1986	(15)	
Caterpillar feeds under ash (<i>Fraxinus excelsior</i>) bark.					
✓ Large clouded knot-horn (<i>Homoeosoma nebulella</i>).					N/b
	Wheatfen	T.N.D.P.	1971-2	(56)	
Caterpillar feeds in the heads of common ragwort (<i>Senecio jacobaea</i>) and spear thistle (<i>Cirsium vulgare</i>). Benefits from headlands at the edges of fields, and lightly grazed rough pasture.					

Family PTEROPHORIDAE (Plume moths (micro-moths)).

<i>Buckleria paludum</i>					RDB 3
	Wheatfen	E. A. E.	1966	(3)	
Caterpillar feeds on sundew (<i>Drosera rotundifolia</i>). May have originated from sundews being grown by Ted Ellis at that time.					
<i>Stenoptilia bipunctidactyla</i>					Unknown
	Buckenham	K. G. S.	1994	(58)	
	Wheatfen	R. S.	1939	(1)	
Caterpillar feeds on scabious (<i>Scabiosa spp.</i>).					
White plume moth (<i>Pterophorus pentadactyla</i>).					Local
	Wheatfen	E. A. E.	1937	(3)	
		N. M. M.	1991	(13)	
Caterpillar feeds on bindweed (<i>Calystegia sepium</i>).					
<i>Adaina microdactyla</i>					Local
	Wheatfen	N. M. M.	1991	(13)	
		N. M. M.	1992	(13)	
Caterpillar feeds on the flowers and seed-heads of golden rod (<i>Solidago virgaurea</i>). Recorded from hemp agrimony (<i>Eupatorium cannabinum</i>).					
<i>Emmelina monodactyla</i>					Common
	Wheatfen	E. A. E.	1938	(3)	
		N. M. M.	1990	(13)	
Caterpillar feeds on a variety of plants.					

Family HESPERIIDAE (Skippers (butterflies)).

Small skipper (<i>Thymelicus sylvestris</i>).					Common
	Coldham Hall	A. R. B.	1986	(27)	
		A. R. B.	1988	(27)	
	Strumpshaw	K. G. S.	1982	(18)	
		M. B.	1989	(52)	
	Wheatfen	M. J. D. C.	1936	(1)	
		B. B. C. S.	1993	(60)	
Caterpillar feeds on tall grasses (Gramineae). Scarce in the Mid-Yare Valley.					
Essex skipper (<i>Thymelicus lineola</i>).					Local
	Coldham Hall	A. R. B.	1988	(27)	
		A. R. B.	1989	(27)	
	Wheatfen	B. A. C.	1938	(1)	
Caterpillar feeds on various tall grasses (Gramineae). Has a southern and eastern distribution in UK but is common on the continent.					

Large skipper (<i>Ochlodes venata s. faunus</i>),				Common
Buckenham	A. E. S. + M. N. P.	1993	(61)	
Coldham Hall	A. R. B.	1986	(27)	
	A. R. B.	1988	(27)	
Rockland	A. R. B.	1987	(27)	
Strumpshaw	K. G. S.	1982	(18)	
	M. E. A. S.	1993		
S. Church Marsh	M. I. W.	1985	(27)	
	A. R. B.	1990	(14)	
Wheatfen	M. J. D. C.	1936	(1)	
	A. R. B.	1987	(27)	

Caterpillar feeds on cock's foot (*Dactylis glomerata*) and occasionally false brome (*Brachypodium sylvaticum*).

Dingy skipper (<i>Erynnis tages</i>),				Local
Wheatfen	E. A. E.	1944	(1)	
	E. A. E.	1946	(1)	

Caterpillar feeds on bird's foot trefoil (*Lotus corniculatus*) and greater bird's foot trefoil (*L. uliginosus*).

Family PAPILIONIDAE (Swallowtail and apollo butterflies).

Swallowtail (<i>Papilio machaon s. britannicus</i>),				RDB 2
Brundall Marsh	E. A. E.	1950	(57)	
Coldham Hall	A. R. B.	1987	(27)	
Rockland	A. R. B.	1986	(27)	
	A. R. B.	1987	(14)	
Strumpshaw	E. A. E.	1950	(57)	
	M. E. A. S.	1994		
Surlingham	E. A. E.	1950	(57)	
	A. R. B.	1989	(27)	
S. Church Marsh	A. R. B.	1988	(27)	
Wheatfen	M. J. D. C.	1921	(1)	
	R. B.	1994		

Caterpillar feeds on milk parsley (*Peucedanum palustre*) and occasionally wild angelica (*Angelica sylvestris*). In Britain this species is restricted to the Norfolk Broads and the sub-species is endemic. The swallowtail is protected under schedule 5 of the 1981 Wildlife and Countryside Act. Although probably less common in the Mid-Yare than the other Broadland river systems, the area contains an internationally important population. The genetic importance is increased by the Mid-Yare population being geographically separated from the main population centre. A rare melanistic individual was found by Ted Ellis on Wheatfen in 1944 (1).

Family PIERIDAE (White and yellow butterflies).

Clouded yellow (<i>Colias croceus</i>).					Migrant
Rockland	D.H.	1990	(53)		
	D.H.	1992	(53)		
Strumpshaw	K.G.S.	1983	(18)		
Wheatfen	R.S.	1938	(1)		
	E.A.E.	1949	(1)		

Caterpillar feeds on leguminous plants. A migrant and transitory resident which does not survive English winters. Three records of single butterflies at Wheatfen (R.S. 1943 (1)) not listed above.

Pale clouded yellow (<i>Colias hyale</i>).					Migrant
Rockland	D.H.	1990	(53)		

Caterpillar feeds on leguminous plants. A rare migrant which does not survive English winters. A single specimen was recorded. This record requires confirmation due to possible confusion with the preceding species.

Brimstone (<i>Gonepteryx rhamni</i>).					Common
Coldham Hall	A.R.B.	1986	(27)		
Rockland	A.R.B.	1986	(27)		
	A.R.B.	1987	(14)		
Strumpshaw	M.G.	1961	(57)		
	M.B.	1990	(52)		
Surlingham	A.R.B.	1987	(27)		
	A.R.B.	1988	(27)		
S.Church Marsh	M.I.W.	1985	(27)		
	A.R.B.	1988	(14)		
Wheatfen	M.J.D.C.	1933	(1)		
	M.E.A.S.	1994			

Caterpillar feeds on buckthorn (*Rhamnus cathartica*) and alder buckthorn (*Frangula alnus*).

Large white (<i>Pieris brassicae</i>).					Common
Coldham Hall	A.R.B.	1986	(27)		
Rockland	A.R.B.	1986	(27)		
Strumpshaw	M.G.	1961	(57)		
	M.B.	1990	(52)		
Surlingham	A.R.B.	1987	(27)		
	A.R.B.	1988	(27)		
S.Church Marsh	M.I.W.	1985	(27)		
	A.R.B.	1990	(14)		
Wheatfen	M.J.D.C.	1933	(1)		
	B.B.C.S.	1993	(60)		

Caterpillar feeds on cabbages (*Brassicae* spp.).

Small white (<i>Pieris rapae</i>).				Common
Coldham Hall	A. R. B.	1986	(27)	
	R. M.	1988	(14)	
Rockland	A. R. B.	1986	(27)	
	Strumpshaw	M. G.	1961	(57)
Surlingham	M. B.	1990	(52)	
	A. R. B.	1987	(27)	
S. Church Marsh	A. R. B.	1988	(27)	
	M. I. W.	1985	(27)	
Wheatfen	M. P.	1990	(14)	
	M. J. D. C.	1928	(1)	
	M. E. A. S.	1994		

Caterpillar feeds on crucifers.

Green-veined white (<i>Pieris napi</i>).				Common
Buckenham	A. E. S. + M. N. P.	1993	(61)	
Coldham Hall	A. R. B.	1986	(27)	
	R. M.	1989	(14)	
Rockland	A. R. B.	1986	(27)	
	A. R. B.	1987	(14)	
Strumpshaw	M. G.	1961	(57)	
	M. B.	1990	(52)	
Surlingham	A. R. B.	1987	(27)	
	A. R. B.	1988	(27)	
S. Church Marsh	M. I. W.	1985	(27)	
	A. R. B.	1990	(14)	
Wheatfen	M. J. D. C.	1928	(1)	
	B. B. C. S.	1993	(60)	

Caterpillar feeds on crucifers. Found in damper habitats than the other whites.

Orange tip (<i>Anthocharis cardamines</i>).				Common
Coldham Hall	A. R. B.	1986	(27)	
	R. M.	1989	(14)	
Rockland	J. E. G.	1981	(57)	
	A. R. B.	1987	(14)	
Strumpshaw	M. G.	1961	(57)	
	M. B.	1990	(52)	
Surlingham	A. R. B.	1987	(27)	
	A. R. B.	1988	(27)	
S. Church Marsh	M. I. W.	1985	(27)	
	A. R. B.	1990	(14)	
Wheatfen	M. J. D. C.	1922	(1)	
	M. E. A. S.	1994		

Caterpillar feeds on lady's smock (*Cardamine pratensis*), garlic mustard (*Alliaria petiolata*), hedge mustard (*Sisymbrium altissimum*) and occasionally other crucifers.

Family LYCAENIDAE (Blues, coppers and hairstreaks (butterflies)).

Green hairstreak (*Callophrys rubi*). Local
 Strumpshaw M.B. 1989 (52)
 Wheatfen M.J.D.C. 1945 (1)

Caterpillar feeds on a variety of herbs and shrubs.
 Two single specimens were probably vagrants. However
 hairstreaks tend to be under-recorded and there may
 be a small colony in the Valley.

Purple hairstreak (*Quercusia (=Thecla) quercus*). Local
 Wheatfen M.J.D.C. 1937 (1)
 R.S. 1944 (1)

Caterpillar feeds on oak (*Quercus robur*). Regularly
 recorded at Wheatfen during the war years.

White-letter hairstreak (*Strymonidia w-album*). N/b

Caterpillar feeds on Elm (*Ulmus spp.*). This species
 is recorded as occurring at Strumpshaw by Cadbury
 (1990), despite being informed by A. Baker that
 there were no records from the reserve. Ted Ellis
 lists the species as occurring at Wheatfen in a
 hand written butterfly inventory compiled in the
 1950's, but includes no specific records. Without
 a specific record this butterfly should be removed
 from the reserve list. However, it may well have
 occurred in the past and could conceivably be
 present. A colony has recently been discovered
 higher up the Yare Valley.

Small copper (*Lycaena phalaeas*). Common

Coldham Hall	A.R.B.	1986	(27)
	A.R.B.	1988	(27)
Rockland	A.R.B.	1987	(27)
	A.R.B.	1988	(27)
Strumpshaw	M.G.	1961	(57)
	M.B.	1990	(52)
S.Church Marsh	A.R.B.	1986	(27)
	A.R.B.	1988	(27)
Wheatfen	M.J.D.C.	1933	(1)
	E.A.E.	1956	(3)

Caterpillar feeds on sorrel (*Rumex acetosa*) and
 sheeps sorrel (*Rumex acetosella*). Rather infrequent
 in the Mid-Yare.

Large copper (<i>Lycaena dispar s. batavus</i>).					Extinct
Wheatfen	E. A. E.	1949	(22)		
	E. A. E.	1951	(3)		
Caterpillar feeds on water dock (<i>Rumex hydrolapathum</i>). An attempt was made to introduce this species at Wheatfen. They bred successfully in 1949 and 1950, but no adults emerged in 1951. See text for more details. J. Cadbury (1990) refers to an introduction attempt at Strumpshaw in 1969, but this is probably a mistaken reference to the above event.					
Silver-studded blue (<i>Plebejus argus</i>).					N/b
Wheatfen	M. J. D. C.	1928	(1)		
Caterpillar feeds on various heathland plants. The single specimen was probably a vagrant from one of the Norfolk heathland sites.					
Common blue (<i>Polyommatus icarus</i>).					Common
Rockland	A. R. B.	1986	(27)		
	A. R. B.	1988	(27)		
Strumpshaw	M. G.	1961	(57)		
	M. E. A. S.	1993			
Wheatfen	E. A. E.	1940	(1)		
	E. A. E.	1949	(3)		
Caterpillar feeds on bird's foot trefoil (<i>Lotus corniculatus</i>) and greater bird's foot trefoil (<i>L. uliginosus</i>). Rather uncommon in the Mid-Yare Valley.					
Holly blue (<i>Celastrina argiolus</i>).					Local
Strumpshaw	M. B.	1985	(52)		
	M. E. A. S.	1993			
Surlingham	A. R. B.	1987	(14)		
S. Church Marsh	M. I. W.	1985	(27)		
	A. R. B.	1986	(27)		
Wheatfen	M. J. D. C.	1939	(1)		
	B. B. C. S.	1993	(60)		
Caterpillar feeds on mainly on holly (<i>Ilex aquifolium</i>) in spring and ivy (<i>Hedera helix</i>) in summer.					

Family NYMPHALIDAE (Admirals, tortoiseshells and allied butterflies).

White admiral (*Ladoga camilla*).

Buckenham	A.E.S.+M.N.P.	1993	(61)
Buckenham Carr	J.C.	1990	
	J.C.	1994	
Wheatfen	E.A.E.	1936	(1)
	E.A.E.	1953	(1)

Strumpshaw 1996 MEAS
Local

Caterpillar feeds on honeysuckle (*Lonicera periclymenum*). Caterpillars found at Wheatfen 1949 and colony still going strong in 1953 (1). This woodland butterfly is now scarce in East Anglia, and extinct in the Mid-Yare except for the colony in Buckenham Carr. Due to a historic lack of recording it is difficult to ascertain if this colony is relict or recent. The butterfly has recently been recorded from several new Norfolk sites (R. Rogers pers. comm.) and may be in the process of recolonising the Mid-Yare.

Red admiral (*Vanessa atalanta*).

Coldham Hall	A.R.B.	1986	(27)
Rockland	A.R.B.	1986	(27)
Strumpshaw	M.B.	1976	(52)
	M.E.A.S.	1993	
Surlingham	A.R.B.	1987	(27)
	A.R.B.	1988	(27)
S.Church Marsh	M.I.W.	1985	(27)
	D.A.S.et al.	1993	(61)
Wheatfen	M.J.D.C.	1921	(1)
	B.B.C.S.	1993	(60)

Migrant

Caterpillar feeds on nettles (*Urtica spp.*).

Painted lady (*Cynthia cardui*).

Coldham Hall	A.R.B.	1986	(27)
Rockland	A.R.B.	1986	(27)
Strumpshaw	M.B.	1976	(52)
	M.B.	1990	(52)
Surlingham	A.R.B.	1987	(27)
	A.R.B.	1988	(27)
S.Church Marsh	M.I.W.	1985	(27)
	A.R.B.	1987	(14)
Wheatfen	M.J.D.C.	1939	(1)
	E.A.E.	1964	(3)

Migrant

Caterpillar feeds on thistles (*Cirsium* and *Carduus spp.*). A regular and often abundant migrant from N. Africa.

Small tortoiseshell (<i>Agais urticae</i>).				Common
Coldham Hall	A. R. B.	1986	(27)	
	R. M.	1988	(14)	
Rockland	A. R. B.	1986	(27)	
Strumpshaw	M. G.	1961	(57)	
	M. E. A. S.	1993		
Surlingham	A. R. B.	1987	(27)	
	A. R. B.	1988	(27)	
S. Church Marsh	M. I. W.	1985	(27)	
	D. A. S. et al.	1993	(61)	
Wheatfen	E. A. E.	1937	(1)	
	M. E. A. S.	1994		

Caterpillar feeds on nettles (*Urtica spp.*).

Large tortoiseshell (<i>Nymphalis polychloros</i>).				RDB 1
Wheatfen	R. S.	1942	(1)	
	R. S.	1945	(1)	

Caterpillar feeds on elms (*Ulmus spp.*). As well as the above single records four individuals were recorded in 1944 by R. Sewell and M. Cockle. The 1940's were the last period of abundance for this butterfly which is now assumed to be extinct in GB.

Camberwell beauty (<i>Nymphalis antiopa</i>).				Migrant
Wheatfen	E. A. E.	1958	(3)	
A single specimen in Ted Ellis's care escaped at Wheatfen on 17. Aug.				

Peacock (<i>Inachis io</i>).				Common
Coldham Hall	A. R. B.	1986	(27)	
	A. R. B.	1987	(27)	
Rockland	A. R. B.	1986	(27)	
Strumpshaw	M. G.	1961	(57)	
	M. E. A. S.	1993		
Surlingham	A. R. B.	1988	(27)	
S. Church Marsh	M. I. W.	1985	(27)	
	A. R. B.	1990	(14)	
Wheatfen	M. J. D. C.	1923	(1)	
	M. E. A. S.	1994		

Caterpillar feeds on nettle (*Urtica dioica*).

Comma (<i>Polygonia c-album</i>).				Common
Buckenham	A. E. S. +M. N. P.	1993	(61)	
Coldham Hall	A. R. B.	1986	(27)	
Rockland	A. R. B.	1986	(27)	
	A. R. B.	1987	(27)	
Strumpshaw	K. G. S.	1982	(18)	
	M. E. A. S.	1993		
Surlingham	A. R. B.	1987	(27)	
	A. R. B.	1988	(27)	
S. Church Marsh	M. I. W.	1985	(27)	
	A. R. B.	1990	(14)	
Wheatfen	R. S.	1938	(1)	
	A. R. B.	1987	(14)	

Caterpillar feeds on hop (*Humulus lupulus*), nettle (*Urtica spp.*) and elm (*Ulmus spp.*). Rare in UK during late 19th and early 20th century but has since recovered.

Pearl-bordered fritillary (<i>Boloria euphrosyne</i>).				Local
Strumpshaw	M. B.	1983	(52)	
	M. B.	1990	(52)	

Caterpillar feeds on common dog violet (*Viola riviniana*) and marsh violet (*Viola palustris*). This species is practically extinct in East Anglia. The four specimens in 1983 and one in 1990 are almost certainly vagrants.

High brown fritillary (<i>Argynnis adippe</i>).				RDB 2
Wheatfen	E. A. E.	1949	(3)	

Caterpillars feed on common dog violet (*Viola riviniana*). A vagrant from another site. In the late 1930's to mid-50's this species was locally common. It is now rare and extinct in eastern England.

Dark green fritillary (<i>Argynnis aglaja</i>).				Local
Strumpshaw	M. B.	1987	(52)	
Wheatfen	E. A. E.	1956	(3)	

Caterpillar feeds on violets (*Viola spp.*). The single specimen at Strumpshaw was probably a vagrant from one of the colonies on the Norfolk coast. The Wheatfen record arises from larvae collected at Horsey which were reared by Ted Ellis and then released.

Silver-washed fritillary (*Argynnis paphia*). Local
 Wheatfen B. A. C. 1938 (1)
 E. A. E. 1949 (1)

Caterpillar feeds on *Viola* spp. especially common dog violet (*Viola riviniana*). Three specimens of this species were recorded in 1938 and 1 in 1949. Although there was probably a colony during the thirties this species is now extinct in the Mid-Yare and has almost disappeared from East Anglia.

Marsh fritillary (*Eurodryas aurinia*). N/b
 Strumpshaw B. W. 1986

Caterpillar feeds on devil's bit scabious (*Succisa pratensis*). An introduction attempt by the British Butterfly Conservation Society using 300 larvae and 70 pupae in compartments 30 and 31 failed. See text for more details.

Family SATYRIDAE (Brown butterflies).

Speckled wood (*Pararge aegeria*). Common
 Strumpshaw M. B. 1987 (52)
 M. B. 1989 (52)

Caterpillar feeds on soft grass blades in woodland such as cock's foot (*Dactylis glomerata*) and couch (*Agropyron repens*). There was a spectacular dispersal of this species in 1986 and these records are probably descendants of the butterflies involved in this event. Whether the Mid-Yare Valley has been successfully colonised remains to be seen.

Wall brown (*Lasiommata megera*). Common
 Rockland J. E. G. 1981 (57)
 A. R. B. 1988 (27)
 Strumpshaw M. G. 1961 (57)
 M. E. A. S. 1993
 S. Church Marsh M. I. W. 1985 (27)
 A. R. B. 1990 (14)
 Wheatfen M. J. D. C. 1928 (1)
 B. B. C. S. 1993 (60)

Caterpillar feeds on coarse grasses (Gramineae).

Grayling (*Hipparchia semele*). Local
 Claxton R. S. 1944 (1)
 Wheatfen E. A. E. 1944 (1)

Caterpillar feeds on fine grasses (Gramineae). Always encountered singularly, probably as a vagrant from coastal sites.

Gatekeeper/hedge brown (<i>Pyronia tithonus</i>).				Common
Buckenham	M.E.A.S.	1993		
Coldham Hall	A.R.B.	1986	(27)	
Rockland	A.R.B.	1986	(27)	
Strumpshaw	M.G.	1961	(57)	
	M.E.A.S.	1993		
Surlingham	A.R.B.	1987	(27)	
	A.R.B.	1988	(27)	
S.Church Marsh	M.I.W.	1985	(27)	
	A.R.B.	1990	(14)	
Wheatfen	M.J.D.C.	1928	(1)	
	B.B.C.S.	1993	(60)	

Caterpillar feeds on various grasses (Gramineae)

Meadow brown (<i>Maniola jurtina</i>).				Common
Buckenham	M.E.A.S.	1993		
Coldham Hall	A.R.B.	1986	(27)	
	R.M.	1988	(14)	
Rockland	A.R.B.	1986	(27)	
	A.R.B.	1988	(27)	
Strumpshaw	M.G.	1961	(57)	
	M.E.A.S.	1993		
S.Church Marsh	M.I.W.	1985	(27)	
	D.A.S. et al.	1993	(61)	
Wheatfen	M.J.D.C.	1928	(1)	
	B.B.C.S.	1993	(60)	

Caterpillar feeds on grasses (Gramineae) with medium width blades.

Small heath (<i>Coenonympha pamphilus</i>).				Common
Coldham Hall	A.R.B.	1986	(27)	
	A.R.B.	1988	(27)	
Rockland	A.R.B.	1986	(27)	
	A.R.B.	1988	(27)	
Strumpshaw	K.G.S.	1982	(18)	
	M.B.	1990	(52)	
S.Church Marsh	A.R.B.	1990	(14)	
Wheatfen	M.J.D.C.	1936	(1)	
	E.A.E.	1949	(3)	

Caterpillar feeds on fescues (*Festuca spp.*) and bents (*Agrotis spp.*). Not very common in the Mid-Yare Valley.

Ringlet (<i>Aphantopus hyperantus</i>).				Common
Buckenham	M. E. A. S.	1993		
Coldham Hall	A. R. B.	1986	(27)	
	A. R. B.	1988	(27)	
Rockland	A. R. B.	1986	(27)	
Strumpshaw	M. B.	1984	(52)	
	M. E. A. S.	1993		
S. Church Marsh	M. I. W.	1985	(27)	
	A. R. B.	1990	(14)	
Wheatfen	M. J. D. C.	1921	(1)	
	A. R. B.	1987	(14)	

Caterpillar feeds on grasses growing in damp habitats.

Family LASIOCAMPIDAE (Eggars and allies (moths)).

December moth (<i>Poecillocampa populi</i>).				Common
Rockland	D. H.	1992	(53)	
Strumpshaw	R. G. P.	1984	(15)	
	M. E. A. S.	1993		
Wheatfen	E. A. E.	1957	(3)	
	E. A. E.	1981	(3)	

Caterpillar feeds on deciduous trees.

✓ Pale (oak) eggar (<i>Trichiura crataegi</i>).				Common
Wheatfen	R. C. D.	1970	(3)	
	T. N. D. P.	1971	(3)	

Caterpillar feeds on blackthorn (*Prunus spinosa*), hawthorn (*Crataegus spp.*), birch (*Betula pendula*) and other trees and shrubs.

✓ Small eggar (<i>Eriogaster lanestris</i>).				RDB 3
Claxton	E. A. E.	1980	(3)	(N/b)

Caterpillar feeds on blackthorn (*Prunus spinosa*) and hawthorn (*Crataegus spp.*). Formerly widespread, but due to pollution and hedge removal is now rare. Pupa overwinter for up to seven years.

✓ The lackey (<i>Malacosoma neustria</i>).				Common
Rockland	D. H.	1992	(53)	
Strumpshaw	K. L.	1983	(59)	
Wheatfen	E. A. E.	1937	(3)	
	N. M. M.	1992	(13)	

Caterpillar feeds on trees and shrubs.

- ✓ Ground lackey (*Malacosoma castrensis*). RDB 3
 Wheatfen J. A. R. 1945 (3)
 Caterpillar feeds on sea plantain (*Plantago maritima*), common sea-lavender (*Limonium vulgare*), sea wormwood (*Artemisia maritima*) and other salt marsh plants. Very local in southeast England. This single specimen may have been a vagrant from the Suffolk coast.
- Oak eggar (*Lasiocampa quercus s. quercus*). Common
 Strumpshaw A. J. W. 1991 (12)
 Wheatfen E. A. E. 1939 (1)
 Caterpillar feeds on trees and shrubs.
- Drinker (*Philudoria potatoaria*). Common
 Buckenham M. E. A. S. 1993
 Coldham Hall N. M. M. 1990 (13)
 Rockland D. H. 1992 (53)
 Strumpshaw K. G. S. 1982 (18)
 P. W. 1994 (78)
 Surlingham P. W. + A. G. I. 1987 (18)
 K. G. S. 1988 (13)
 S. Church Marsh N. M. M. 1989 (13)
 Wheatfen M. J. D. C. 1933 (1)
 N. M. M. 1992 (13)
 Caterpillar feeds on grasses (Gramineae). Recorded on *Phragmites australis* and *Glyceria maxima* at Wheatfen (1). Common in the Mid-Yare.
- The lappet (*Gastropacha quercifolia*). Common
 Wheatfen T. N. D. P. 1972 (3)
 Caterpillar feeds on blackthorn (*Prunus spinosa*), hawthorn (*Crataegus spp.*), buckthorn (*Rhamnus catharticus*) and occasionally apple (*Malus spp.*).
- Family SATURNIIDAE (Silk moths (moths)).
- Emperor moth (*Pavonia (=Saturnia) paviona*). Common
 Strumpshaw A. J. W. 1991 (12)
 Wheatfen R. S. 1935 (1)
 T. N. D. P. 1972 (3)
 Caterpillar normally feeds on shrubs. At Wheatfen recorded on *Spiraea ulmaria*. Often found on meadowsweet (*Filipendula ulmaria*) in the Broads (K. Saul pers. comm.).

Family DREPANIDAE (Hooktips (moths)).

Scalloped hooktip (<i>Falcaria lacertinaria</i>).				Common
Rockland	D.H.	1992	(53)	
Strumpshaw	A.J.W.	1991	(12)	
Wheatfen	T.N.D.P.	1971	(3)	
	T.N.D.P.	1972	(3)	

Caterpillar feeds on birch (*Betula pendula*).

Oak hooktip (<i>Drepana binaria</i>).				Common
Rockland	D.H.	1992	(53)	
Strumpshaw	K.L.	1983	(59)	
	A.J.W.	1991	(12)	
Surlingham	K.G.S.	1988	(13)	
Wheatfen	T.N.D.P.	1971	(3)	
	N.M.M.	1992	(13)	

Caterpillar feeds on oak (*Quercus robur*).

Pebble hooktip (<i>Drepana falcataria</i>).				Common
Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
Surlingham	K.G.S.	1988	(13)	
S.Church Marsh	N.M.M.	1989	(13)	
Wheatfen	M.J.D.C.	1939	(1)	
	N.M.M.	1992	(13)	

Caterpillar feeds on birch (*Betula pendula*) and alder (*Alnus glutinosa*).

Chinese character (<i>Cilix glaucata</i>).				Common
Rockland	C.R.	1990-2	(53)	
Strumpshaw	R.G.P.	1986	(15)	
	A.J.W.	1991	(12)	
Surlingham	K.G.S.	1988	(13)	
Wheatfen	E.A.E.	1936	(3)	
	N.M.M.	1992	(13)	

Caterpillar feeds on hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*) and sometimes other members of the Rosaceae family.

Family THYRATIRIDAE (Lutestrings and allies (moths)).

Peach blossom (<i>Thyatira batis</i>).				Common
Buckenham Carr	K.G.S.	1994	(58)	
Strumpshaw	K.L.	1983	(59)	
	A.J.W.	1991	(12)	
Wheatfen	T.N.D.P.	1972	(3)	

Caterpillar feeds on bramble (*Rubus spp.*).

Buff arches (*Habrosyne pyritoides*). Common

Rockland	C. R.	1990-2	(53)	
	D. H.	1993	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Surlingham	K. G. S.	1988	(13)	
Wheatfen	A. G. B. R.	1937	(1)	
	N. M. M.	1992	(13)	

Caterpillar feeds on bramble (*Rubus spp.*).

Figure of eighty (*Tethea ocularis s. octogesimea*). Common

Cantley	R. Dyke	1994	(78)	
Rockland	D. H.	1993	(53)	
Strumpshaw	R. G. P.	1985	(15)	
	R. G. P.	1986	(15)	
Wheatfen	E. A. E.	1971	(3)	
	W. M. W.	1989	(13)	

Caterpillar feeds poplar (*Populus spp.*) and aspen (*Populus tremula*).

Common lutestring (*Ochropacha duplaris*). Common

Rockland	D. H.	1993	(53)	
Strumpshaw	R. G. P.	1985	(15)	
	A. J. W.	1991	(12)	

Caterpillar feeds on oak (*Quercus robur*), birch (*Betula pendula*) and alder (*Alnus glutinosa*).

Frosted green (*Polyploca ridens*). Local

Strumpshaw	R. G. P.	1986	(15)	
Wheatfen	T. N. D. P.	1972	(56)	

Caterpillar feeds on oak (*Quercus robur*). Rather uncommon in mature oak woodland and apparently rare in the Mid-Yare Valley.

Family GEOMETRIDAE (Geometrids (moths)).

March moth (*Alsophila aescularia*). Common

Strumpshaw	R. G. P.	1985	(15)	
	R. G. P.	1986	(15)	
Wheatfen	E. A. E.	1967	(3)	
	S. R. W.	1983	(3)	

Caterpillar feeds on a variety of deciduous trees. Female wingless.

Grass emerald (*Pseudoterpna pruinata s. atropunctaria*). Common

Wheatfen	T. N. D. P.	1972	(3)	
----------	-------------	------	-----	--

Caterpillar feeds on gorse (*Ulex spp.*), broom (*Cytistus scoparius*) and petty whin (*Genista angelica*).

Large emerald (<i>Geometra papilionaria</i>).				Common
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Surlingham	K. G. S.	1988	(13)	
Wheatfen	J. L. M.	1939	(1)	
	N. M. M.	1992	(13)	
Caterpillar feeds on birch (<i>Betula pendula</i>) and occasionally other deciduous trees.				
Blotched emerald (<i>Comibaena bajularia (=pustulata)</i>).				Local
Wheatfen	E. A. E.	1933	(1)	
	S. R. W.	1983	(3)	
Caterpillar feeds on oak (<i>Quercus robur</i>). Also recorded at Wheatfen by T. Peet in 1971 and 72.				
Common emerald (<i>Hemithea aestivaria</i>).				Common
Coldham Hall	N. M. M.	1990	(13)	
Rockland	C. R.	1990-2	(53)	
	D. H.	1993	(53)	
Strumpshaw	R. G. P.	1985	(15)	
	A. J. W.	1991	(12)	
Wheatfen	J. L. M.	1939	(1)	
	N. M. M.	1991	(13)	
Caterpillar feeds on deciduous trees and shrubs.				
Small grass emerald (<i>Chlorissa viridata</i>).				N/a
Wheatfen	E. A. E.	1976	(3)	
Caterpillar feeds on heather, birch (<i>Betula pendula</i>) and creeping willow (<i>Salix repens</i>). Very local and southern, found on heaths and in mossy places.				
Small emerald (<i>Hemistola chrysoprasaria</i>).				Local
Rockland	D. H.	1992	(53)	
Caterpillar feeds traveller's joy (<i>Clematis vitalba</i>).				
Little emerald (<i>Jodis lactearia</i>).				Common
Strumpshaw	A. J. W.	1991	(12)	
Wheatfen	E. A. E.	1939	(1)	
Caterpillar feeds on trees and shrubs.				
Maiden's blush (<i>Cyclophora punctaria</i>).				Local
Strumpshaw	A. J. W.	1991	(12)	
Caterpillar feeds on oak (<i>Quercus robur</i>) and occasionally birch (<i>Betula pendula</i>).				

✓	Blood-vein (<i>Timandra griseata</i>).				Common
	Buckenham	K. G. S.	1994	(58)	
	Coldham Hall	A. R. B.	1986	(14)	
		N. M. M.	1990	(13)	
	Rockland	D. H.	1992	(53)	
	Strumpshaw	K. L.	1983	(59)	
		A. J. W.	1991	(12)	
	S. Church Marsh	A. R. B.	1986	(14)	
	Wheatfen	E. A. E.	1936	(3)	
		N. M. M.	1991	(13)	
	Caterpillar feeds on members of the dock family (Polygonaceae).				
✓	Tawny wave (<i>Scopula rubiginata</i>)				RDB 3
	Strumpshaw	?	1983	(72)	
	Foodplant unknown. Confined to the Brecks and coastal sand dunes, almost certainly a vagrant from one of these areas.				
	Small blood-vein (<i>Scopula imitaria</i>).				Common
	Rockland	C. R.	1990-2	(53)	
	Strumpshaw	R. G. P.	1986	(15)	
		A. J. W.	1991	(12)	
	Wheatfen	M. J. D. C.	1937	(1)	
		N. M. M.	1992	(13)	
	Caterpillar feeds on privet (<i>Ligustrum vulgare</i>).				
	Lesser cream wave (<i>Scopula immutata</i>).				Local
	Cantley	R. Dyke	1994	(78)	
	Strumpshaw	K. L.	1983	(59)	
		A. J. W.	1991	(12)	
	Wheatfen	M. J. D. C.	1936	(1)	
		N. M. M.	1991	(13)	
	Caterpillar feeds on meadowsweet (<i>Filipendula ulmaria</i>) and common valerian (<i>Valeriana officinalis</i>). A local species restricted to wet meadows. Recorded as abundant at Wheatfen in the 1930's (3).				
	Cream wave (<i>Scopula floslactata s. floslactata</i>).				Local
	Buckenham	K. G. S.	1994	(58)	
	Strumpshaw	K. L.	1983	(59)	
		R. G. P.	1984	(15)	
	Wheatfen	E. A. E.	1937	(3)	
		E. A. E.	1974	(3)	
	Caterpillar feeds on a variety of low plants.				

Purple-bordered gold (<i>Idaea muricata</i>).					N/a
Strumpshaw	R. G. P.	1986	(15)		
Wheatfen	E. A. E.	1937	(1)		
	E. A. E.	1972	(3)		
Caterpillar feeds on marsh cinquefoil (<i>Potentilla palustris</i>). A very local and southern day-flying species. Infrequent in the Mid-Yare.					
Small fan-footed wave (<i>Idaea biselata</i>).					Common
Strumpshaw	R. G. P.	1984	(15)		
	A. J. W.	1991	(12)		
Wheatfen	J. L. M.	1939	(1)		
	N. M. M.	1991	(13)		
Caterpillar feeds on various plants.					
Dwarf cream wave (<i>Idaea fuscovenosa</i>).					Local
Strumpshaw	A. J. W.	1991	(12)		
Caterpillar feeds on bramble (<i>Rubus spp.</i>) and dandelion (<i>Taraxacum spp.</i>).					
Small dusty wave (<i>Idaea seriata</i>).					Common
Rockland	C. R.	1990-2	(53)		
Strumpshaw	R. G. P.	1986	(15)		
	A. J. W.	1991	(12)		
Wheatfen	M. J. D. C.	1938	(1)		
	T. N. D. P.	1971-2	(56)		
Caterpillar feeds on Ivy (<i>Hedera helix</i>).					
Single-dotted wave (<i>Idaea dimidiata</i>).					Common
Coldham Hall	N. M. M.	1990	(13)		
Rockland	C. R.	1990-2	(53)		
Strumpshaw	K. L.	1983	(59)		
	A. J. W.	1991	(12)		
Wheatfen	E. T. D.	1938	(1)		
	N. M. M.	1992	(13)		
Caterpillar feeds on cow parsley (<i>Anthriscus sylvestris</i>) and burnet saxifrage (<i>Pimpinella saxifraga</i>).					
Treble brown spot (<i>Idaea trigeminata</i>).					Local
Strumpshaw	R. G. P.	1985	(15)		
	A. J. W.	1991	(12)		
Caterpillar feeds on various low plants. When first recorded, this was only the second known site in Norfolk, the other being higher up the Yare valley in the grounds of UEA. It is now quite widespread.					

Small scallop (<i>Idaea emarginata</i>).					Local
	Rockland	D.H.	1992	(53)	
	Strumpshaw	K.L.	1983	(59)	
		A.J.W.	1991	(12)	
	Wheatfen	J.L.M.	1939	(1)	
		N.M.M.	1992	(13)	

Caterpillar feeds on bedstraws (*Galium spp.*). A local species restricted to fens and wet meadows.

Riband wave (<i>Idaea aversata</i>).					Common
	Buckenham Carr	K.G.S.	1994	(58)	
	Coldham Hall	N.M.M.	1990	(13)	
	Rockland	D.H.	1992	(53)	
		D.H.	1993	(53)	
	Strumpshaw	K.L.	1983	(59)	
		A.J.W.	1991	(12)	
	Surlingham	K.G.S.	1988	(13)	
	S.Church Marsh	N.M.M.	1989	(13)	
	Wheatfen	T.N.D.P.	1971	(3)	
		N.M.M.	1992	(13)	

Caterpillar feeds on various low plants. Common in Mid-Yare most years.

✓ Oblique carpet (<i>Orthonama vittata</i>).					Local
	Strumpshaw	R.G.P.	1984	(15)	
		A.J.W.	1991	(12)	
	S.Church Marsh	N.M.M.	1989	(13)	
	Wheatfen	B.A.C.	1938	(3)	
		T.N.D.P.	1972	(3)	

Caterpillar feeds on bedstraws (*Galium spp.*), growing in marshy or fenland areas.

✓ Balsam carpet (<i>Xanthorhoe biriviata</i>).					RDB 3 (N/a)
	Strumpshaw	A.J.W.	1991	(12)	
	Surl. Broad	A.P.F.	1991	(62)	
	Wheatfen	N.M.M.	1991	(13)	
		M.E.A.S.	1994		

Caterpillar feeds on orange balsam (*Impatiens capensis*) growing in lightly wooded water meadows. Only the second Norfolk record of this moth. A very local species which is a recent addition to the Mid-Yare fauna. As long as the naturalised balsam continues to flourish here, this species should also do well. It has also been found in the Ant marshes, but the Yare marshes are its Norfolk stronghold (K. Saul pers. comm.). Whether it will spread to new sites and/or limit the spread of orange balsam remains to be seen. Recorded in some numbers, flying in sunshine (c.2-3 o'clock) on April 27 1994.

Flame carpet (*Xanthorhoe designata*). Common

Strumpshaw	R. G. P.	1985	(15)
	A. J. W.	1991	(12)
S. Church Marsh	A. R. B.	1986	(14)
Wheatfen	E. T. D.	1938	(1)
	S. R. W.	1984	(3)

Caterpillar feeds on members of the family Cruciferae.

Red twin-spot carpet (*Xanthorhoe spadicearia*). Common

Rockland	C. R.	1990-2	(53)
Strumpshaw	R. G. P.	1984	(15)
	A. J. W.	1991	(12)
Surlingham	P. W. + A. G. I.	1987	(18)
	K. G. S.	1988	(13)
S. Church Marsh	N. M. M.	1989	(13)
Wheatfen	M. J. D. C.	1938	(1)
	T. N. D. P.	1971	(3)

Caterpillar feeds on bedstraws (*Galium spp.*).

✓ Dark-barred twin-spot carpet (*Xanthorhoe ferrugata*). Common

Rockland	C. R.	1990-2	(53)
Strumpshaw	R. G. P.	1984	(15)
	A. J. W.	1991	(12)
Surlingham	P. W. + A. G. I.	1987	(18)
	K. G. S.	1988	(13)
S. Church Marsh	N. M. M.	1989	(13)
Wheatfen	M. J. D. C.	1938	(1)
	E. A. E.	1982	(3)

Caterpillar feeds on low plants.

Large twin-spot carpet (*Xanthorhoe quadrifasiata*). Local

Strumpshaw	R. G. P.	1984	(15)
	P. W.	1994	(78)
Surlingham	P. W.	1987	(61)
	K. G. S.	1988	(13)
Wheatfen	N. M. M.	1992	(13)

Caterpillar feeds on bedstraws (*Galium spp.*) and other plants. A woodland species.

Silver-ground carpet (<i>Xanthorhoe montanata</i>).				Common
Buckenham Carr	K. G. S.	1994	(58)	
Coldham Hall	A. R. B.	1986	(14)	
Rockland	C. R.	1990-2	(53)	
Strumpshaw	K. G. S.	1982	(18)	
	P. W.	1994	(78)	
Wheatfen	E. A. E.	1939	(1)	
	E. A. E.	1986	(3)	

Caterpillar feeds on bedstraws (*Galium spp.*) and primrose (*Primula vulgaris*). Abundant in Mid-Yare and under represented at light.

Garden carpet (<i>Xanthorhoe fluctuata</i>).				Common
Rockland	D. H.	1992	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
S. Church Marsh	A. R. B.	1986	(14)	
Wheatfen	M. J. D. C.	1938	(1)	
	N. M. M.	1990	(13)	

Caterpillar feeds on crucifers.

✓	Shaded broad-bar (<i>Scotopteryx chenopodiata</i>).				Common
	Strumpshaw	R. G. P.	1984	(15)	
		A. J. W.	1991	(12)	
	Surlingham	P. W. + A. G. I.	1987	(18)	
		K. G. S.	1988	(13)	
	Wheatfen	M. J. D. C.	1936	(1)	
		B. B. C. S.	1993	(60)	

Caterpillar feeds on vetches (*Vicia spp.*) and clovers (*Trifolium spp.*).

Common carpet (<i>Epirrhoe alternata s. alternata</i>).				Common
Buckenham Carr	K. G. S.	1994	(58)	
Coldham Hall	A. R. B.	1986	(14)	
	N. M. M.	1990	(13)	
Rockland	D. H.	1992	(53)	
	D. H.	1993	(53)	
Strumpshaw	R. G. P.	1984	(15)	
	A. J. W.	1991	(12)	
Surlingham	P. W. + A. G. I.	1987	(18)	
	K. G. S.	1988	(13)	
S. Church Marsh	A. R. B.	1986	(14)	
	N. M. M.	1989	(13)	
Wheatfen	M. J. D. C.	1936	(1)	
	N. M. M.	1992	(13)	

Caterpillar feeds on bedstraws (*Galium spp.*).

Wood carpet (<i>Epirrhoe rivata</i>).					Local
Wheatfen	E. A. E.	1982	(3)		
Caterpillar feeds on hedge and lady's bedstraw (<i>Galium mollugo</i> and <i>G. verum</i>).					
Galium carpet (<i>Epirrhoe galiata</i>).					Local
Rockland	D. H.	1992	(53)		
Caterpillar feeds on bedstraws (<i>Galium spp.</i>).					
Probably a mis-identification and therefore requires confirmation.					
Yellow shell (<i>Camptogramma bilineata s. bilineata</i>).					Common
Rockland	D. H.	1992	(53)		
Strumpshaw	R. G. P.	1986	(15)		
	R. H.	1994	(58)		
Surlingham	K. G. S.	1988	(13)		
S. Church Marsh	A. R. B.	1986	(14)		
Wheatfen	A. G. B. R.	1937	(1)		
	E. A. E.	1939	(1)		
Caterpillar feeds on low plants.					
The mallow (<i>Larentia clavaria</i>).					Common
Strumpshaw	A. J. W.	1991	(12)		
Caterpillar feeds on common mallow (<i>Malva sylvestris</i>) and marsh mallow (<i>Althaea officinalis</i>).					
A rather local species often recorded from marshes or river-banks.					
Shoulder stripe (<i>Anticlea badiata</i>).					Common
Strumpshaw	R. G. P.	1985	(15)		
	A. J. W.	1991	(12)		
Wheatfen	E. A. E.	1946	(1)		
	S. R. W.	1983	(3)		
Caterpillar feeds on roses (<i>Rosa spp.</i>); <i>Rosa canina</i> at Wheatfen (1).					
The streamer (<i>Anticlea derivata</i>).					Common
Strumpshaw	R. G. P.	1985	(15)		
	A. J. W.	1991	(12)		
Wheatfen	T. N. D. P.	1972	(3)		
	E. A. E.	1983	(3)		
Caterpillar feeds on roses (<i>Rosa spp.</i>).					
Beautiful carpet (<i>Mesoleuca albicillata</i>).					Common
Strumpshaw	R. G. P.	1986	(15)		
Wheatfen	J. L. M.	1939	(1)		
Caterpillar feeds on bramble (<i>Rubus spp.</i>).					

Dark spinach (<i>Pelurga comitata</i>).				Common
Surlingham	K.G.S.	1988	(13)	
Caterpillar feeds on goosefoot (<i>Chenopodium spp.</i>) and orache (<i>Atriplex spp.</i>).				
Water carpet (<i>Lampropteryx suffumata</i>).				Common
Strumpshaw	R.G.P.	1985	(15)	
	A.J.W.	1991	(12)	
Wheatfen	E.A.E.	1977	(3)	
Caterpillar feeds on bedstraw (<i>Galium spp.</i>).				
Purple bar (<i>Cosmorhoe ocellata</i>).				Common
Buckenham	C.H.	1994	(78)	
Rockland	C.R.	1990-2	(53)	
Wheatfen	E.A.E.	1982	(3)	
Caterpillar feeds on hedge bedstraw (<i>Galium mollugo</i>) and other <i>Galium spp.</i> .				
The phoenix (<i>Eulithis prunata</i>).				Common
Strumpshaw	A.J.W.	1991	(12)	
Wheatfen	S.R.W.	1983	(3)	
Caterpillar feeds on currants (<i>Ribes spp.</i>). Rather local.				
The chevron (<i>Eulithis testata</i>).				Common
Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
Surlingham	K.G.S.	1988	(13)	
Wheatfen	B.A.C.	1938	(1)	
	E.A.E.	1985	(3)	
Caterpillar feeds on <i>Salix spp.</i> , birch (<i>Betula pendula</i>) and alder (<i>Alnus glutinosa</i>). Wheatfen larvae recorded on <i>Salix spp.</i> and yellow loosestrife (<i>Lysimachia vulgaris</i>).				
The spinach (<i>Eulithis mellinata</i>).				Common
Strumpshaw	K.L.	1983	(59)	
	A.J.W.	1991	(12)	
Wheatfen	E.A.E.	1937	(1)	
	E.A.E.	1977	(3)	
Caterpillar feeds on currants (<i>Ribes spp.</i>).				
Barred straw (<i>Eulithis pyraliata</i>).				Common
Rockland	C.R.	1990-2	(53)	
Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
Wheatfen	E.A.E.	1937	(3)	
	N.M.M.	1992	(13)	
Caterpillar feeds on bedstraws (<i>Galium spp.</i>).				

✓ Small phoenix (<i>Ecliptopera silaceata</i>).				Common
Strumpshaw	K.L.	1983	(59)	
	A.J.W.	1991	(12)	
Surlingham	K.G.S.	1988	(13)	
S.Church Marsh	N.M.M.	1989	(13)	
Wheatfen	E.A.E.	1970	(3)	
	N.M.M.	1992	(13)	
Caterpillar feeds on willowherbs (<i>Epilobium spp.</i>).				
Autumn green carpet (<i>Chloroclysta miata</i>).				Local
Wheatfen	M.J.D.C.	1939	(1)	
Caterpillar feeds on willow (<i>Salix spp.</i>), rowan (<i>Sorbus aucuparia</i>) and other trees. Scarce in Norfolk during recent times.				
Dark marbled carpet (<i>Chloroclysta citrata s.citrata</i>).				Common
Strumpshaw	K.L.	1983	(59)	
	A.J.W.	1991	(12)	
Wheatfen	E.T.D.	1938	(1)	
	T.N.D.P.	1971	(3)	
Caterpillar feeds on willow (<i>Salix spp.</i>), birch (<i>Betula pendula</i>) and wild strawberry (<i>Fragaria vesca</i>). Occurs in woodland. Also recorded in 1986 at Strumpshaw by R.G. Pointer (15).				
Common marbled carpet (<i>Chloroclysta truncata</i>).				Common
Buckenham	K.G.S.	1994	(58)	
Strumpshaw	R.G.P.	1984	(15)	
	P.W.	1994	(78)	
Surlingham	K.G.S.	1988	(13)	
Wheatfen	B.A.C.	1938	(1)	
	N.M.M.	1990	(13)	
Caterpillar feeds on a variety of plants.				
Barred yellow (<i>Cidaria fulvata</i>).				Common
Coldham Hall	N.M.M.	1990	(13)	
Strumpshaw	R.G.P.	1986	(15)	
	A.J.W.	1991	(12)	
Wheatfen	W.M.W.	1989	(13)	
	N.M.M.	1991	(13)	
Caterpillar feeds on roses (<i>Rosa spp.</i>).				
Blue-bordered carpet (<i>Plemyria rubiginata s.rubiginata</i>).				Common
Rockland	C.R.	1990-2	(53)	
Strumpshaw	R.G.P.	1985	(15)	
Wheatfen	T.N.D.P.	1971	(3)	
Caterpillar feeds on alder (<i>Alnus glutinosa</i>), blackthorn (<i>Prunus spinosa</i>) and probably other trees.				

Grey pine carpet (<i>Thera obeliscata</i>).				Common
Strumpshaw	R.G.P.	1985	(15)	
	R.G.P.	1986	(15)	
Wheatfen	T.N.D.P.	1971-2	(56)	
Caterpillar feeds on conifers.				
Broken-barred carpet (<i>Electrophaes corylata</i>).				Common
Strumpshaw	A.J.W.	1991	(12)	
Wheatfen	M.J.D.C.	1939	(1)	
Caterpillar feeds on deciduous trees.				
Green carpet (<i>Colostygia pectinataria</i>).				Common
Strumpshaw	R.G.P.	1985	(15)	
	A.J.W.	1991	(12)	
Surlingham	K.G.S.	1988	(13)	
Wheatfen	T.N.D.P.	1971	(3)	
Caterpillar feeds on bedstraws (<i>Galium spp.</i>).				
July highflyer (<i>Hydriomena furcata</i>).				Common
Strumpshaw	K.L.	1983	(59)	
	A.J.W.	1991	(12)	
Wheatfen	M.J.D.C.	1936	(1)	
	N.M.M.	1992	(13)	
Caterpillar feeds on <i>Salix spp.</i> and hazel (<i>Corylus avellana</i>).				
May highflyer (<i>Hydriomena impluviata</i>).				Common
Buckenham	K.G.S.	1994	(58)	
Buckenham Carr	K.G.S.	1994	(58)	
Cantley	R.K.	1994	(78)	
Strumpshaw	R.G.P.	1985	(15)	
	P.W.	1994	(78)	
Wheatfen	M.J.D.C.	1938	(1)	
	K.C.D.	1970	(3)	
Caterpillar feeds on spun together alder (<i>Alnus glutinosa</i>) leaves.				
Scallop shell (<i>Rheumaptera undulata</i>).				Common
Strumpshaw	R.G.P.	1985	(15)	
	A.J.W.	1991	(12)	
Wheatfen	T.N.D.P.	1971	(3)	
Caterpillar feeds on <i>Salix spp.</i> and aspen (<i>Alnus glutinosa</i>).				
Scarce tissue (<i>Rheumaptera cervinalis</i>).				Common
Rockland	D.H.	1993	(53)	
Caterpillar feeds barberry (<i>Berberis vulgaris</i>) and cultivated members of this genus.				

The tissue (<i>Triphosa dubitata</i>),					Local
Wheatfen	B. A. C.	1938	(1)		
Caterpillar feeds on buckthorn (<i>Rhamnus catharticus</i>)					
and alder buckthorn (<i>Frangula alnus</i>).					
Dark umber (<i>Philereme transversata s. britannica</i>),					Local
Rockland	D. H.	1993	(53)		
Strumpshaw	R. G. P.	1986	(15)		
Wheatfen	M. J. D. C.	1938	(1)		
	N. M. M.	1992	(13)		
Caterpillar feeds on buckthorn (<i>Rhamnus catharticus</i>).					
November moth (<i>Epirrita dilutata</i>),					Common
Rockland	D. H.	1992	(53)		
Strumpshaw	R. G. P.	1984	(15)		
	A. J. W.	1991	(12)		
Wheatfen	E. A. E.	1936	(3)		
	E. A. E.	1979	(3)		
Caterpillar feeds on deciduous trees and shrubs.					
Pale november moth (<i>Epirrita christyi</i>),					Common
Strumpshaw	K. L.	1983	(59)		
Wheatfen	E. A. E.	1969	(3)		
	T. N. D. P.	1972	(56)		
Caterpillar feeds on various deciduous trees. The					
Strumpshaw record was unusually early (20 August).					
Autumnal moth (<i>Epirrita autumnata</i>),					Common
Rockland	C. R.	1990-2	(53)		
Strumpshaw	R. G. P.	1985	(15)		
	R. G. P.	1986	(15)		
Wheatfen	E. A. E.	1938	(3)		
Caterpillar feeds on birch (<i>Betula pendula</i>) and					
alder (<i>Alnus glutinosa</i>).					
Winter moth (<i>Operophtera brumata</i>),					Common
Rockland	D. H.	1992	(53)		
Strumpshaw	A. J. W.	1991	(12)		
Wheatfen	M. J. D. C.	1936	(1)		
	E. A. E.	1979	(3)		
Caterpillar feeds on many trees and shrubs.					
Northern winter moth (<i>Operophtera fagata</i>),					Common
Wheatfen	M. J. D. C.	1938	(1)		
	E. A. E.	1967	(3)		
Caterpillar feeds on birch (<i>Betula pendula</i>) and					
trees of the rose family.					

The rivulet (<i>Perizoma affinitata</i>).				Common
Strumpshaw	R.G.P.	1985	(15)	
	A.J.W.	1991	(12)	
Wheatfen	N.M.M.	1992	(13)	
Caterpillar lives in and feeds on the seed capsules of red campion (<i>Silene dioica</i>).				
Small rivulet (<i>Perizoma alchemillata</i>).				Common
Rockland	C.R.	1990-2	(53)	
	D.H.	1993	(53)	
Strumpshaw	R.G.P.	1986	(15)	
	R.H.	1994	(58)	
Surlingham	P.W.+A.G.I.	1987	(18)	
	K.G.S.	1988	(13)	
Wheatfen	A.G.B.R.	1937	(1)	
	T.N.D.P.	1971	(3)	
Caterpillar feeds on hemp-nettles (<i>Galeopsis spp.</i>).				
Grass rivulet (<i>Perizoma albulata s. albulata</i>).				Local
Wheatfen	E.A.E.	1939	(1)	
Caterpillar feeds on the ripening seeds of yellow rattle (<i>Rhinanthus minor</i>).				
Sandy carpet (<i>Perizoma flavofasciata</i>).				Common
Buckenham	K.G.S.	1994	(58)	
Buckenham Carr	K.G.S.	1994	(58)	
Rockland	D.H.	1993	(53)	
Strumpshaw	R.G.P.	1985	(15)	
	P.W.	1994	(78)	
Caterpillar lives in and feeds on the seed pods ofampions (<i>Silene spp.</i>).				
Twin-spot carpet (<i>Perizoma didymata s. didymata</i>).				Common
Buckenham	P.S.	1994	(78)	
Wheatfen	J.L.M.	1939	(1)	
	N.M.M.	1991	(13)	
Caterpillar feeds on a variety of low plants.				
Marsh carpet (<i>Perizoma sagittata</i>).				RDB 2 (N/a)
Strumpshaw	K.L.	1983	(59)	
	A.J.W.	1991	(12)	
Wheatfen	T.N.D.P.	1989		
Caterpillar feeds on the ripening seeds of meadow-rue (<i>Thalictrum flavum</i>) during August and September. This is a very local species, confined to fenland in the eastern counties. Even in the Mid-Yare it is only recorded in low numbers (typically single specimens). It was also recorded at Strumpshaw in 1984, 86 and 87. The Wheatfen record is of a caterpillar on meadow-rue (T. Peet pers. comm.).				

Toadflax pug (<i>Eupithecia linariata</i>).					Common
	Strumpshaw	A. J. W.	1991	(12)	
	Wheatfen	E. A. E.	1982	(3)	
Caterpillar lives in and feeds on the flowers and seed capsules of common toadflax (<i>Linaria vulgaris</i>).					
Mottled pug (<i>Eupithecia exiguata s. exiguata</i>).					Common
	Strumpshaw	A. J. W.	1991	(12)	
Caterpillar feeds on hawthorn (<i>Crataegus monogyna</i>), blackthorn (<i>Prunus spinosa</i>) and sycamore (<i>Acer pseudoplatanus</i>).					
Valerian pug (<i>Eupithecia valerianata</i>).					N/b
	Coldham Hall	N. M. M.	1990	(13)	
	Wheatfen	T. N. D. P.	1971-2	(56)	
Caterpillar feeds on flowers and ripening seeds of common valerian (<i>Valeriana officinalis</i>). Local, confined to damp woods, marshes and fens.					
Marsh pug (<i>Eupithecia pygmaeata</i>).					Local
	Strumpshaw	G. M. H.	1991	(12)	
	Wheatfen	M. J. D. C.	1939	(1)	
Caterpillar feeds on flowers and seed capsules of field mouse-ear (<i>Cerastium arvense</i>) in June and July. A rare, local species occurring at widely scattered sites. Recorded from cpt. 30.					
Lime-speck pug (<i>Eupithecia centaureata</i>).					Common
	Rockland	D. H.	1992	(53)	
	Strumpshaw	R. G. P.	1986	(15)	
		A. J. W.	1991	(12)	
	S. Church Marsh	N. M. M.	1989	(13)	
	Wheatfen	E. A. E.	1970	(3)	
		T. N. D. P.	1971-2	(56)	
Caterpillar feeds on many low plants.					
Triple-spotted pug (<i>Eupithecia trisignaria</i>).					Local
	Strumpshaw	A. J. W.	1991	(12)	
	Surlingham	K. G. S.	1988	(13)	
Caterpillar feeds on ripening seeds of wild angelica (<i>Angelica sylvestris</i>) and hog weed (<i>Heracleum spondylium</i>). Local, normally from marshy areas.					
Freyer's pug (<i>Eupithecia intricata s. arceuthata</i>).					Common
	Rockland	D. H.	1993	(53)	
Caterpillar feeds various species of cypress (<i>Cupressus spp.</i> and <i>Chamaecyparis spp.</i>). This pug has a southern distribution.					

Satyr pug (<i>Eupithecia satyrata s. satyrata</i>).					Common
	Buckenham	K.G.S.	1994	(58)	
Caterpillar most commonly feeds on meadowsweet (<i>Filipendula ulmaria</i>), but also on devils' bit scabious (<i>Succisa pratensis</i>) and knapweed (<i>Centaurea nigra</i>).					
Wormwood pug (<i>Eupithecia absinthiata</i>).					Common
	Strumpshaw	A.J.W.	1991	(12)	
	Wheatfen	N.M.M.	1991	(13)	
Caterpillar feeds on several Compositae species.					
Ling pug (<i>Eupithecia goossensiata</i>).					Local
	Strumpshaw	R.G.P.	1986	(15)	
Caterpillar feeds on heather flowers. A heath and moorland species. Probably a mis-identification (K. Saul pers. comm.).					
Currant pug (<i>Eupithecia assimilata</i>).					Common
	Rockland	C.R.	1990-2	(53)	
	Strumpshaw	R.G.P.	1985	(15)	
		A.J.W.	1991	(12)	
Caterpillar feeds on currants (<i>Ribes spp.</i>) and hop (<i>Humulus lupulus</i>).					
Common pug (<i>Eupithecia vulgata s. vulgata</i>).					Common
	Rockland	D.H.	1992	(53)	
	Strumpshaw	R.G.P.	1985	(15)	
		A.J.W.	1991	(12)	
	Wheatfen	M.J.D.C.	1938	(1)	
		S.R.W.	1983	(3)	
Caterpillar feeds on <i>Salix spp.</i> , composites and other plants.					
White-spotted pug (<i>Eupithecia tripunctaria</i>).					Local
	Strumpshaw	R.G.P.	1985	(15)	
		A.J.W.	1991	(12)	
	Surlingham	K.G.S.	1988	(13)	
Caterpillar feeds on elder (<i>Sambucus nigra</i>) flowers in July and on the seeds of wild angelica (<i>Angelica sylvestris</i>) and wild parsnip (<i>Pastinaca sativa</i>) later in the year.					
Grey pug (<i>Eupithecia subfuscata</i>).					Common
	Buckenham	K.G.S.	1994	(58)	
	Strumpshaw	A.J.W.	1991	(12)	
		R.H.	1994	(58)	
Caterpillar feeds on a wide variety of plants, including trees.					

Tawny speckled pug (<i>Eupithecia icterata s. subfulvata</i>).				Common
Rockland	C. R.	1990-2	(53)	
Strumpshaw	A. J. W.	1991	(12)	
Caterpillar feeds on yarrow (<i>Achillea millefolium</i>).				
Bordered pug (<i>Eupithecia succenturiata</i>).				Common
Rockland	C. R.	1990-2	(53)	
	D. H.	1993	(53)	
Wheatfen	W. M. W.	1989	(13)	
Caterpillar feeds on mugwort (<i>Artemisia vulgaris</i>).				
Shaded pug (<i>Eupithecia subumbrata</i>)				Local
Strumpshaw	P. W.	1994	(78)	
Caterpillar feeds on various herbaceous flower heads.				
Brindled pug (<i>Eupithecia abbreviata</i>).				Common
Strumpshaw	R. G. P.	1985	(15)	
	A. J. W.	1991	(12)	
Wheatfen	M. J. D. C.	1937	(1)	
	T. N. D. P.	1972	(3)	
Caterpillar feeds on oak (<i>Quercus robur</i>).				
Dwarf pug (<i>Eupithecia tantillaria</i>).				Common
Strumpshaw	G. M. H.	1991	(12)	
Caterpillar feeds on Norway spruce (<i>Picea abies</i>) and douglas fir (<i>Pseudotsuga menziesii</i>).				
The v-pug (<i>Chloroclystis v-ata</i>).				Common
Rockland	C. R.	1990-2	(53)	
Strumpshaw	R. G. P.	1986	(15)	
	A. J. W.	1991	(12)	
Surlingham	K. G. S.	1988	(13)	
Wheatfen	R. H.	1974	(3)	
	S. R. W.	1983	(3)	
Caterpillar feeds on a variety of plants.				
Green pug (<i>Chloroclystis rectangularata</i>).				Common
Rockland	D. H.	1993	(53)	
Strumpshaw	R. G. P.	1985	(15)	
Wheatfen	E. A. E.	1939	(3)	
	T. N. D. P.	1972	(3)	
Caterpillar feeds on trees in the rose family.				
Double-striped pug (<i>Gymnoscelis rufifasciata</i>).				Common
Strumpshaw	R. G. P.	1986	(15)	
	A. J. W.	1991	(12)	
Caterpillar feeds on the flowers of many plants.				

Dentated pug (<i>Anticollix sparsata</i>).					N/a
Strumpshaw	R.G.P.	1985	(15)		
	A.J.W.	1991	(12)		
Wheatfen	E.A.E.	1977	(3)		
	E.A.E.	1983	(3)		

Caterpillar feeds on the leaves and sometimes the flowers of yellow loosestrife (*Lysimachia vulgaris*). A very local species only found in fens or marshy areas. It is interesting that the above Strumpshaw records of the moth were in August and September. Generally, colonies are in flight during June and July (Skinner, 1984). There are however Strumpshaw records from June in 1986 and the Wheatfen records are from the 11th and 31st of July. This suggests a partial second brood.

The streak (<i>Chesias legatella</i>).					Common
Wheatfen	E.A.E.	1970	(3)		
	T.N.D.P.	1971	(3)		

Caterpillar feeds on broom (*Cytisus scoparius*). Single specimens trapped at Wheatfen.

Treble bar (<i>Aplocera plagiata s. plagiata</i>).					Common
Rockland	D.H.	1992	(53)		
Strumpshaw	R.G.P.	1986	(15)		
	A.J.W.	1991	(12)		
Wheatfen	M.J.D.C.	1939	(1)		

Caterpillar feeds on St. John's wort (*Hypericum spp.*).

Dingy shell (<i>Euchoeca nebulata</i>).					Local
Strumpshaw	R.G.P.	1986	(15)		
	A.J.W.	1991	(12)		
Wheatfen	E.A.E.	1939	(1)		

Caterpillar feeds on alder (*Alnus glutinosa*).

Small white wave (<i>Asthena albulata</i>).					Common
Buckenham Carr	K.G.S.	1994	(58)		
Coldham Hall	N.M.M.	1990	(13)		
Strumpshaw	A.J.W.	1991	(12)		

Caterpillar feeds on hazel (*Corylus avellana*) and birch (*Betula pendula*). Uncommon and often associated with ancient woodland.

Small yellow wave (<i>Hydrelia flammeolaria</i>).					Common
Strumpshaw	R.G.P.	1985	(15)		
	P.W.	1994	(78)		

Caterpillar feeds on maple (*Acer spp.*) and sometimes alder (*Alnus glutinosa*). Several records from Strumpshaw.

Seraphim (<i>Lobophora halterata</i>).				Local
Strumpshaw	R.G.P.	1985	(15)	
Caterpillar feeds on aspen (<i>Populus tremula</i>).				
Small seraphim (<i>Pterapherapteryx sexalata</i>).				Local
Buckenham Carr	K.G.S.	1994	(58)	
Cantley	R.K.	1994	(78)	
Coldham Hall	N.M.M.	1990	(13)	
Strumpshaw	T.N.D.P.	1973	(57)	
	P.W.	1994	(78)	
Caterpillar feeds on willow (<i>Salix spp.</i>). Uncommon and only occurs in southern marshes.				
Yellow-barred brindle (<i>Acasis viretata</i>).				Local
Strumpshaw	A.J.W.	1991	(12)	
Caterpillar feeds on holly (<i>Ilex aquifolium</i>), ivy (<i>Hedera helix</i>), privet (<i>Ligustrum vulgare</i>), dogwood (<i>Cornus sanguinea</i>) and guelder-rose (<i>Viburnum opulus</i>).				
Magpie (<i>Abraxas grossulariata</i>).				Common
Rockland	C.R.	1990-2	(53)	
Strumpshaw	K.L.	1983	(59)	
Surlingham	K.G.S.	1988	(13)	
Wheatfen	E.A.E.	1936	(3)	
	N.M.M.	1991	(13)	
Caterpillar feeds on currant (<i>Ribes spp.</i>), blackthorn (<i>Prunus spinosa</i>), hawthorn (<i>Crataegus spp.</i>), spindle (<i>Euonymus spp.</i>) and other plants and shrubs.				
Clouded magpie (<i>Abraxas sylvata</i>).				Local
Strumpshaw	R.G.P.	1985	(15)	
	A.J.W.	1991	(12)	
Caterpillar feeds on wych elm (<i>Ulmus glabra</i>) and English elm (<i>U. procera</i>). A local and increasingly uncommon species.				

Clouded border (<i>Lomaspilis marginata</i>).				Common
	Buckenham	K.G.S.	1994	(58)
	Buckenham Carr	K.G.S.	1994	(58)
	Coldham Hall	N.M.M.	1990	(13)
	Rockland	A.R.B.	1986	(14)
		D.H.	1993	(53)
	Strumpshaw	K.L.	1983	(59)
		A.J.W.	1991	(12)
	Surlingham	K.G.S.	1988	(13)
	S.Church Marsh	A.R.B.	1986	(14)
		N.M.M.	1989	(13)
	Wheatfen	E.A.E.	1937	(1)
		N.M.M.	1992	(13)
Caterpillar feeds on members of the willow family (Salicaceae). Abundant in the Mid-Yare Valley.				
Scorched carpet (<i>Ligdia adustata</i>).				Local
	Strumpshaw	K.L.	1983	(59)
		A.J.W.	1991	(12)
	Wheatfen	S.R.W.	1983	(3)
		N.M.M.	1992	(13)
Caterpillar feeds on spindle (<i>Euonymus europaeus</i>).				
Peacock (<i>Semiothisa notata</i>).				Local
	Strumpshaw	R.G.P.	1984	(15)
		R.G.P.	1985	(15)
Caterpillar feeds on birch (<i>Betula pendula</i>). A southern and local woodland species.				
Dusky peacock (<i>Semiothisa signaria</i>).				Migrant/Colonist
	Strumpshaw	G.M.H.	1991	(12)
Caterpillar feeds on conifers. This record, a first for Norfolk and 4th for the UK is almost certainly an immigrant however a second record would indicate the presence of a colony.				
Tawny-barred angle (<i>Semiothisa liturata</i>).				Common
	Strumpshaw	A.J.W.	1991	(12)
Caterpillar feeds on Scots pine (<i>Pinus sylvestris</i>) and Norway spruce (<i>Picea abies</i>).				
Latticed heath (<i>Semiothisa clathrata s.clathrata</i>).				Common
	Buckenham	K.G.S.	1994	(58)
	Rockland	D.H.	1992	(53)
		D.H.	1993	(53)
	Strumpshaw	K.G.S.	1982	(18)
		M.E.A.S.	1994	
	Wheatfen	M.J.D.C.	1936	(1)
		N.M.M.	1992	(13)
Caterpillar feeds on lucerne (<i>Medicago sativa</i>) and				

other Legumes. A day-flyer recorded at Strumpshaw from cpts. 30+31.

The v-moth (<i>Semiothisa wauaria</i>).				Local
Wheatfen	S. R. W.	1983	(3)	
Caterpillar feeds on blackcurrant (<i>Ribes nigrum</i>), red currant (<i>Ribes rubrum</i>) and gooseberry (<i>Ribes uva-crispa</i>).				
Brown silver-line (<i>Petrophora chlorosata</i>).				Common
Strumpshaw	R. G. P.	1985	(15)	
	P. W.	1994	(78)	
Wheatfen	J. L. M.	1939	(1)	
	T. N. D. P.	1972	(56)	
Caterpillar feeds on bracken (<i>Pteridium aquilinum</i>).				
Scorched wing (<i>Plagodis dolabraria</i>).				Local
Rockland	D. H.	1993	(53)	
Strumpshaw	R. G. P.	1985	(15)	
	A. J. W.	1991	(12)	
Wheatfen	M. J. D. C.	1938	(1)	
	S. R. W.	1983	(3)	
Caterpillar feeds on deciduous trees.				
Brimstone moth (<i>Opisthograptis luteolata</i>).				Common
Buckenham	K. G. S.	1994	(58)	
Coldham Hall	N. M. M.	1990	(13)	
Rockland	D. H.	1992	(53)	
	D. H.	1993	(53)	
Strumpshaw	K. L.	1983	(59)	
	P. W.	1994	(78)	
Surlingham	P. W. + A. G. I.	1987	(18)	
	K. G. S.	1988	(13)	
S. Church Marsh	N. M. M.	1989	(13)	
Wheatfen	M. J. D. C.	1936	(1)	
	N. M. M.	1991	(13)	
Caterpillar feeds on trees in the family Rosaceae.				
Bordered beauty (<i>Epione repandaria</i>).				Common
Rockland	D. H.	1993	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
S. Church Marsh	A. R. B.	1986	(14)	
Wheatfen	M. J. D. C.	1936	(1)	
	E. A. E.	1979	(3)	
Caterpillar feeds on willow (<i>Salix spp.</i>). Fairly common where foodplant is present.				

Lilac beauty (<i>Apeira syringaria</i>).					Local
Strumpshaw	K. L.	1983	(59)		
	A. J. W.	1991	(12)		
Wheatfen	E. A. E.	1966	(3)		
	T. N. D. P.	1971	(3)		
Caterpillar feeds on honeysuckle (<i>Lonicera periclymenum</i>), privet (<i>Ligustrum vulgare</i>) and ash (<i>Fraxinus excelsior</i>).					
✓ August thorn (<i>Ennomos quercinaria</i>).					Local
Rockland	D. H.	1992	(53)		
Strumpshaw	K. L.	1983	(59)		
Surlingham	K. G. S.	1988	(13)		
Wheatfen	T. N. D. P.	1971	(3)		
	S. R. W.	1983	(3)		
Caterpillar feeds on oak (<i>Quercus robur</i>) and other trees.					
Canary-shouldered thorn (<i>Ennomos alniaria</i>).					Common
Strumpshaw	K. L.	1983	(59)		
	A. J. W.	1991	(12)		
Surlingham	K. G. S.	1988	(13)		
S. Church Marsh	N. M. M.	1989	(13)		
Wheatfen	M. J. D. C.	1938	(1)		
	S. R. W.	1983	(3)		
Caterpillar feeds on deciduous trees including alder (<i>Alnus glutinosa</i>) and willows (<i>Salix spp.</i>).					
✓ Dusky thorn (<i>Ennomos fuscantaria</i>).					Common
Strumpshaw	R. G. P.	1984	(15)		
	R. G. P.	1986	(15)		
Wheatfen	T. N. D. P.	1971	(3)		
Caterpillar feeds on ash (<i>Fraxinus excelsior</i>).					
✓ September thorn (<i>Ennomos erosaria</i>).					Common
Strumpshaw	R. G. P.	1984	(15)		
Wheatfen	T. N. D. P.	1971	(3)		
Caterpillar feeds on oak (<i>Quercus robur</i>), lime (<i>Tilia spp.</i>) and birch (<i>Betula pendula</i>).					
Early thorn (<i>Selenia dentaria</i>).					Common
Rockland	C. R.	1990-2	(53)		
	D. H.	1993	(53)		
Strumpshaw	R. G. P.	1984	(15)		
	A. J. W.	1991	(12)		
Surlingham	K. G. S.	1988	(13)		
Wheatfen	A. G. B. R.	1937	(1)		
	N. M. M.	1992	(13)		
Caterpillar feeds on deciduous trees and shrubs.					

Purple thorn (<i>Selenia tetralunaria</i>).				Common
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Surlingham	P. W. + A. G. I.	1987	(18)	
Wheatfen	E. A. E.	1966	(3)	
	S. R. W.	1983	(3)	
Caterpillar feeds on birch (<i>Betula pendula</i>), oak (<i>Quercus robur</i>), alder (<i>Alnus glutinosa</i>) and other trees.				
Scalloped hazel (<i>Odontopera bidentata</i>).				Common
Rockland	C. R.	1990-2	(53)	
Strumpshaw	R. G. P.	1985	(15)	
	A. J. W.	1991	(12)	
Wheatfen	T. N. D. P.	1971	(3)	
	S. R. W.	1983	(3)	
Caterpillar feeds on deciduous and coniferous trees.				
Scalloped oak (<i>Crocallis elinguaris</i>).				Common
Rockland	D. H.	1992	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Wheatfen	B. A. C.	1938	(3)	
	W. M. W.	1989	(13)	
Caterpillar feeds on deciduous trees and shrubs.				
Swallow-tailed moth (<i>Ourapteryx sambucaria</i>).				Common
Coldham Hall	A. R. B.	1986	(14)	
Rockland	D. H.	1992	(53)	
	D. H.	1993	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Wheatfen	J. L. M.	1939	(1)	
	N. M. M.	1991	(13)	
Caterpillar feeds on ivy (<i>Hedera helix</i>) and various trees and shrubs.				
Feathered thorn (<i>Colotois pennaria</i>).				Common
Strumpshaw	R. G. P.	1984	(15)	
	A. J. W.	1991	(12)	
Wheatfen	E. A. E.	1965	(3)	
	S. R. W.	1983	(3)	
Caterpillar feeds on deciduous trees and shrubs.				
Pale brindled beauty (<i>Apocheima pilosaria</i>).				Common
Rockland	D. H.	1993	(53)	
Strumpshaw	R. G. P.	1986	(15)	
Wheatfen	E. A. E.	1966	(3)	
	E. A. E.	1980	(3)	
Caterpillar feeds on deciduous trees and shrubs.				

✓ Brindled beauty (<i>Lycia hirtaria</i>),				Common
Rockland	C. R.	1990-2	(53)	
Strumpshaw	R. G. P.	1985	(15)	
	A. J. W.	1991	(12)	
Wheatfen	E. A. E.	1976	(3)	
	S. R. W.	1983	(3)	
Caterpillar feeds on deciduous trees.				
Oak beauty (<i>Biston strataria</i>),				Common
Strumpshaw	R. G. P.	1985	(15)	
	A. J. W.	1991	(12)	
Wheatfen	E. A. E.	1967	(3)	
	T. N. D. P.	1972	(3)	
Caterpillar feeds on various deciduous trees.				
Peppered moth (<i>Biston betularia</i>),				Common
Buckenham	K. G. S.	1994	(58)	
Rockland	D. H.	1992	(53)	
	D. H.	1993	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Wheatfen	B. D.	1941	(1)	
	N. M. M.	1991	(13)	
Caterpillar feeds on a wide variety of plants.				
Spring usher (<i>Agriopsis leucophaearia</i>),				Common
Strumpshaw	R. G. P.	1986	(15)	
Wheatfen	M. J. D. C.	1939	(1)	
	E. A. E.	1973	(3)	
Caterpillar feeds on oak (<i>Quercus robur</i>). Female wingless.				
Scarse umber (<i>Agriopsis aurantiaria</i>),				Common
Rockland	D. H.	1992	(53)	
Wheatfen	E. A. E.	1957	(3)	
	T. N. D. P.	1971	(3)	
Caterpillar feeds on deciduous trees. Female is flightless.				
Dotted border (<i>Agriopsis marginaria</i>),				Common
Rockland	C. R.	1990-2	(53)	
	D. H.	1993	(53)	
Strumpshaw	R. G. P.	1985	(15)	
	M. E. A. S.	1994		
Wheatfen	E. A. E.	1969	(3)	
	S. R. W.	1983	(3)	
Caterpillar feeds on deciduous trees and shrubs. Female is flightless.				

Mottled umber (<i>Erannis defoliaria</i>).					Common
	Strumpshaw	A. J. W.	1991	(12)	
	Wheatfen	E. A. E.	1940	(1)	
		E. A. E.	1980	(3)	
Caterpillar feeds on deciduous trees and shrubs. Recorded on hazel (<i>Corylus avellana</i>) at Wheatfen. Female wingless.					
Waved umber (<i>Menophra abruptaria</i>).					Common
	Rockland	C. R.	1990-2	(53)	
	Strumpshaw	R. G. P.	1984	(15)	
		A. J. W.	1991	(12)	
	Wheatfen	M. J. D. C.	1944	(1)	
		E. A. E.	1975	(3)	
Caterpillar feeds on privet (<i>Ligustrum vulgare</i>).					
Willow beauty (<i>Peribatodes rhomboidaria</i>).					Common
	Rockland	C. R.	1990-2	(53)	
	Strumpshaw	R. G. P.	1984	(15)	
		A. J. W.	1991	(12)	
	Surlingham	K. G. S.	1988	(13)	
	Wheatfen	E. T. D.	1938	(1)	
		N. M. M.	1991	(13)	
Caterpillar feeds mainly on deciduous trees but also other plants.					
Mottled beauty (<i>Alcis repandata s. repandata</i>).					Common
	Buckenham	K. G. S.	1994	(58)	
	Buckenham Carr	K. G. S.	1994	(58)	
	Coldham Hall	N. M. M.	1990	(13)	
	Rockland	D. H.	1992	(53)	
		D. H.	1993	(53)	
	Strumpshaw	R. G. P.	1984	(15)	
		P. W.	1994	(78)	
	Wheatfen	T. N. D. P.	1971	(3)	
		N. M. M.	1991	(13)	
Caterpillar feeds on various plants.					
Pale oak beauty (<i>Serraca punctinalis</i>).					Common
	Buckenham Carr	K. G. S.	1994	(58)	
	Strumpshaw	R. G. P.	1985	(15)	
		A. J. W.	1991	(12)	
Caterpillar feeds mainly on oak (<i>Quercus robur</i>) and birch (<i>Betula pendula</i>).					
Brussels lace (<i>Cleorodes lichenaria</i>).					Local
	Wheatfen	E. A. E.	1937	(3)	
Caterpillar feeds on lichens. A woodland moth. A caterpillar was recorded feeding on lichens at Wheatfen.					

The engrailed (<i>Ectropis bistortata</i>).				Common
Rockland	C. R.	1990-2	(53)	
	D. H.	1993	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Surlingham	K. G. S.	1988	(13)	
Wheatfen	T. N. D. P.	1971	(3)	
	N. M. M.	1992	(13)	
Caterpillar feeds on a variety of trees and shrubs.				
Small engrailed (<i>Ectropis crepuscularia</i>).				Local
Strumpshaw	A. J. W.	1991	(12)	
Wheatfen	N. M. M.	1991	(13)	
Caterpillar feeds on birch (<i>Betula pendula</i>), larch (<i>Larix decidua</i>) and willow (<i>Salix spp.</i>).				
Square spot (<i>Paradarisa consonaria</i>).				Local
Wheatfen	E. A. E.	1972	(3)	
Caterpillar feeds on oak (<i>Quercus robur</i>), birch (<i>Betula pendula</i>), pine (<i>Pinus spp.</i>), and other trees. A local woodland species.				
Brindled white-spot (<i>Paradarisa extersaria</i>).				Local
Wheatfen	E. A. E.	1972	(3)	
Caterpillar feeds on oak (<i>Quercus robur</i>) and birch (<i>Betula pendula</i>). A rather local woodland species.				
Grey birch (<i>Aethalura punctulata</i>).				Common
Strumpshaw	R. G. P.	1985	(15)	
	A. J. W.	1991	(12)	
Wheatfen	S. R. W.	1983	(3)	
Caterpillar feeds on birch (<i>Betula pendula</i>) and occasionally alder (<i>Alnus glutinosa</i>).				
Bordered white (<i>Bupalus piniaria</i>).				Common
Strumpshaw	R. G. P.	1985	(15)	
Caterpillar feeds on pines (<i>Pinus spp.</i>).				
Common white wave (<i>Cabera pusaria</i>).				Common
Buckenham	K. G. S.	1994	(58)	
Coldham Hall	N. M. M.	1990	(13)	
Rockland	C. R.	1990-2	(53)	
	D. H.	1993	(53)	
Strumpshaw	R. G. P.	1985	(15)	
	R. H.	1994	(58)	
S. Church Marsh	N. M. M.	1989	(13)	
Wheatfen	E. A. E.	1937	(3)	
	N. M. M.	1991	(13)	
Caterpillar feeds on deciduous trees and shrubs.				

Common wave (<i>Cabera exanthemata</i>).				Common
Buckenham	K. G. S.	1994	(58)	
Buckenham Carr	K. G. S.	1994	(58)	
Rockland	A. R. B.	1986	(14)	
	C. R.	1990-2	(53)	
Coldham Hall	N. M. M.	1990	(13)	
Strumpshaw	K. G. S.	1982	(18)	
	P. W.	1994	(78)	
Surlingham	K. G. S.	1988	(13)	
S. Church Marsh	A. R. B.	1986	(14)	
Wheatfen	E. A. E.	1939	(3)	
	N. M. M.	1992	(13)	
Caterpillar feeds on willow (<i>Salix</i> spp.) and aspen (<i>Populus tremula</i>). Abundant in Mid-Yare in recent years.				
White-pinion spotted (<i>Lomographa bimaculata</i>).				Common
Strumpshaw	R. G. P.	1984	(15)	
Wheatfen	M. J. D. C.	1939	(1)	
Caterpillar feeds on hawthorn (<i>Crataegus monogyna</i>) and blackthorn (<i>Prunus spinosa</i>).				
Clouded silver (<i>Lomographa temerata</i>).				Common
Rockland	D. H.	1993	(53)	
Strumpshaw	R. G. P.	1984	(15)	
	P. W.	1994	(78)	
Wheatfen	E. A. E.	1939	(1)	
	E. A. E.	1949	(3)	
Caterpillar feeds on trees in the family Rosaceae.				
Early moth (<i>Theria primaria</i> (= <i>rupicapraria</i>)).				Common
Rockland	C. R.	1990-2	(53)	
	D. H.	1994	(53)	
Strumpshaw	R. G. P.	1986	(15)	
Wheatfen	E. A. E.	1971	(3)	
	E. A. E.	1980	(3)	
Caterpillar feeds on hawthorn (<i>Crataegus monogyna</i>) and blackthorn (<i>Prunus spinosa</i>).				
Light emerald (<i>Campaea margaritata</i>).				Common
Buckenham	K. G. S.	1994	(58)	
Buckenham Carr	K. G. S.	1994	(58)	
Strumpshaw	R. G. P.	1984	(15)	
	R. H.	1994	(58)	
Wheatfen	R. S.	1937	(1)	
	N. M. M.	1991	(13)	
Caterpillar feeds on deciduous trees.				

Barred red (*Hylaea fasciaria*). Common
 Strumpshaw R.G.P. 1985 (15)
 A.J.W. 1991 (12)
 Caterpillar feeds on conifers.

Family SPHINGIDAE (Hawk-moths).

The sparsity of early hawk-moth records is puzzling.

Convolvulus Hawk-moth (*Agrius convolvuli*). Migrant
 Rockland C.Rudd 1950 (28)
 Strumpshaw G.E.D. 1943 (29)
 Surlingham Mr.Preston 1950 (28)
 T.N.D.P. 1971 (56)

Caterpillar feeds on members of the family Convolvulaceae. A rare immigrant species known in the Mid-Yare from two caterpillars at Rockland and two adults, one at Strumpshaw and the other at Surlingham.

Privet hawk-moth (*Sphinx ligustri*). Common
 Coldham Hall E.A.E. 1962 (3)
 Rockland D.H. 1993 (53)
 Strumpshaw K.L. 1983 (59)
 M.E.A.S. 1993
 Wheatfen T.N.D.P. 1971 (56)
 N.M.M. 1991 (13)

Caterpillar feeds on privet (*Ligustrum vulgare*), lilac (*Syringa vulgaris*) and ash (*Fraxinus excelsior*). Larval records on privet from Wheatfen and Strumpshaw. Very large and uncommon.

Pine hawk-moth (*Hyloicus pinastri*). Local
 Wheatfen N.M.M. 1991 (13)

Caterpillar feeds on Scots pine (*Pinus sylvestris*) and Norway spruce (*Picea abies*). Confined to southern and eastern localities.

Lime hawk-moth (*Mimas tiliae*). Common
 Wheatfen T.N.D.P. 1971 (3)
 E.A.E. 1972 (3)

Caterpillar feeds on lime (*Tilia spp.*), English elm (*Ulmus procera*), alder (*Alnus glutinosa*), and birch (*Betula pendula*). Uncommon with a southern distribution. Only three specimens have been recorded, all at Wheatfen.

Eyed hawk-moth (<i>Smerinthus ocellata</i>).				Common
	Coldham Hall	N. M. M.	1990 (13)	
	Rockland	D. H.	1992 (53)	
	Strumpshaw	K. L.	1983 (59)	
		P. W.	1994 (78)	
	Wheatfen	E. A. E.	1957 (3)	
		N. M. M.	1991 (13)	
Caterpillar feeds on willow (<i>Salix spp.</i>), willow (<i>Salix spp.</i>), and apple (<i>Malus spp.</i>).				
Poplar hawk-moth (<i>Laotloe populi</i>).				Common
	Coldham Hall	N. M. M.	1990 (13)	
	Rockland	D. H.	1992 (53)	
	Strumpshaw	K. L.	1983 (59)	
		A. J. W.	1991 (12)	
	Wheatfen	T. N. D. P.	1971 (56)	
		N. M. M.	1992 (13)	
Caterpillar feeds on members of the willow family (<i>Salicaceae</i>). An abundant moth in the Mid-Yare.				
Humming-bird hawk-moth (<i>Macroglossum stellatarum</i>)				Migrant
	Surlingham	A. R. B.	1990 (68)	
	Wheatfen	E. A. E.	1944 (3)	
Caterpillar feeds on bedstraws (<i>Galium spp.</i>) and wild madder (<i>Rubia peregrina</i>). Rarely, if ever overwinters. Less common in recent decades.				
Elephant hawk-moth (<i>Deilephila elpenor</i>).				Common
	Coldham Hall	N. M. M.	1990 (13)	
	Rockland	D. H.	1992 (53)	
		D. H.	1993 (53)	
	Strumpshaw	K. L.	1983 (59)	
		A. J. W.	1991 (12)	
	Surlingham	K. G. S.	1988 (13)	
	S. Church Marsh	A. R. B.	1986 (14)	
		N. M. M.	1989 (13)	
	Wheatfen	E. A. E.	1969 (3)	
		N. M. M.	1992 (13)	
Caterpillar feeds on willowherb (<i>Epilobium spp.</i>), bedstraw (<i>Galium spp.</i>) and other plants. Recorded on great willowherb (<i>Epilobium hirsutum</i>) at Surlingham Church Marsh (14).				

Family NOTODONIDAE (Kittens, prominents and allies).

Buff-tip (<i>Phalera bucephala</i>).					Common
Rockland	D.H.	1992	(53)		
	D.H.	1993	(53)		
Strumpshaw	K.G.S.	1982	(18)		
	A.J.W.	1991	(12)		
Wheatfen	R.S.	1939	(1)		
	N.M.M.	1991	(13)		
Caterpillar feeds on various deciduous trees and shrubs.					
Puss moth (<i>Cerura vinula</i>).					Common
Strumpshaw	A.J.W.	1991	(12)		
Wheatfen	T.N.D.P.	1972	(3)		
Caterpillar feeds on members of the willow family (Salicaceae).					
Alder kitten (<i>Furcula (=Harpyia) bicuspis</i>).					N/b
Cantley	R.K.	1994	(78)		
Wheatfen	T.N.D.P.	1972	(56)		
Caterpillar feeds on birch (<i>Betula pendula</i>) and alder (<i>Alnus glutinosa</i>). A local woodland moth with a south-eastern distribution. A single adult was trapped at Wheatfen.					
Sallow kitten (<i>Furcula (=Harpyia) furcula</i>).					Common
Rockland	D.H.	1993	(53)		
Strumpshaw	K.L.	1983	(59)		
	A.J.W.	1991	(12)		
Surlingham	K.G.S.	1988	(13)		
S.Church Marsh	N.M.M.	1989	(13)		
Wheatfen	E.A.E.	1971	(3)		
	N.M.M.	1992	(13)		
Caterpillar feeds on sallow (<i>Salix spp.</i>) and aspen (<i>Populus tremula</i>).					
Poplar kitten (<i>Furcula (=Harpyia) bifida</i>).					Local
Surlingham	J.V.G.	1970-7	(62)		
Caterpillar feeds on <i>Populus spp.</i> and occasionally <i>Salix spp.</i> .					

Lobster moth (<i>Stauropus fagi</i>).				Common
	Buckenham Carr	K.G.S.	1994	(58)
	Strumpshaw	R.G.P.	1984	(15)
	Wheatfen	T.N.D.P.	1971	(3)
		S.R.W.	1983	(3)
Caterpillar feeds on oak (<i>Quercus robur</i>), hazel (<i>Corylus avellana</i>), birch (<i>Betula pendula</i>) and beech (<i>Fagus sylvatica</i>). Only four specimens have been recorded from the Mid-Yare.				
Iron prominent (<i>Notodonta dromedarius</i>).				Common
	Rockland	C.R.	1990-2	(53)
	Strumpshaw	K.L.	1983	(59)
		P.W.	1994	(78)
	Surlingham	K.G.S.	1988	(13)
	S.Church Marsh	N.M.M.	1989	(13)
	Wheatfen	E.A.E.	1970	(3)
		J.W.W.	1982	(3)
Caterpillar feeds on birch (<i>Betula pendula</i>), alder (<i>Alnus glutinosa</i>), hazel (<i>Corylus avellana</i>), and oak (<i>Quercus robur</i>).				
Pebble prominent (<i>Eligmodonta ziczac</i>).				Common
	Rockland	C.R.	1990-2	(53)
	Strumpshaw	K.L.	1983	(59)
		A.J.W.	1991	(12)
	Surlingham	K.G.S.	1988	(13)
	Wheatfen	T.N.D.P.	1971	(3)
		N.M.M.	1992	(13)
Caterpillar feeds on members of the willow family (Salicaceae).				
Lesser swallow prominent (<i>Pheosia gnoma</i>).				Common
	Rockland	D.H.	1992	(53)
	Strumpshaw	R.G.P.	1984	(15)
		A.J.W.	1991	(12)
	Surlingham	K.G.S.	1988	(13)
	Wheatfen	T.N.D.P.	1971	(3)
		T.N.D.P.	1972	(3)
Caterpillar feeds on members of the willow family (Salicaceae).				

Swallow prominent (*Phosia tremula*). Common

Coldham Hall	N. M. M.	1990	(13)
Rockland	C. R.	1990-2	(53)
Strumpshaw	K. L.	1983	(59)
	A. J. W.	1991	(12)
Surlingham	K. G. S.	1988	(13)
Wheatfen	T. N. D. P.	1971	(3)
	S. R. W.	1983	(3)

Caterpillar feeds on members of the willow family (Salicaceae).

Coxcomb prominent (*Ptilodon capucina*). Common

Buckenham Carr	K. G. S.	1994	(58)
Strumpshaw	K. L.	1983	(59)
	A. J. W.	1991	(12)
Surlingham	K. G. S.	1988	(13)
Wheatfen	A. G. B. R.	1937	(1)
	S. R. W.	1983	(3)

Caterpillar feeds on deciduous trees.

Maple prominent (*Ptilodontella cucullina*). Local

Strumpshaw	R. G. P.	1985	(15)
	R. G. P.	1986	(15)

Caterpillar feeds on feild maple (*Acer campestre*)

and occasionally sycamore (*Acer pseudoplatanus*).

An uncommon species, found in the south-east of the UK. Found by T. Peet at Hickling in 1969 (3).

Pale prominent (*Pterostoma palpina*). Common

Coldham Hall	N. M. M.	1990	(13)
Rockland	D. H.	1993	(53)
Strumpshaw	K. L.	1983	(59)
	A. J. W.	1991	(12)
Surlingham	P. W. + A. G. I.	1987	(18)
	K. G. S.	1988	(13)
S. Church Marsh	N. M. M.	1989	(13)
Wheatfen	M. J. D. C.	1939	(1)
	N. M. M.	1992	(13)

Caterpillar feeds on members of the willow family (Salicaceae).

Marbled brown (*Drymonia dodonaea var. nigrescens*). Common

Buckenham	K. G. S.	1994	(58)
Buckenham Carr	K. G. S.	1994	(58)
Cantley	R. K.	1994	(78)
Rockland	D. H.	1993	(53)
Strumpshaw	R. G. P.	1985	(15)
	A. J. W.	1991	(12)

Caterpillar feeds on oak (*Quercus robur*).

Lunar marbled brown (*Drymonia ruficornis*). Local
 Strumpshaw R.G.P. 1986 (15)
 Wheatfen T.N.D.P. 1972 (3)
 Caterpillar feeds on oak (*Quercus robur*).

Chocolate tip (*Clostera curtula*). Local
 Strumpshaw K.L. 1983 (59)
 A.J.W. 1991 (12)
 Wheatfen E.A.E. 1970 (3)
 N.M.M. 1992 (13)
 Caterpillar feeds on members of the willow family
 (Salicaceae). Regularly recorded in low numbers.

Family LYMANTRIIDAE (Tussocks, vapourers and allies).

✓ Scarse vapourer (*Orgyia recens*). RDB 2
 Strumpshaw D.J.P.M. 1987 (62) (RDB 3)
 G.M.H. 1989 (51)
 Wheatfen M.J.D.C. 1938 (1)
 E.A.E. 1976 (3)

Caterpillar feeds on hawthorn (*Crataegus monogyna*),
 willow (*Salix spp.*), oak (*Quercus robur*),
 meadowsweet (*Filipendula ulmaria*), water dock (*Rumex
 hydrolapathum*) and probably other plants. An
 extremely local species (previously RDB 2) confined
 to Yorkshire, Lincolnshire and Norfolk. The fact that
 the female is wingless and less able to colonise new
 sites has contributed to its decline. Ellis notes
 that this species was commoner in this area before
 WWII (56). Males fly by day and the species is most
 often encountered in this form. The 1989 Strumpshaw
 record resulted from a caterpillar in a pit-fall
 trap and the 1976 Wheatfen record was of a
 caterpillar feeding on meadowsweet (*Filipendula
 ulmaria*).

The vapourer (*Orgyia antiqua*). Common
 Strumpshaw K.L. 1983 (59)
 A.J.W. 1991 (12)
 Wheatfen M.J.D.C. 1936 (1)
 B.B.C.S. 1993 (60) ?

Caterpillar feeds on deciduous trees and shrubs.
 Female wingless. Not commonly recorded in the Mid-
 Yare, the only other record is from B.A.Cooper in
 1938 at Wheatfen (1). Most records of single males,
 but the 1993 record was of a larva, this requires
 confirmation due to possible confusion with the
 scarce vapourer (*O. recens*) larva.

Pale tussock (*Calliteara (=Dasychira) pudibunda*). Common

Buckenham Carr	K.G.S.	1994	(58)
Rockland	D.H.	1993	(53)
Strumpshaw	R.G.P.	1984	(15)
	A.J.W.	1991	(12)
Wheatfen	T.N.D.P.	1971	(3)
	R.E.	1991	(55)

Caterpillar feeds on deciduous trees.

Brown-tail (*Euproctis chrysorrhoea*). Local

Strumpshaw	A.J.W.	1991	(12)
Wheatfen	M.J.D.C.	1936	(1)
	S.R.W.	1983	(3)

Caterpillar feeds on hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*) and willow (*Salix spp.*). The caterpillars live in a communal web and are cloaked in irritant hairs. Also recorded at Wheatfen in 1939 by M.E.L.N. (1).

Yellow tail (*Euproctis similis*). Common

Rockland	A.R.B.	1986	(14)
	D.H.	1992	(53)
Strumpshaw	K.L.	1983	(59)
	A.J.W.	1991	(12)
Surlingham	K.G.S.	1988	(13)
S.Church Marsh	A.R.B.	1986	(14)
Wheatfen	B.A.C.	1938	(1)
	N.M.M.	1992	(13)

Caterpillar feeds on deciduous trees and shrubs.

White satin moth (*Leucoma salicis*). Local

Rockland	D.H.	1992	(53)
Strumpshaw	K.G.S.	1982	(18)
	A.J.W.	1991	(12)
Wheatfen	T.N.D.P.	1971	(3)
	N.M.M.	1991	(13)

Caterpillar feeds on members of the willow family (*Salicaceae*).

Black arches (*Lymantria monacha*). Local

Wheatfen	T.N.D.P.	1971	(3)
	N.M.M.	1992	(13)

Caterpillar feeds on oak (*Quercus robur*).

Family ARCTIIDAE (Footmen, tigers and allies).

Round-winged muslin (<i>Thumatha senex</i>).				Local
Buckenham	P.S.	1994	(78)	
Cantley	R.K.	1994	(78)	
Coldham Hall	N.M.M.	1990	(13)	
Rockland	C.R.	1990-2	(53)	
	D.H.	1993	(53)	
Strumpshaw	K.L.	1983	(59)	
	P.W.	1994	(78)	
Surlingham	P.W.+A.G.I.	1987	(18)	
	K.G.S.	1988	(13)	
S.Church Marsh	N.M.M.	1989	(13)	
Wheatfen	E.A.E.	1939	(1)	
	N.M.M.	1992	(13)	

Caterpillar feeds on lichens and mosses, including *Peltigera canina*. Pupa found on *Glyceria maxima* at Wheatfen (1). A local moth, but abundant in the Mid-Yare.

Rosy footman (<i>Miltochrista miniata</i>).				Local
Coldham Hall	N.M.M.	1990	(13)	
Strumpshaw	K.L.	1983	(59)	
	R.G.P.	1986	(15)	
Wheatfen	R.S.	1937	(1)	
	N.M.M.	1992	(13)	

Caterpillar feeds on *Peltigera canina* and other lichens on trees.

✓ Dotted footman (<i>Pelosia muscerda</i>)				RDB 3
Surlingham	?	1899	(57)	

Caterpillar feeds on algae growing on small bushes. Although still locally common in the Broads, this species appears to have become extinct in the Mid-Yare Valley.

Dingy footman (<i>Eilema griseola</i>).				Common
Strumpshaw	R. G. P.	1984	(15)	
	A. J. W.	1991	(12)	
Surlingham	K. G. S.	1988	(13)	
S. Church Marsh	N. M. M.	1989	(13)	
Wheatfen	M. J. D. C.	1938	(1)	
	N. M. M.	1992	(13)	
Caterpillar feeds on lichens in damp areas. Very abundant in Mid-Yare some years.				
Pale footman (<i>E. griseola f. stramineola</i>).				
Strumpshaw	K. L.	1983	(59)	
Wheatfen	B. A. C.	1938	(1)	
	W. M. W.	1989	(13)	
This is an endemic pale form of the dingy footman. K. Lord appears to have mistakenly recorded this form as the orange footman (<i>Eilema sororcula</i>).				
Scarce footman (<i>Eilema complana</i>).				Local
Rockland	D. H.	1992	(53)	
Strumpshaw	K. L.	1983	(59)	
	R. G. P. + P. W.	1987	(18)	
Wheatfen	R. S.	1938	(1)	
	N. M. M.	1991	(13)	
Caterpillar feeds on lichens.				
Common footman (<i>Eilema lurideola</i>).				Common
Rockland	D. H.	1992	(53)	
	D. H.	1993	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Surlingham	P. W. + A. G. I.	1987	(18)	
	K. G. S.	1988	(13)	
Wheatfen	M. J. D. C.	1937	(1)	
	N. M. M.	1992	(13)	
Caterpillar feeds on lichens. Common in Mid-Yare.				
Four-spotted footman (<i>Lithosia quadra</i>).				Migrant
Strumpshaw	K. L.	1983	(59)	
Caterpillar feeds on <i>Peltigera canina</i> and other lichens on trees. A single specimen of this uncommon migrant was captured at light. Possibly an ex. UK resident.				

Garden tiger (<i>Arctica caja</i>).					Common
	Rockland	D.H.	1992	(53)	
	Strumpshaw	K.L.	1983	(59)	
		A.J.W.	1991	(12)	
	Surlingham	K.G.S.	1988	(13)	
	Wheatfen	M.J.D.C.	1921	(3)	
		N.M.M.	1992	(13)	

Caterpillar feeds on a wide variety of plants.

Cream-spot tiger (<i>Arctia villica s. britannica</i>).					Local
	Wheatfen	J. Markham	1963	(3)	

Caterpillar feeds on a wide variety of plants.

A single caterpillar was found at Wheatfen.

✓ White ermine (<i>Spilosoma lubricipeda</i>).					Common
	Buckenham Carr	K.G.S.	1994	(58)	
	Rockland	D.H.	1992	(53)	
		D.H.	1993	(53)	
	Strumpshaw	K.L.	1983	(59)	
		P.W.	1994	(78)	
	Wheatfen	M.J.D.C.	1937	(1)	
		T.N.D.P.	1971	(3)	

Caterpillar feeds on a variety of plants.

✓ Buff ermine (<i>Spilosoma luteum</i>).					Common
	Buckenham	K.G.S.	1994	(58)	
	Buckenham Carr	K.G.S.	1994	(58)	
	Coldham Hall	N.M.M.	1990	(13)	
	Rockland	C.R.	1990-2	(53)	
		D.H.	1993	(53)	
	Strumpshaw	K.L.	1983	(59)	
		P.W.	1994	(78)	
	S. Church Marsh	A.R.B.	1986	(14)	
	Wheatfen	B.A.C.	1938	(1)	
		N.M.M.	1991	(13)	

Caterpillar feeds on a wide variety of plants.

Abundant in this area during the last decade at least.

Water ermine (<i>Spilosoma urticae</i>).					N/b
	Rockland	D.H.	1993	(53)	
	Wheatfen	M.J.D.C.	1933	(1)	
		E.A.E.	1939	(1)	

Caterpillar feeds on a variety of marsh plants, including yellow loosestrife (*Lysimachia vulgaris*), water dock (*Rumex hydrolapathum*), lousewort (*Pedicularis sylvatica*), yellow iris (*Iris pseudacorus*) and nettle (*Urtica dioica*). A local and southern species confined to fens and marshes. Appears to have recently suffered a population

crash in the Broads, its traditional stronghold. The 1993 record requires confirmation due to the potential for confusion with the white ermine (*S. lubricipeda*).

Muslin moth (<i>Diaphora mendica</i>).				Common
Strumpshaw	R. G. P.	1985	(15)	
	A. J. W.	1991	(12)	
Wheatfen	M. J. D. C.	1937	(1)	
	E. A. E.	1984	(3)	

Caterpillar feeds on grassland plants.

Ruby tiger (<i>Phragmatobia fuliginosa s. fuliginosa</i>).				Common
Rockland	D. H.	1992	(53)	
	D. H.	1993	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Surlingham	P. W. + A. G. I.	1987	(18)	
	K. G. S.	1988	(13)	
S. Church Marsh	N. M. M.	1989	(13)	
Wheatfen	A. G. B. R.	1937	(1)	
	W. M. W.	1989	(13)	

Caterpillar feeds on herbaceous plants.

The cinnabar (<i>Tyria jacobaeae</i>).				Common
Rockland	D. H.	1992	(53)	
Strumpshaw	R. G. P.	1985	(15)	
	A. J. W.	1991	(12)	
Surlingham	R. M.	1988	(14)	
Wheatfen	E. A. E.	1956	(3)	
	T. N. D. P.	1972	(3)	

Caterpillar feeds on ragwort (*Senecio jacobaea*) and other members of the genus *Senecio*.

Family NOLIDAE (Black arches).

Short-cloaked moth (<i>Nola cucullatella</i>).				Common
Wheatfen	E. A. E.	1972	(3)	
	N. M. M.	1991	(13)	

Caterpillar feeds on hawthorn (*Crataegus spp.*), blackthorn (*Prunus spinosa*), apple (*Malus spp.*) and plum (*Prunus spp.*).

Least black arches (<i>Nola confusalis</i>).				Local
Rockland	C. R.	1990-2	(53)	
Strumpshaw	R. G. P.	1986	(15)	
	A. J. W.	1991	(12)	

Caterpillar feeds on lichens growing on trees. A rather local woodland species.

Family NOCTUIDAE (Noctuids).

White-line dart (*Euxoa tritici*). Common
 Rockland D.H. 1992 (53)
 Caterpillar feeds on various small herbaceous plants.

Garden dart (*Euxoa nigricans*). Common
 Rockland C.R. 1990-2 (53)
 Strumpshaw R.G.P. 1985 (15)
 A.J.W. 1991 (12)
 Wheatfen E.T.D. 1938 (1)
 T.N.D.P. 1972 (3)
 Caterpillar feeds on many wild and cultivated plants.

Turnip moth (*Agrotis segetum*). Common
 Buckenham K.G.S. 1994 (58)
 Strumpshaw R.G.P. 1985 (15)
 P.W. 1994 (78)
 Wheatfen M.J.D.C. 1936 (1)
 N.M.M. 1991 (13)
 Caterpillar feeds on root vegetables and other roots.

Heart and club (*Agrotis clavis*). Common
 Strumpshaw K.L. 1983 (59)
 R.G.P. 1984 (15)
 Caterpillar feeds on various herbaceous plants.

Heart and dart (*Agrotis exclamationis*). Common
 Buckenham Carr K.G.S. 1994 (58)
 Coldham Hall N.M.M. 1990 (13)
 Rockland C.R. 1990-2 (53)
 D.H. 1993 (53)
 Strumpshaw K.L. 1983 (59)
 P.W. 1994 (78)
 Wheatfen M.J.D.C. 1938 (1)
 N.M.M. 1991 (13)
 Caterpillar feeds on a wide variety of plants.

Dark sword-grass (*Agrotis ipsilon*). Migrant
 Strumpshaw R.G.P. 1984 (15)
 R.G.P. 1986 (15)
 Wheatfen E.A.E. 1938 (3)
 N.M.M. 1989 (13)

Caterpillar feeds on the leaves and roots of many plants. A common immigrant arriving in large numbers some years and possibly surviving mild winters.

Shuttle-shaped dart (<i>Agrotis puta s. puta</i>).				Common
Rockland	C.R.	1990-2	(53)	
Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
S.Church Marsh	N.M.M.	1989	(13)	
Wheatfen	M.J.D.C.	1936	(1)	
	N.M.M.	1990	(13)	
Caterpillar feeds on herbaceous plants. Light and dark forms found at Wheatfen (1938 (1)).				
Sand dart (<i>Agrotis ripae</i>).				N/b
Strumpshaw	K.L.	1983	(59)	
Caterpillar feeds on sandhill plants and hides in loose sand during daylight. This record is of a single vagrant, probably from a coastal colony.				
The flame (<i>Axylia putris</i>).				Common
Buckenham	K.G.S.	1994	(58)	
Coldham Hall	N.M.M.	1990	(13)	
Rockland	C.R.	1990-2	(53)	
	D.H.	1993	(53)	
Strumpshaw	R.G.P.	1984	(15)	
	P.W.	1994	(78)	
Wheatfen	E.A.E.	1968	(3)	
	N.M.M.	1991	(13)	
Caterpillar feeds on several herbaceous plants.				
Flame shoulder (<i>Ochropleura plecta</i>).				Common
Buckenham	K.G.S.	1994	(58)	
Coldham Hall	N.M.M.	1990	(13)	
Rockland	C.R.	1990-2	(53)	
	D.H.	1993	(53)	
Strumpshaw	K.L.	1983	(59)	
	P.W.	1994	(78)	
Surlingham	P.W.+A.G.I.	1987	(18)	
	K.G.S.	1988	(13)	
S.Church Marsh	N.M.M.	1989	(13)	
Wheatfen	E.T.D.	1938	(1)	
	N.M.M.	1991	(13)	
Caterpillar feeds on a variety of plants. Usually recorded in large numbers in the Mid-Yare.				
Dotted rustic (<i>Rhyacia simulans</i>).				Local
Strumpshaw	R.G.P.	1985	(15)	
Caterpillar food plant unknown. This species has a fluctuating population, recently common in southern England it is presently local. Adult aestivates.				

Large yellow underwing (<i>Noctua pronuba</i>).				Common
Coldham Hall	F. B.	1986	(14)	
	N. M. M.	1990	(13)	
Rockland	D. H.	1992	(53)	
Strumpshaw	K. L.	1983	(59)	
	P. W.	1994	(78)	
Surlingham	P. W. + A. G. I.	1987	(18)	
	K. G. S.	1988	(13)	
S. Church Marsh	N. M. M.	1989	(13)	
Wheatfen	M. J. D. C.	1937	(1)	
	N. M. M.	1992	(13)	

Caterpillar feeds on a wide range of plants including grasses (Gramineae). A common moth, abundant in the Mid-Yare.

Lesser yellow underwing (<i>Noctua comes</i>).				Common
Rockland	D. H.	1992	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Surlingham	K. G. S.	1988	(13)	
S. Church Marsh	N. M. M.	1989	(13)	
Wheatfen	E. T. D.	1938	(1)	
	B. B. C. S.	1993	(60)	

Caterpillar feeds on trees shrubs and large herbaceous plants.

Broad-bordered yellow underwing (<i>Noctua fimbriata</i>).				Common
Strumpshaw	R. G. P.	1984	(15)	
	A. J. W.	1991	(12)	
Wheatfen	B. A. C.	1938	(1)	
	E. A. E.	1982	(3)	

Caterpillar feeds on a wide variety of plants.

Lesser broad-bordered yellow underwing (<i>Noctua jantha</i>).				Common
Rockland	C. R.	1990-2	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Surlingham	P. W. + A. G. I.	1987	(18)	
	K. G. S.	1988	(13)	
Wheatfen	B. A. C.	1938	(1)	
	N. M. M.	1992	(13)	

Caterpillar feeds on a wide variety of plants. Until recently this species was mistakenly recorded in the UK as *Noctua janthina*.

Least yellow underwing (<i>Noctua interjecta s. caliginosa</i>).				Common
Rockland	C. R.	1990-2	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Surlingham	P. W. + A. G. I.	1987	(18)	
	K. G. S.	1988	(13)	
S. Church Marsh	N. M. M.	1989	(13)	
Wheatfen	B. A. C.	1938	(1)	
	E. A. E.	1972	(3)	

Caterpillar feeds on grasses and herbaceous plants.

Stout dart (<i>Spaelotis ravida</i>).				Local
Wheatfen	E. A. E.	1982	(3)	

Caterpillar foodplant unknown. Associated with wetlands, this moth has great fluctuations in population.

Double dart (<i>Graphiphora auger</i>).				Common
Coldham Hall	N. M. M.	1990	(13)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Wheatfen	M. J. D. C.	1938	(1)	
	N. M. M.	1991	(13)	

Caterpillar feeds on trees and shrubs, including blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*) and willow (*Salix spp.*).

True lover's knot (<i>Lycophotia porphyrea</i>).				Common
Rockland	C. R.	1990-2	(53)	
Strumpshaw	K. L.	1983	(59)	
Surlingham	K. G. S.	1988	(13)	
Wheatfen	E. A. E.	1972	(3)	

Caterpillar feeds on heather (*Calluna* and *Erica spp.*). Apparently scarce in the Mid-Yare.

Pearly underwing (<i>Peridroma saucia</i>).				Migrant
Strumpshaw	R. G. P.	1984	(15)	

Caterpillar feeds on various herbs. A regular immigrant which rarely breeds or survives the winter.

Ingrailed clay (<i>Diarsia mendica s. mendica</i>).				Common
Buckenham	K.G.S.	1994	(58)	
Buckenham Carr	K.G.S.	1994	(58)	
Rockland	C.R.	1990-2	(53)	
	D.H.	1993	(53)	
Strumpshaw	R.G.P.	1984	(15)	
	P.W.	1994	(78)	
Wheatfen	J.L.M.	1939	(1)	
	S.R.W.	1983	(3)	
Caterpillar feeds on bramble (<i>Rubus spp.</i>), willow (<i>Salix spp.</i>) and other plants.				
Purple clay (<i>Diarsia brunnea</i>).				Common
Strumpshaw	A.J.W.	1991	(12)	
Caterpillar feeds on willow (<i>Salix spp.</i>), birch (<i>Betula pendula</i>), dock (<i>Rumex spp.</i>) and other plants.				
Small square-spot (<i>Diarsia rubi</i>).				Common
Buckenham	K.G.S.	1994	(58)	
Rockland	C.R.	1990-2	(53)	
Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
Wheatfen	M.J.D.C.	1938	(1)	
	N.M.M.	1990	(13)	
Caterpillar feeds on a variety of herbaceous plants.				
Fen square-spot (<i>Diarsia florida</i>).				Local
Coldham Hall	N.M.M.	1990	(13)	
Caterpillar food plant unknown. This is a rare species restricted to fens and most commonly encountered in the eastern counties.				
Setaceous hebrew character (<i>Xestia c-nigrum</i>).				Common
Buckenham	K.G.S.	1994	(58)	
Coldham Hall	M.E.A.S.	1993		
Rockland	D.H.	1992	(53)	
	D.H.	1993	(53)	
Strumpshaw	K.L.	1983	(59)	
	A.J.W.	1991	(12)	
S.Church Marsh	N.M.M.	1989	(13)	
Wheatfen	B.A.C.	1938	(1)	
	N.M.M.	1990	(13)	
Caterpillar feeds on nettles (<i>Urtica dioica</i>) and probably other plants.				

Triple-spotted clay (*Xestia ditrapezium*). Local
 Buckenham K.G.S. 1994 (58)
 Wheatfen T.N.D.P. 1971 (3)

Caterpillar feeds on a variety trees and trailing plants.

Double square-spot (*Xestia triangulum*). Common

Coldham Hall N.M.M. 1990 (13)
 Rockland D.H. 1992 (53)
 D.H. 1993 (53)
 Strumpshaw K.L. 1983 (59)
 A.J.W. 1991 (12)
 Surlingham P.W.+A.G.I. 1987 (18)
 K.G.S. 1988 (13)
 Wheatfen T.N.D.P. 1971 (3)
 N.M.M. 1992 (13)

Caterpillar feeds on a variety of plants.

Dotted clay (*Xestia baja*). Common

Strumpshaw R.G.P. 1985 (15)
 Wheatfen T.N.D.P. 1971 (3)
 T.N.D.P. 1972 (3)

Caterpillar feeds on a variety of plants.

✓ Square-spotted clay (*Xestia rhomboidea*). N/b

Strumpshaw A.J.W. 1991 (12)
 Surlingham T.N.D.P. 1974 (62)

Caterpillar feeds on birch (*Betula pendula*) and bramble (*Rubus spp.*). This is a very local woodland species with a southern distribution. The adult visits flowers including burdock (*Arctium spp.*) and willowherbs (*Epilobium spp.*).

Six-striped rustic (*Xestia sexstrigata*). Common

Strumpshaw R.G.P. 1984 (15)
 A.J.W. 1991 (12)
 Surlingham P.W.+A.G.I. 1987 (18)
 Wheatfen B.A.C. 1938 (3)
 M.J.D.C. 1939 (1)

Caterpillar feeds on variety of herbaceous plants.

Square-spot rustic (*Xestia xanthographia*). Common

Rockland D.H. 1992 (53)
 Strumpshaw R.G.P. 1984 (15)
 A.J.W. 1991 (12)
 Wheatfen E.T.D. 1938 (1)
 N.M.M. 1990 (13)

Caterpillar feeds on grasses (Gramineae) and low plants.

- Heath rustic (*Xestia agathina s. agathina*). Local
 Wheatfen T.N.D.P. 1972 (56)
 Caterpillar feeds on young heather and occasionally *Salix* spp.. At Wheatfen single specimen was taken in a light trap.
- The gothic (*Naenia typica*). Local
 Strumpshaw R.G.P. 1986 (15)
 A.J.W. 1991 (12)
 Wheatfen T.N.D.P. 1972 (3)
 W.M.W. 1989 (13)
 Caterpillar feeds on a wide variety of plants including willow (*Salix* spp.).
- Green arches (*Anaplectoides prasina*). Common
 Buckenham K.G.S. 1994 (58)
 Cantley R.K. 1994 (78)
 Strumpshaw A.J.W. 1991 (12)
 Wheatfen M.J.D.C. 1938 (1)
 T.N.D.P. 1972 (3)
 Caterpillar feeds on a variety of plants including honeysuckle (*Lonicera periclymenum*).
- Red chestnut (*Cerastis rubricosa*). Common
 Strumpshaw R.G.P. 1985 (15)
 R.G.P. 1986 (15)
 Wheatfen T.N.D.P. 1971 (3)
 S.R.W. 1983 (3)
 Caterpillar feeds on variety of herbaceous plants.
- The nutmeg (*Discestra trifolii*). Common
 Rockland D.H. 1992 (53)
 Strumpshaw A.J.W. 1991 (12)
 S.Church Marsh N.M.M. 1989 (13)
 Wheatfen T.N.D.P. 1971 (3)
 N.M.M. 1991 (13)
 Caterpillar feeds on goosefoot (*Chenopodium* spp.) and orache (*Atriplex* spp.).
- The shears (*Hada nana*). Common
 Strumpshaw K.L. 1983 (59)
 Caterpillar feeds on hawk's-beard (*Crepis* spp.), hawkweed (*Hieracium* spp.), dandelion (*Taraxacum officinale*), and chickweed (*Stellaria* spp.). A single specimen.
- ✓ Pale shining brown (*Polia bombycina*). Local
 Wheatfen T.N.D.P. 1972 (3)
 Caterpillar foodplant is unknown. Southerly distribution.

Silvery arches (<i>Poia hepatica</i>).					N/b
Wheatfen	T.N.D.P.	1972	(3)		
Caterpillar feeds on birch (<i>Betula pendula</i>), but also bog myrtle (<i>Myrica gale</i>), willow (<i>Salix spp.</i>) and hawthorn (<i>Crataegus spp.</i>).					
Cabbage moth (<i>Mamestra brassicae</i>).					Common
Rockland	D.H.	1992	(53)		
Strumpshaw	K.L.	1983	(59)		
	A.J.W.	1991	(12)		
Wheatfen	M.J.D.C.	1938	(1)		
	N.M.M.	1989	(13)		
Caterpillar feeds on cabbages and other <i>Brassica spp.</i> .					
✓ Dot moth (<i>Melanchra persicariae</i>).					Common
Rockland	C.R.	1990-2	(53)		
	D.H.	1993	(53)		
Strumpshaw	R.G.P.	1984	(15)		
	R.G.P.	1986	(15)		
Surlingham	K.G.S.	1988	(13)		
Wheatfen	R.S.	1938	(1)		
	W.M.W.	1989	(13)		
Caterpillar feeds on a variety of plants.					
Beautiful brocade (<i>Lacanobia contigua</i>).					Local
Wheatfen	E.A.E.	1976	(3)		
Caterpillar feeds on a wide variety of trees and plants.					
Pale-shouldered brocade (<i>Lacanobia thalassina</i>).					Common
Buckenham	K.G.S.	1994	(58)		
Strumpshaw	R.G.P.	1986	(15)		
Wheatfen	M.J.D.C.	1937	(1)		
	T.N.D.P.	1971	(3)		
Caterpillar feeds on many woodland plants.					
Dog's tooth (<i>Lacanobia suasa</i>).					Local
Buckenham	K.G.S.	1994	(58)		
Cantley	R.K.	1994	(78)		
Wheatfen	T.N.D.P.	1971-2	(56)		
Caterpillar feeds on a variety of herbaceous plants. A lowland moth, often occurring on saltmarshes.					

Bright-line brown-eye (<i>Lacanobia oleracea</i>).					Common
	Buckenham	K. G. S.	1994	(58)	
	Coldham Hall	N. M. M.	1990	(13)	
	Rockland	C. R.	1990-2	(53)	
		D. H.	1993	(53)	
	Strumpshaw	K. L.	1983	(59)	
		A. J. W.	1991	(12)	
	Surlingham	K. G. S.	1988	(13)	
	Wheatfen	B. A. C.	1938	(1)	
		N. M. M.	1992	(13)	
Caterpillar feeds on a variety of plants.					
Broom moth (<i>Ceramica pisi</i>).					Common
	Rockland	D. H.	1993	(53)	
	Strumpshaw	R. G. P.	1986	(15)	
	Wheatfen	T. N. D. P.	1971	(3)	
		T. N. D. P.	1972	(3)	
Caterpillar feeds on a variety of plants.					
The campion (<i>Hadena rivularis</i>).					Common
	Strumpshaw	R. G. P.	1984	(15)	
		A. J. W.	1991	(12)	
	Wheatfen	E. A. E.	1972	(3)	
		N. M. M.	1992	(13)	
Caterpillar feeds on the ripening seeds of pinks (<i>Silene spp.</i> and <i>Lychnis spp.</i>). Rather local.					
Tawny shears (<i>Hadera perplexa s. perplexa</i>).					Common
	Wheatfen	T. N. D. P.	1971-2	(56)	
Caterpillar feeds on bladder campion (<i>Silene vulgaris</i>), Nottingham catchfly (<i>Silene nutans</i>) and occasionally other members of this genus.					
Varied coronet (<i>Hadera compta</i>).					Common
	Rockland	C. R.	1990-2	(53)	
	Wheatfen	T. N. D. P.	1972	(56)	
Caterpillar feeds on the ripening seeds of sweet william (<i>Dianthus barbatus</i>). A single specimen was recorded at Wheatfen. This moth was first recorded in this country at Dover in 1948, but has since spread.					
Marbled coronet (<i>Hadena confusa</i>).					Local
	Strumpshaw	R. G. P.	1986	(15)	
	Wheatfen	T. N. D. P.	1971-2	(56)	
Caterpillar feeds on the ripening seeds of <i>Silene spp.</i>					

The lychnis (<i>Hadena bicruris</i>).				Common
	Coldham Hall	N. M. M.	1990	(13)
	Rockland	D. H.	1992	(53)
	Strumpshaw	K. L.	1983	(59)
		R. G. P.	1986	(15)
	S. Church Marsh	N. M. M.	1989	(13)
	Wheatfen	T. N. D. P.	1971	(3)
Caterpillar feeds on the pinks (<i>Silene spp.</i> and <i>Lychnis spp.</i>).				
Antler moth (<i>Cerapteryx graminis</i>).				Common
	Strumpshaw	R. G. P.	1984	(15)
		A. J. W.	1991	(12)
	Wheatfen	E. A. E.	1937	(3)
		N. M. M.	1992	(13)
Caterpillar feeds on fescues (<i>Festuca spp.</i>) and other grasses (Gramineae).				
Hedge rustic (<i>Tholera cespitis</i>).				Common
	Strumpshaw	R. G. P.	1985	(15)
		R. G. P.	1986	(15)
	Wheatfen	E. A. E.	1972	(3)
Caterpillar feeds on mat grass (<i>Nardus stricta</i>), <i>Deschampsia spp.</i> and other grasses.				
Feathered gothic (<i>Tholera decimalis</i>).				Common
	Strumpshaw	K. L.	1983	(59)
	Wheatfen	J. W. W.	1982	(3)
Caterpillar feeds on variety of grasses (Gramineae).				
Pine beauty (<i>Panolis flammea</i>).				Common
	Strumpshaw	R. G. P.	1986	(15)
Caterpillar feeds on pines (<i>Pinus spp.</i>).				
Small quaker (<i>Orthosia cruda</i>).				Common
	Strumpshaw	R. G. P.	1985	(15)
		A. J. W.	1991	(12)
	Wheatfen	T. N. D. P.	1972	(3)
		S. R. W.	1983	(3)
Caterpillar feeds on oak (<i>Quercus robur</i>) and willow (<i>Salix spp.</i>).				

✓ Powdered quaker (<i>Orthosia gracilis</i>).					Common
	Strumpshaw	R. G. P.	1986	(15)	
		A. J. W.	1991	(12)	
	Wheatfen	T. N. D. P.	1971	(3)	
		T. N. D. P.	1972	(3)	
Caterpillar feeds on <i>Salix</i> spp., meadowsweet (<i>Filipendula ulmaria</i>), purple loosestrife (<i>Lythrum salicaria</i>) and yellow loosestrife (<i>Lysimachia vulgaris</i>).					
Common quaker (<i>Othosia stabilis</i>).					Common
	Strumpshaw	K. L.	1983	(59)	
		A. J. W.	1991	(12)	
	Wheatfen	M. J. D. C.	1939	(1)	
		T. N. D. P.	1972	(3)	
Caterpillar feeds on oak (<i>Quercus robur</i>), willow (<i>Salix</i> spp.) and other trees.					
Clouded drab (<i>Orthosia incerta</i>).					Common
	Strumpshaw	K. L.	1983	(59)	
		A. J. W.	1991	(12)	
	Wheatfen	E. A. E.	1946	(3)	
		S. R. W.	1983	(3)	
Caterpillar feeds on oak (<i>Quercus robur</i>), willow (<i>Salix</i> spp.) and other trees.					
Twin-spotted quaker (<i>Orthosia munda</i>).					Common
	Strumpshaw	R. G. P.	1985	(15)	
		R. G. P.	1986	(15)	
	Wheatfen	S. R. W.	1983	(3)	
Caterpillar feeds on various deciduous trees.					
Hebrew character (<i>Orthosia gothica</i>).					Common
	Rockland	C. R.	1990-2	(53)	
	Strumpshaw	R. G. P.	1984	(15)	
		A. J. W.	1991	(12)	
	Wheatfen	K. C. D.	1970	(3)	
		S. R. W.	1983	(3)	
Caterpillar feeds on a variety of trees and other plants.					

Brown-line bright-eye (<i>Mythimna conigera</i>).				Common
Rockland	C.R.	1990-2	(53)	
	D.H.	1993	(53)	
Strumpshaw	R.G.P.	1984	(15)	
	R.G.P.	1986	(15)	
Surlingham	K.G.S.	1988	(13)	
Wheatfen	E.A.E.	1938	(3)	
	W.M.W.	1989	(13)	

Caterpillar feeds on grasses including cock's foot (*Dactylis glomerata*), *Poa* spp. and *Festuca* spp..

The clay (<i>Mythimna ferrago</i>).				Common
Rockland	C.R.	1990-2	(53)	
	D.H.	1993	(53)	
Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
Surlingham	P.W.+A.G.I.	1987	(18)	
	K.G.S.	1988	(13)	
Wheatfen	B.A.C.	1938	(1)	
	W.M.W.	1989	(13)	

Caterpillar feeds mainly on grasses (Gramineae).

Striped Wainscot (<i>Mythimna pudorina</i>).				Local
Buckenham	K.G.S.	1994	(58)	
Cantley	R.K.	1994	(78)	
Strumpshaw	R.G.P.	1985	(15)	
	P.W.	1994	(78)	
Surlingham	P.W.+A.G.I.	1987	(18)	
	K.G.S.	1988	(13)	
Wheatfen	E.A.E.	1939	(1)	
	N.M.M.	1991	(13)	

Caterpillar feeds on *Phragmites australis*, *Phalaris arundinacea*, and other grasses. Southern wetlands.

Southern wainscot (<i>Mythimna straminea</i>).				Local
Buckenham	C.H.	1994	(78)	
Rockland	C.R.	1990-2	(53)	
Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
Surlingham	K.G.S.	1988	(13)	
S.Church Marsh	N.M.M.	1989	(13)	
Wheatfen	R.S.	1938	(1)	
	N.M.M.	1992	(13)	

Caterpillar feeds on *Phragmites australis* and canary grass (*Phalaris* spp.), also recorded on *Glyceria maxima* at Wheatfen (1). A local fenland species which can be quite abundant in suitable southern habitats.

Smoky wainscot (<i>Mythimna impura s. impura</i>).				Common
	Coldham Hall	N. M. M.	1990	(13)
	Rockland	C. R.	1990-2	(53)
	Strumpshaw	K. L.	1983	(59)
		A. J. W.	1991	(12)
	Surlingham	P. W. + A. G. I.	1987	(18)
		K. G. S.	1988	(13)
	Wheatfen	A. G. B. R.	1937	(1)
		N. M. M.	1992	(13)

Caterpillar feeds on a variety of grasses (Graminieae). A common wainscot not restricted to wetlands.

Common wainscot (<i>Mythimna pallens</i>).				Common
	Buckenham	K. G. S.	1994	(58)
	Coldham Hall	N. M. M.	1990	(13)
	Rockland	D. H.	1992	(53)
		D. H.	1993	(53)
	Strumpshaw	K. L.	1983	(59)
		A. J. W.	1991	(12)
	Surlingham	P. W. + A. G. I.	1987	(18)
	Wheatfen	A. G. B. R.	1938	(1)
		N. M. M.	1991	(13)

Caterpillar feeds on a variety of grasses (Graminieae). A fairly common wainscot, not restricted to wetlands.

White-speck (<i>Mythimna unipuncta</i>).				Migrant
	Strumpshaw	G. M. H.	1988-89	(51)

Caterpillar feeds on a variety of grasses (Graminieae). A migrant and transitory resident wainscot. A single caterpillar was recorded from a water trap.

Obscure wainscot (<i>Mythimna obsoleta</i>).				Local
	Strumpshaw	K. L.	1983	(59)

Caterpillar feeds on *Phragmites australis*. A very local fen and marsh species with a southern distribution. This record requires confirmation.

✓ Shoulder-striped wainscot (<i>Mythimna comma</i>).				Common
	Buckenham	K. G. S.	1994	(58)
	Coldham Hall	N. M. M.	1990	(13)
	Rockland	C. R.	1990-2	(53)
		D. H.	1993	(53)
	Strumpshaw	A. J. W.	1991	(12)
	Wheatfen	E. A. E.	1936	(3)
		T. N. D. P.	1971	(3)

Caterpillar feeds on cock's foot (*Dactylis glomerata*) and other grasses (Gramineae).

✓ Flame wainscot (<i>Senta flammea</i>).					RDB 3
	Cantley	R.K.	1994	(78)	(N/a)
	Strumpshaw	K.L.	1983	(59)	
		R.H.	1994	(58)	
	Wheatfen	T.N.D.P.	1971	(3)	
		R.H.	1974	(3)	
Caterpillar feeds on <i>Phragmites australis</i> at night hiding in the stem during daylight. It overwinters as a pupa in the reed stem. An internationally local species, confined in this country to East Anglian fens. The Mid-Yare has an important population of this species and it has been found in all years of intensive trapping, often in reasonable numbers.					
The shark (<i>Cucullia umbratica</i>)					Common
	Wheatfen	A.G.B.R.	1937	(3)	
		E.A.E.	1972	(3)	
Caterpillar feeds on various species of sow-thistle (<i>Sonchus spp.</i>) and wild lettuce (<i>Lactuca spp.</i>).					
The mullein (mullein shark) (<i>Cucullia verbasci</i>).					Common
	Wheatfen	T.N.D.P.	1972	(56)	
Caterpillar feeds on great mullein (<i>Verbascum thapsus</i>), hoary mullein (<i>Verbascum pulverulentum</i>), dark mullein (<i>Verbascum nigrum</i>), white mullein (<i>Verbascum lychnitis</i>), common figwort (<i>Scrophularia nodosa</i>), and water figwort (<i>Scrophularia auriculata</i>).					
✓ Minor shoulder-knot (<i>Brachylomia (=Cleoceris) viminalis</i>).					Common
	Strumpshaw	R.G.P.	1986	(15)	
		A.J.W.	1991	(12)	
	Wheatfen	E.A.E.	1945	(3)	
		W.M.W.	1989	(13)	
Caterpillar feeds on <i>Salix spp.</i> leaves which it spins together.					
Tawny pinion (<i>Lithophane semibrunnea</i>).					Local
	Wheatfen	T.N.D.P.	1971-2	(56)	
Caterpillar feeds on ash (<i>Fraxinus excelsior</i>).					
Grey shoulder-knot (<i>Lithophane ornitopus s.lactipennis</i>).					Common
	Rockland	D.H.	1993	(53)	
		D.H.	1994	(53)	
	Strumpshaw	R.G.P.	1984	(15)	
	Wheatfen	M.J.D.C.	1939	(1)	
		T.N.D.P.	1972	(3)	
Caterpillar feeds on oak (<i>Quercus robur</i>).					

- ✓ Sword-grass (*Xylena exsoleta*) N/a/N/b
 Wheatfen B.A.C. 1938 (3)
 Caterpillar feeds on a variety of low plants. The current status of this moth is unclear. Once widespread, it has declined throughout this century and is now restricted to the north and west.
- Early grey (*Xylocampa areola*). Common
 Rockland C.R. 1990-2 (53)
 D.H. 1993 (53)
 Strumpshaw R.G.P. 1985 (15)
 A.J.W. 1991 (12)
 Wheatfen E.A.E. 1970 (3)
 S.R.W. 1983 (3)
 Caterpillar feeds on honeysuckle (*Lonicera spp.*).
- ✓ Green-brindled crescent (*Allophytes oxyacanthae*). Common
 Strumpshaw R.G.P. 1985 (15)
 R.G.P. 1986 (15)
 Wheatfen R.S. 1938 (1)
 S.R.W. 1983 (3)
 Caterpillar feeds on blackthorn (*Prunus spinosa*) and hawthorn (*Crataegus monogyna*).
- Merveille du jour (*Dichonia aprilina*). Common
 Strumpshaw R.G.P. 1984 (15)
 A.J.W. 1991 (12)
 Wheatfen E.A.E. 1970 (3)
 T.N.D.P. 1971 (3)
 Caterpillar feeds on oak (*Quercus robur*).
- Brindled green (*Dryobotodes eremita*). Common
 Strumpshaw R.G.P. 1984 (15)
 R.G.P. 1985 (15)
 Wheatfen M.J.D.C. 1938 (1)
 N.M.M. 1990 (13)
 Caterpillar feeds in the buds then on the leaves of oak (*Quercus robur*) and hawthorn (*Crataegus monogyna*).
- ✓ Dark brocade (*Blepharita adusta*). Common
 Rockland C.R. 1990-2 (53)
 Strumpshaw K.L. 1983 (59)
 Caterpillar feeds on a variety low plants. A local moth with a southern distribution. Found on downland, heathland and fenland.

Large ranunculus (<i>Polymixis flavicincta</i>).					Local
Wheatfen	T. N. D. P.	1971	(3)		
Caterpillar feeds on a variety plants. A southern species.					
The satellite (<i>Eupsilia transversa</i>).					Common
Strumpshaw	R. G. P.	1986	(15)		
Wheatfen	E. A. E.	1939	(1)		
Caterpillar feeds on deciduous trees and other caterpillars when encountered.					
The chestnut (<i>Conistra vaccinii</i>).					Common
Strumpshaw	R. G. P.	1984	(15)		
	A. J. W.	1991	(12)		
Wheatfen	E. A. E.	1939	(3)		
	E. A. E.	1973	(3)		
Caterpillar feeds on oak (<i>Quercus robur</i>), birch (<i>Betula pendula</i>), elm (<i>Ulmus spp.</i>) and occasionally other plants.					
The dark chestnut (<i>Conistra ligula</i>).					Common
Wheatfen	E. A. E.	1933	(3)		
	E. A. E.	1982	(3)		
Caterpillars feed on hawthorn (<i>Crateagus spp.</i>), willow (<i>Salix spp.</i>) and oak (<i>Quercus robur</i>).					
The brick (<i>Agrochola circellaris</i>).					Common
Strumpshaw	R. G. P.	1984	(15)		
	A. J. W.	1991	(12)		
Wheatfen	M. J. D. C.	1938	(1)		
	T. N. D. P.	1971	(3)		
Caterpillar feeds on wych elm (<i>Ulmus glabra</i>) and occasionally other trees.					
Red-line quaker (<i>Agrochola lota</i>).					Common
Rockland	D. H.	1992	(53)		
Strumpshaw	R. G. P.	1984	(15)		
	A. J. W.	1991	(12)		
Wheatfen	T. N. D. P.	1971	(3)		
Caterpillar feeds on <i>Salix spp.</i> .					
Yellow-line quaker (<i>Agrochola macilenta</i>).					Common
Strumpshaw	R. G. P.	1984	(15)		
	A. J. W.	1991	(12)		
Wheatfen	T. N. D. P.	1971	(3)		
Caterpillar feeds on beech (<i>Fagus sylvatica</i>), poplar catkins (<i>Populus spp.</i>), oak (<i>Quercus robur</i>) and sometimes other plants.					

✓	Flounced chestnut (<i>Agrochola helvola</i>).				Common
	Strumpshaw	R. G. P.	1986	(15)	
	Wheatfen	T. N. D. P.	1971	(3)	
	Caterpillar feeds on a variety of trees and plants.				
✓	Brown-spot pinion (<i>Agrochola litura</i>).				Common
	Strumpshaw	R. G. P.	1984	(15)	
		A. J. W.	1991	(12)	
	Wheatfen	E. A. E.	1938	(3)	
		N. M. M.	1989	(13)	
	Caterpillar feeds on various plants.				
✓	Beaded chestnut (<i>Agrochola lychnidis</i>).				Common
	Rockland	D. H.	1992	(53)	
	Strumpshaw	R. G. P.	1984	(15)	
		A. J. W.	1991	(12)	
	Wheatfen	T. N. D. P.	1971	(3)	
		N. M. M.	1989	(13)	
	Caterpillar feeds on grasses (Gramineae) and low plants.				
	The suspected (<i>Parastichtis suspecta</i>).				Local
	Surlingham	P. W. + A. G. I.	1987	(18)	
	Caterpillar feeds on birch (<i>Betula pendula</i>) and possibly willow (<i>Salix spp.</i>). A single specimen.				
✓	Centre-barred sawfly (<i>Atethmia centrigo</i>).				Common
	Rockland	D. H.	1992	(53)	
	Strumpshaw	R. G. P.	1984	(15)	
		R. G. P.	1986	(15)	
	Wheatfen	R. C. D.	1970	(3)	
		S. R. W.	1983	(3)	
	Caterpillar feeds first on the buds then on the leaves of ash (<i>Fraxinus excelsior</i>).				
	Lunar underwing (<i>Omphaloscelis lunosa</i>).				Common
	Rockland	D. H.	1992	(53)	
	Strumpshaw	R. G. P.	1984	(15)	
		R. G. P.	1986	(15)	
	Wheatfen	T. N. D. P.	1971	(3)	
		N. M. M.	1989	(13)	
	Caterpillar feeds on the blades, stems and roots of various grasses (Gramineae).				
	Orange sawfly (<i>Xanthia citrigo</i>).				Common
	Wheatfen	T. N. D. P.	1972	(3)	
		N. M. M.	1990	(13)	
	Caterpillar feeds on lime (<i>Tilia spp.</i>).				

Pink-barred sawfly (*Xanthia togata*). Common

Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
Wheatfen	T.N.D.P.	1971	(3)	
	S.R.W.	1983	(3)	

Caterpillar first feeds on sawfly catkins (*Salix* spp.), but in later instars moves onto low plants.

The sawfly (*Xanthia ictertia*). Common

Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
Wheatfen	E.T.D.	1938	(1)	
	N.M.M.	1990	(13)	

Caterpillar first feeds on sawfly catkins (*Salix* spp.), but in later instars moves onto leaves or low plants.

Dusky-lemon sawfly (*Xanthia gilvago*). Local

Strumpshaw	A.J.W.	1991	(12)	
Wheatfen	T.N.D.P.	1971	(3)	
	T.N.D.P.	1972	(3)	

Caterpillar feeds on the seeds of elms (*Ulmus* spp.).

Poplar grey (*Acronicta megacephala*). Common

Rockland	D.H.	1992	(53)	
	D.H.	1993	(53)	
Strumpshaw	R.G.P.	1985	(15)	
	R.G.P.	1986	(15)	
Wheatfen	B.A.C.	1938	(3)	
	N.M.M.	1991	(13)	

Caterpillar feeds on black poplar (*Populus nigra*), aspen (*Populus tremula*) and occasionally other members of the willow family (*Salicaceae*).

The sycamore (*Acronicta aceris*). Local

Rockland	D.H.	1993	(53)	
Strumpshaw	A.J.W.	1991	(12)	
Surlingham	K.G.S.	1988	(13)	
Wheatfen	N.M.M.	1991	(13)	

Caterpillar feeds on horse chestnut (*Aesculus hippocastanum*), *Acer* spp. and oak (*Quercus robur*). This appears to be a recent addition to the Mid-Yare fauna.

The miller (<i>Acronicta leporina</i>).				Common
Cantley	R.K.	1994	(78)	
Strumpshaw	R.G.P.	1984	(15)	
	R.G.P.	1985	(15)	
Wheatfen	T.N.D.P.	1971-2	(56)	
Caterpillar feeds on deciduous trees and burrows into the wood.				
The alder (<i>Acronicta alni</i>).				Local
Strumpshaw	R.G.P.	1986	(15)	
Wheatfen	T.N.D.P.	1972	(56)	
Caterpillar feeds on alder (<i>Alnus glutinosa</i>) and other deciduous trees. A rather local species. Both records are of single adults, however larvae have been recorded at Wheatfen (T. Peet pers. comm.).				
Dark dagger (<i>Acronicta tridens</i>).				Common
Strumpshaw	R.G.P.	1984	(15)	
Wheatfen	T.N.D.P.	1971-2	(56)	
Caterpillar feeds on deciduous trees and shrubs.				
Grey dagger (<i>Acronicta psi</i>).				Common
Rockland	D.H.	1992	(53)	
Strumpshaw	K.L.	1983	(59)	
	A.J.W.	1991	(12)	
Wheatfen	E.A.E.	1937	(3)	
	N.M.M.	1991	(13)	
Caterpillar feeds on deciduous trees.				
✓ Knot grass (<i>Acronicta rumicis</i>).				Common
Strumpshaw	A.J.W.	1991	(12)	
Wheatfen	B.A.C.	1938	(3)	
	E.A.E.	1949	(3)	
Caterpillar recorded feeding on water dock (<i>Rumex hydrolapathum</i>) at Wheatfen, but known to feed on a variety of plants.				
Reed dagger (<i>Simyra albovenosa</i>).				N/b
Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
S.Church Marsh	N.M.M.	1989	(13)	
Wheatfen	M.J.D.C.	1937	(1)	
	N.M.M.	1992	(13)	
Caterpillar feeds between June and September on the leaves of <i>Phragmites australis</i> . Also recorded on <i>Glyceria maxima</i> At Wheatfen. A very local wainscot like moth found in southern fens. Regularly taken at light in the Mid-Yare, but not in large numbers. Ted Ellis records the existence of the reddish form				

(*S. albovenosa ab. ochraceae*) at Wheatfen. Overwinters as a pupa.

Marbled beauty (<i>Cryphia domestica</i>).				Common
Strumpshaw	A. J. W.	1991	(12)	
Caterpillar feeds on lichens growing on rocks and walls.				
Copper underwing (<i>Amphipyra pyramidea</i>).				Common
Strumpshaw	R. G. P.	1984	(15)	
	M. E. A. S.	1993		
Wheatfen	E. A. E.	1936	(3)	
	N. M. M.	1992	(13)	
Caterpillar feeds on oak (<i>Quercus robur</i>), honeysuckle (<i>Lonicera spp.</i>), ash (<i>Fraxinus excelsior</i>), and other trees and shrubs.				
Svensson's copper underwing (<i>Amphipyra berbera s. svenssoni</i>).				Common
Strumpshaw	A. J. W.	1991	(12)	
Caterpillar feeds on oak (<i>Quercus robur</i>), lime (<i>Tilia spp.</i>), willow (<i>Salix spp.</i>) and probably other trees. Regularly recorded as the above species, from which it differs very slightly.				
Mouse moth (<i>Amphipyra tragopoginis</i>).				Common
Rockland	D. H.	1992	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Wheatfen	E. T. D.	1938	(3)	
	N. M. M.	1992	(13)	
Caterpillar feeds on a variety of plants.				
Old lady (<i>Mormo maura</i>).				Local
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Wheatfen	E. T. D.	1938	(1)	
	E. A. E.	1981	(3)	
Caterpillar feeds on deciduous trees and shrubs. Usually recorded as singletons, and rarely at light. Ted Ellis records a pair returning to the same roost on ten consecutive days in 1976.				
Bird's wing (<i>Dypterygia scabriuscula</i>).				Local
Strumpshaw	K. L.	1983	(59)	
	R. G. P.	1986	(15)	
Wheatfen	T. N. D. P.	1972	(3)	
Caterpillar feeds on <i>Rumex spp.</i> and other low growing plants. Usually occurs in heathy areas. (P. Waring pers. comm.).				

Brown rustic (<i>Rusina ferruginea</i>).				Common
	Rockland	C. R.	1990-2	(53)
	Strumpshaw	R. G. P.	1984	(15)
		P. W.	1994	(78)
	Wheatfen	J. L. M.	1939	(1)
		N. M. M.	1991	(13)
Caterpillar feeds on dock (<i>Rumex spp.</i>), plantain (<i>Plantago spp.</i>), groundsel (<i>Senecio spp.</i>) and other low plants.				
Straw underwing (<i>Thalpophila matura</i>).				Common
	Strumpshaw	A. J. W.	1991	(12)
	Surlingham	P. W. + A. G. I.	1987	(18)
		K. G. S.	1988	(13)
Caterpillar feeds on various grasses (Gramineae).				
Small angle shades (<i>Euplexia lucipara</i>).				Common
	Buckenham	K. G. S.	1994	(58)
	Rockland	D. H.	1993	(53)
	Strumpshaw	K. L.	1983	(59)
		P. W.	1994	(78)
	Wheatfen	T. N. D. P.	1971	(3)
		T. N. D. P.	1972	(3)
Caterpillar feeds on bracken (<i>Pteridium aquilinum</i>), ferns (Filicopsida) and other low plants.				
Angle shades (<i>Phlogophora meticulosa</i>).				Common
	Rockland	T. B.	1986	(14)
		D. H.	1993	(53)
	Strumpshaw	K. G. S.	1982	(18)
		A. J. W.	1991	(12)
	S. Church Marsh	A. R. B.	1986	(14)
		N. M. M.	1989	(13)
	Wheatfen	R. S.	1938	(1)
		N. M. M.	1991	(13)
Caterpillar feeds on a wide variety of plants.				
Double kidney (<i>Ipimorpha retusa</i>).				Local
	Strumpshaw	R. G. P.	1984	(15)
		A. J. W.	1991	(12)
	S. Church Marsh	N. M. M.	1989	(13)
	Wheatfen	B. A. C.	1938	(1)
		N. M. M.	1992	(13)
Caterpillar feeds in the spun shoots of willow and willow (<i>Salix spp.</i>). A local species of damp situations, the relatively large Mid-Yare population is of national importance.				

The olive (<i>Ipimorpha subtusa</i>).					Local
	Strumpshaw	R.G.P.	1984	(15)	
	Wheatfen	J.L.M.	1939	(3)	
		T.N.D.P.	1972	(3)	
Caterpillar feeds in the spun leaves of aspen (<i>Populus tremula</i>) and poplars (<i>Populus spp.</i>).					
Dingy shears (<i>Enargia ypsilon</i>).					Local
	Strumpshaw	R.G.P.	1985	(15)	
Caterpillar feeds on the buds and catkins then the leaves of willow (<i>Salix spp.</i>) and occasionally other members of the willow family (Salicaceae). Local but widespread in GB.					
Lesser-spotted pinion (<i>Cosmia affinis</i>).					Local
	Strumpshaw	R.G.P.	1984	(15)	
Caterpillar feeds on elms (<i>Ulmus spp.</i>).					
The dun-bar (<i>Cosmia trapezina</i>).					Common
	Strumpshaw	K.L.	1983	(59)	
		A.J.W.	1991	(12)	
	Wheatfen	A.G.B.R.	1937	(3)	
		N.M.M.	1992	(13)	
Caterpillar feeds on various trees, shrubs and other caterpillars.					
Lunar-spotted pinion (<i>Cosmia pyralina</i>).					Local
	Strumpshaw	A.J.W.	1991	(12)	
	Wheatfen	T.N.D.P.	1971	(3)	
		E.A.E.	1974	(3)	
Caterpillar feeds on various deciduous trees and shrubs.					
Dark arches (<i>Apamea monoglypha</i>).					Common
	Coldham Hall	N.M.M.	1990	(13)	
	Rockland	D.H.	1992	(53)	
	Strumpshaw	K.L.	1983	(59)	
		A.J.W.	1991	(12)	
	Surlingham	P.W.+A.G.I.	1987	(18)	
		K.G.S.	1988	(13)	
	S.Church Marsh	N.M.M.	1989	(13)	
	Wheatfen	M.J.D.C.	1936	(1)	
		N.M.M.	1992	(13)	
Caterpillar feeds on the roots and stems of cock's foot (<i>Dactylus glomerata</i>) and other grasses (Gramineae).					

Light arches (<i>Apamea lithoxylaea</i>).				Common
Strumpshaw	R. G. P.	1986	(15)	
	A. J. W.	1991	(12)	
Surlingham	P. W. + A. G. I.	1987	(18)	
Wheatfen	M. J. D. C.	1937	(1)	
	N. M. M.	1991	(13)	
Caterpillar probably feeds on grasses (Gramineae).				
Clouded-bordered brindle (<i>Apamea crenata</i>).				Common
Rockland	C. R.	1990-2	(53)	
	D. H.	1993	(53)	
Strumpshaw	R. G. P.	1985	(15)	
	A. J. W.	1991	(12)	
Wheatfen	J. L. M.	1939	(1)	
	R. E.	1992	(55)	
Caterpillar feeds on cock's foot (<i>Dactylis glomerata</i>) and other grasses (Gramineae).				
Clouded brindle (<i>Apamea epomidion</i>).				Common
Strumpshaw	K. L.	1983	(59)	
Wheatfen	M. J. D. C.	1939	(1)	
Caterpillar feeds on various grasses (Gramineae).				
✓ Dusky brocade (<i>Apamea remissa</i>).				Common
Rockland	D. H.	1992	(53)	
	D. H.	1993	(53)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Wheatfen	J. L. M.	1939	(1)	
	M. E. L. N.	1939	(1)	
Caterpillar feeds on the seeds and leaves of various grasses (Gramineae).				
Small clouded brindle (<i>Apamea unanimitis</i>).				Common
Buckenham	K. G. S.	1994	(58)	
Cantley	R. K.	1994	(78)	
Coldham Hall	N. M. M.	1990	(13)	
Strumpshaw	R. G. P.	1985	(15)	
	P. W.	1994	(78)	
Wheatfen	J. L. M.	1939	(1)	
	T. N. D. P.	1971	(3)	
Caterpillar feeds on various grasses including reed canary-grass (<i>Phalaris spp.</i>). Found locally in marshy areas.				
✓ Large nutmeg (<i>Apamea anceps</i>).				Local
Strumpshaw	R. G. P.	1986	(15)	
Caterpillar feeds on the flowers and seeds and then the leaves of grasses (Gramineae).				

Rustic shoulder-knot (<i>Apamea sordens</i>).				Common
Rockland	C. R.	1990-2	(53)	
Strumpshaw	R. G. P.	1985	(15)	
	A. J. W.	1991	(12)	
Wheatfen	T. N. D. P.	1971	(3)	
Caterpillar feeds on cock's foot (<i>Dactylus glomerata</i>) and other grasses (Gramineae).				
Slender brindle (<i>Apamea scolopacina</i>).				Local/Common
Strumpshaw	R. G. P.	1984	(15)	
Caterpillar feeds first in the stems, then on the leaves, stem-bases and flowers of various woodland grasses (Gramineae). Rather local.				
Double lobed (<i>Apamea ophiogramma</i>).				Local/Common
Rockland	D. H.	1993	(53)	
Strumpshaw	R. G. P.	1984	(15)	
	A. J. W.	1991	(12)	
Surlingham	P. W. + A. G. I.	1987	(18)	
	K. G. S.	1988	(13)	
Wheatfen	M. J. D. C.	1938	(1)	
	N. M. M.	1992	(13)	
Caterpillar feeds in the stems of reed canary-grass (<i>Phalaris spp.</i>) and <i>Glyceria maxima</i> . A local but often abundant marshland species.				
Marbled minor (<i>Oligia strigilis</i>).				Common
Buckenham	K. G. S.	1994	(58)	
Rockland	D. H.	1993	(53)	
Strumpshaw	K. L.	1983	(59)	
	R. G. P.	1986	(15)	
Wheatfen	T. N. D. P.	1971-2	(56)	
	N. M. M.	1991	(13)	
Caterpillar feeds in the stems of cock's foot (<i>Dactylus glomerata</i>), reed canary-grass (<i>Phalaris arundinacea</i>) and other grasses (Gramineae).				
Rufous minor (<i>Oligia versicolor</i>).				Local
Strumpshaw	R. G. P.	1986	(15)	
	A. J. W.	1991	(12)	
Caterpillar food plant unknown.				
Tawny marbled minor (<i>Oligia latruncula</i>).				Common
Buckenham	K. G. S.	1994	(58)	
Wheatfen	N. M. M.	1991	(13)	
Caterpillar feeds in various grasses (Gramineae).				

Middle-barred minor (*Oligia fasciuncula*). Common

Buckenham	K.G.S.	1994	(58)
Rockland	D.H.	1993	(53)
Strumpshaw	R.G.P.	1986	(15)
	P.W.	1994	(78)
Wheatfen	E.A.E.	1939	(1)
	N.M.M.	1991	(13)

Caterpillar feeds on various grasses (Gramineae).

Cloaked minor (*Mesoligia furuncula*). Common

Strumpshaw	A.J.W.	1991	(12)
Surlingham	P.W.+A.G.I.	1987	(18)
	K.G.S.	1988	(13)
Wheatfen	B.A.C.	1938	(1)
	T.N.D.P.	1971-2	(56)

Caterpillar feeds on various grasses (Gramineae).

✓ Rosy minor (*Mesoligia literosa*). Common

Strumpshaw	R.G.P.	1984	(15)
Surlingham	K.G.S.	1988	(13)

Caterpillar feeds in the roots and stems of various grasses (Gramineae).

Common rustic (*Mesapamea secalis*). Common

Rockland	D.H.	1992	(53)
	D.H.	1993	(53)
Strumpshaw	R.G.P.	1984	(15)
	A.J.W.	1991	(12)
Surlingham	P.W.+A.G.I.	1987	(18)
	K.G.S.	1988	(13)
S.Church Marsh	N.M.M.	1989	(13)
Wheatfen	R.S.	1937	(1)
	N.M.M.	1992	(13)

Caterpillar feeds in the stems of various grasses (Gramineae). Records may refer to *M. secalella* which is almost indistinguishable.

Small dotted buff (*Photedes minima*). Common

Rockland	D.H.	1992	(53)
Strumpshaw	R.G.P.	1986	(15)
Wheatfen	T.N.D.P.	1971	(3)
	N.M.M.	1991	(13)

Caterpillar feeds in the stems of tufted hair grass (*Deschampsia cespitosa*).

Small wainscot (*Photedes pygmina*). Common

Strumpshaw	K.L.	1983	(59)
	A.J.W.	1991	(12)
Surlingham	K.G.S.	1988	(13)
Wheatfen	B.A.C.	1938	(1)
	S.R.W.	1983	(3)

Caterpillar feeds in the stems of various sedges (*Carex spp.*), rushes (*Juncus spp.*) and grasses (Gramineae). Fairly common in marshy areas.

Fenn's wainscot (*Photedes brevilinea*). RDB 3

Strumpshaw	R.G.P.	1984	(15)
Wheatfen	T.N.D.P.	1971	(3)
	E.A.E.	1976	(3)

Young caterpillar feeds in the stems of *Pragmites australis*, and moves out at night to feed on the leaves when older. Internationally scarce, and in the UK very local, being confined to the Broads and Suffolk coast. Inhabits reedy dykes and reedbeds on a two wale cutting cycle (P. Waring pers. comm.). Recorded as being scarce at Wheatfen (also recorded there in 1972).

Dusky sallow (*Eremobia ochroleuca*). Common

Rockland	D.H.	1992	(53)
Strumpshaw	R.G.P.	1984	(15)
	A.J.W.	1991	(12)
Wheatfen	E.A.E.	1972	(3)
	E.A.E.	1975	(3)

Caterpillar feeds on various grasses (Gramineae).

Flounced rustic (*Luperina testacea*). Common

Strumpshaw	R.G.P.	1984	(15)
	A.J.W.	1991	(12)
Wheatfen	T.N.D.P.	1971	(3)
	T.N.D.P.	1972	(3)

Caterpillar feeds on various grasses (Gramineae).

Ear moth (*Amphipoea oculea*) Common

Strumpshaw	K.L.	1983	(59)
Wheatfen	N.D.R.	1944	(3)
	E.A.E.	1982	(3)

Caterpillars feed on the stem bases of a variety of plants in damp situations.

✓	Rosy rustic (<i>Hydraecia micacea</i>).				Common
	Strumpshaw	K.G.S.	1982	(18)	
		A.J.W.	1991	(12)	
	Surlingham	K.G.S.	1988	(13)	
	Wheatfen	E.A.E.	1936	(3)	
		N.M.M.	1992	(13)	
	Caterpillar feeds on variety of low plants.				
	The butterbur (<i>Hydraecia petasitis</i>).				Local
	Strumpshaw	R.G.P.	1986	(15)	
	Caterpillar feeds in the stem and then the roots of butterbur (<i>Petasites hybridus</i>). A local species of marshy areas.				
	Frosted orange (<i>Gortyna flavago</i>).				Common
	Strumpshaw	R.G.P.	1985	(15)	
		R.G.P.	1986	(15)	
	Wheatfen	M.J.D.C.	1936	(1)	
		N.M.M.	1990	(13)	
	Caterpillar feeds in the stems of burdock (<i>Arctium spp.</i>), foxglove (<i>Digitalis purpurea</i>), thistles (<i>Cirsium spp.</i>) and other large-stemmed plants.				
✓	Haworth's minor (<i>Celaena haworthii</i>).				Local
	Strumpshaw	R.G.P.	1984	(15)	
		A.J.W.	1991	(12)	
	Surlingham	P.W.+A.G.I.	1987	(18)	
	Wheatfen	E.T.D.	1938	(1)	
	Caterpillar feeds in the stems of cotton grass (<i>Eriophorum spp.</i>) and perhaps grasses (Gramineae) and rushes (Juncaceae). Overwinters as an egg. A marshland species with a northern distribution. The Mid-Yare population is regionally important.				
✓	The crescent (<i>Celaena leucostigma s. leucostigma</i>).				Local
	Strumpshaw	R.G.P.	1984	(15)	
		A.J.W.	1991	(12)	
	Surlingham	P.W.+A.G.I.	1987	(18)	
		K.G.S.	1988	(13)	
	S.Church Marsh	N.M.M.	1989	(13)	
	Wheatfen	E.T.D.	1938	(1)	
		N.M.M.	1992	(13)	
	Caterpillar bores the leaves of yellow iris (<i>Iris pseudacorus</i>) and great fen-sedge (<i>Cladium mariscus</i>). A widespread but local marsh and fenland species. In the Mid-Yare it is normally abundant, but very scarce some years.				

Bulrush wainscot (<i>Nonagria typhae</i>).				Common
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
S. Church Marsh	N. M. M.	1989	(13)	
Wheatfen	E. T. D.	1938	(1)	
	N. M. M.	1989	(13)	
Caterpillar feeds in the stems of bulrush (<i>Typha spp.</i>). Pupa can be found in stems during July and August. Overwinters as an egg.				
Twin-spotted wainscot (<i>Archanara geminipuncta</i>).				Local
Strumpshaw	R. G. P.	1984	(15)	
	A. J. W.	1991	(12)	
Wheatfen	T. N. D. P.	1971	(3)	
Caterpillar feeds in the stems of <i>Phragmites australis</i> . Pupa found in stems in July and August. Locally common in S.E. of UK.				
Brown-veined wainscot (<i>Archanara dissoluta</i>).				Local
Strumpshaw	R. G. P.	1984	(15)	
	A. J. W.	1991	(12)	
Wheatfen	E. T. D.	1938	(1)	
	S. R. W.	1983	(3)	
<i>A. dissoluta ab. arundineta</i>				
Wheatfen	S. R. W.	1983	(3)	
Caterpillar feeds in the stems of <i>Phragmites australis</i> . Pupa found in stems in July. Locally common in S.E. of UK.				
Webb's wainscot (<i>Archanara sparganii</i>).				N/b
Strumpshaw	R. G. P.	1984	(15)	
	R. G. P.	1986	(15)	
Caterpillar in the stems of bulrush (<i>Typha spp.</i>), yellow iris (<i>Iris pseudacorus</i>), common club-rush (<i>Scirpus lacustris</i>) and branched bur-reed (<i>Sparganium erectum</i>). Usually inhabiting fens and marshy places near the coast.				
Rush wainscot (<i>Archanara algae</i>).				RDB 3
Strumpshaw	R. G. P.	1985	(15)	
Caterpillar feeds in the stems of common club-rush (<i>Scirpus lacustris</i>), bulrush (<i>Typha spp.</i>), and yellow iris (<i>Iris pseudacorus</i>). A very local species for which the Norfolk Broads are probably the main stronghold. This record requires confirmation.				

Large wainscot (<i>Rhizodra lutos</i>).				Common
Strumpshaw	R. G. P.	1984	(15)	
	A. J. W.	1991	(12)	
Wheatfen	E. A. E.	1967	(3)	
	N. M. M.	1990	(13)	
Caterpillar feeds in the roots and stem bases of <i>Phragmites australis</i> . Widespread and locally common in England.				
Fen wainscot (<i>Arenostola phragmitidis</i>).				Local
Strumpshaw	R. G. P.	1984	(15)	
	A. J. W.	1991	(12)	
Surlingham	T. N. D. P.	1974	(62)	
	K. G. S.	1988	(13)	
S. Church Marsh	N. M. M.	1989	(13)	
Wheatfen	E. A. E.	1938	(3)	
	N. M. M.	1992	(13)	
Caterpillar feeds in the stems of <i>Phragmites australis</i> . Local but not uncommon. Very common in Mid-Yare.				
Small rufous (<i>Coenobia rufa</i>).				Local
Strumpshaw	R. G. P.	1986	(15)	
Wheatfen	A. G. B. R.	1937	(3)	
	J. L. M.	1939	(3)	
Caterpillar feeds in the stems of jointed rush (<i>Juncus articulatus</i>) and sometimes soft rush (<i>J. effusus</i>). Fenland and marshy areas.				
Treble lines (<i>Charanyca trigrammica</i>).				Common
Strumpshaw	R. G. P.	1986	(15)	
Wheatfen	E. A. E.	1939	(3)	
	E. A. E.	1972	(3)	
Caterpillar feeds on a variety of low plants.				
The uncertain (<i>Hoplodrina alsines</i>).				Common
Coldham Hall	N. M. M.	1990	(13)	
Strumpshaw	K. L.	1983	(59)	
	A. J. W.	1991	(12)	
Surlingham	P. W. + A. G. I.	1987	(18)	
Wheatfen	E. A. E.	1938	(3)	
	N. M. M.	1992	(13)	
Caterpillar feeds on low plants.				

✓	The rustic (<i>Hoplodrina blanda</i>).				Common
	Strumpshaw	R.G.P.	1984	(15)	
		A.J.W.	1991	(12)	
	Surlingham	K.G.S.	1988	(13)	
	Wheatfen	E.A.E.	1938	(3)	
		N.M.M.	1991	(13)	
	Caterpillar feeds on a variety of low plants.				
	Vine's rustic (<i>Hoplodrina ambigua</i>).				Local
	Strumpshaw	R.G.P.	1984	(15)	
	Caterpillar feeds on low plants. A resident and suspected immigrant. A single specimen recorded.				
✓	Mottled rustic (<i>Caradrina morpheus</i>).				Common
	Buckenham	K.G.S.	1994	(58)	
	Rockland	C.R.	1990-2	(53)	
		D.H.	1993	(53)	
	Strumpshaw	R.G.P.	1984	(15)	
		A.J.W.	1991	(12)	
	Surlingham	K.G.S.	1988	(13)	
	Wheatfen	T.N.D.P.	1971-2	(56)	
		N.M.M.	1991	(13)	
	Caterpillar feeds on nettle (<i>Urtica dioica</i>), dandelion (<i>Taraxacum spp.</i>) and other low plants.				
	Pale mottled willow (<i>Caradrina clavipalpis</i>).				Common
	Strumpshaw	R.G.P.	1984	(15)	
		A.J.W.	1991	(12)	
	Surlingham	K.G.S.	1988	(13)	
	Caterpillar feeds on a variety of low plants.				
	Silky wainscot (<i>Chilodes maritimus</i>).				N/b/Local
	Buckenham	K.G.S.	1994	(58)	
	Cantley	R.Dyke	1994	(78)	
	Coldham Hall	N.M.M.	1990	(13)	
	Strumpshaw	R.G.P.	1986	(15)	
		P.W.	1994	(78)	
	Wheatfen	T.N.D.P.	1972	(3)	
	Caterpillar forages in old reed stems, feeding on a variety of animal and plant matter. A fenland species with a southern and eastern national distribution. Also recorded by A. Whitehouse at Strumpshaw in 1991.				
	Small yellow underwing (<i>Panemeria tenebrata</i>).				Local
	Wheatfen	M.J.D.C.	1938	(1)	
		E.A.E.	1956	(3)	
	Caterpillar feeds on the seed capsules of common mouse-ear (<i>Cerastium holosteoides</i>). Probably extinct in the broads.				

Scarce bordered straw (<i>Heliothis (=Helicoverpa) armigera</i>).					Migrant
Wheatfen	E. A. E.	1976	(3)		
Caterpillar feeds on a variety of plants, especially crops. Ted Ellis records two specimens active by day on 22.7.76. An unusual record.					
Marbled white spot (<i>Lithacodia pygarga</i>).					Common
Cantley	R. K.	1994	(78)		
Strumpshaw	R. G. P.	1986	(15)		
Caterpillar feeds on purple moor-grass (<i>Molinia caerulea</i>) and probably other grasses.					
Silver hook (<i>Eustrotia uncula</i>).					Local
Strumpshaw	R. G. P.	1985	(15)		
	P. W.	1994	(78)		
Wheatfen	T. N. D. P.	1972	(3)		
Caterpillar feeds on sedges (<i>Carex spp.</i>) and grasses (Gramineae). Local in fenlands and boggy places. Also recorded by D. Miller at Strumpshaw in 1986 (52).					
Cream-bordered green pea (<i>Earias clorana</i>).					N/b
Buckenham	K. G. S.	1994	(58)		
Cantley	R. K.	1994	(78)		
Strumpshaw	D. J. P. M.	1985	(52)		
	P. W.	1994	(78)		
Wheatfen	T. N. D. P.	1972	(3)		
Caterpillar feeds on members of the willow family (Salicaceae). Local in marshy areas and shingle beaches in south-eastern England. Also recorded at Strumpshaw in 1986 by R. Pointer and 1991 by A. Whitehouse.					
Scarce silver-lines (<i>Bena prasinana</i>).					Local
Wheatfen	T. N. D. P.	1971	(3)		
	T. N. D. P.	1972	(3)		
Caterpillar feeds on oak (<i>Quercus robur</i>).					
Green silver-lines (<i>Pseudoips fagana s. britannica</i>).					Common
Buckenham	K. G. S.	1994	(58)		
Strumpshaw	R. G. P.	1985	(15)		
	A. J. W.	1991	(12)		
Wheatfen	E. A. E.	1967	(3)		
	N. M. M.	1991	(13)		
Caterpillar feeds on a variety of deciduous trees.					

Burnished brass (<i>Diachrysis chrysitis</i>).				Common
Buckenham	K.G.S.	1994	(58)	
Coldham Hall	N.M.M.	1990	(13)	
Rockland	D.H.	1992	(53)	
	D.H.	1993	(53)	
Strumpshaw	K.L.	1983	(59)	
	P.W.	1994	(78)	
S.Church Marsh	A.R.B.	1986	(14)	
Wheatfen	R.S.	1938	(1)	
	N.M.M.	1991	(13)	

Caterpillar feeds on nettle (*Urtica dioica*) and probably other low plants.

Golden plusia (<i>Polychrysis moneta</i>).				Common
Strumpshaw	R.G.P.	1984	(15)	
Wheatfen	T.N.D.P.	1971	(3)	
	T.N.D.P.	1972	(3)	

Caterpillar feeds on monk's hood (*Aconitum napellus*) and cultivated species of *Delphinium*. A single specimen was taken at Strumpshaw.

Gold spot (<i>Plusia festucae</i>).				Common
Buckenham	K.G.S.	1994	(58)	
Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
S.Church Marsh	N.M.M.	1989	(13)	
Wheatfen	B.A.C.	1938	(1)	
	T.N.D.P.	1972	(3)	

Caterpillar feeds on yellow iris (*Iris pseudacorus*), bur-reeds (*Sparganium spp.*) and probably a variety of other marshland plants. Fairly common in marshes and other wetlands.

Lempke's gold spot (<i>Plusia putnami s. gracilis</i>).				Local
Strumpshaw	R.G.P.	1986	(15)	
Wheatfen	T.N.D.P.	1972	(3)	

Caterpillar foodplant unknown. Locally widespread in the fens and broads of East Anglia and further north.

Silver y (<i>Autographa gamma</i>).				Common/Migrant
Coldham Hall	T.B.	1986	(14)	
Rockland	D.H.	1992	(53)	
Strumpshaw	K.G.S.	1982	(18)	
	M.E.A.S.	1993		
Surlingham	P.W.+A.G.I.	1987	(18)	
	K.G.S.	1988	(13)	
Wheatfen	E.A.E.	1936	(1)	
	N.M.M.	1992	(13)	

Caterpillar feeds on most plants. Particularly abundant in cpts. 30-31 (Aug. 1993). This species

does not usually survive the winter in this country, but immigrates every year in huge numbers and breeds.

Beautiful golden y (<i>Autographa pulchrina</i>).				Common
Buckenham	K.G.S.	1994	(58)	
Rockland	D.H.	1993	(53)	
Strumpshaw	R.G.P.	1984	(15)	
	R.H.	1994	(58)	
Wheatfen	T.N.D.P.	1971	(3)	
	T.N.D.P.	1972	(3)	

Caterpillar feeds on honeysuckle (*Lonicera spp.*), dead-nettle (*Lamium spp.*) and other low plants.

Plain golden y (<i>Autographa jota</i>).				Common
Coldham Hall	N.M.M.	1990	(13)	
Rockland	D.H.	1993	(53)	
Strumpshaw	R.G.P.	1985	(15)	
	A.J.W.	1991	(12)	
Wheatfen	T.N.D.P.	1971	(3)	
	N.M.M.	1991	(13)	

Caterpillar feeds on nettles (*Urtica dioica*), honeysuckle (*Lonicera spp.*) and probably other plants.

Dark spectacle (<i>Abrostola trigemina</i>).				Common
Surlingham	K.G.S.	1988	(13)	

Caterpillar feeds on common nettle (*Urtica dioica*) and hop (*Humulus lupulus*).

The spectacle (<i>Abrostola triplasia</i>).				Common
Coldham Hall	E.A.E.	1968	(3)	
Rockland	C.R.	1990-2	(53)	
	D.H.	1993	(53)	
Strumpshaw	R.G.P.	1984	(15)	
	P.W.	1994	(78)	
Surlingham	K.G.S.	1988	(13)	
S.Church Marsh	N.M.M.	1989	(13)	
Wheatfen	B.A.C.	1938	(1)	
	N.M.M.	1991	(13)	

Caterpillar feeds on nettle (*Urtica dioica*).

Red underwing (<i>Catocala nupta</i>).				Common
Rockland	D.H.	1992	(53)	
Strumpshaw	K.L.	1983	(59)	
	R.G.P.	1986	(15)	
Wheatfen	T.N.D.P.	1971	(3)	
	E.A.E.	1976	(3)	

Caterpillar feeds on trees in the willow family (*Salicaceae*). Only recorded from Strumpshaw in

low numbers (recorded as *Catocala promissa* by K. Lord (59)).

Mother shipton (<i>Callistege mi</i>).					Common
Wheatfen	R. S.	1939	(1)		
Caterpillar feeds on clover (<i>Trifolium spp.</i>).					
Burnet companion (<i>Euclidia glyphica</i>).					Common
Wheatfen	M. J. D. C.	1938	(1)		
	E. A. E.	1944	(1)		
Caterpillar feeds on various clovers (<i>Trifolium spp.</i>) and trefoils (<i>Lotus spp.</i>).					
The blackneck (<i>Lygephila pastinum</i>).					Local
Buckenham	K. G. S.	1994	(58)		
Coldham Hall	A. R. B.	1986	(14)		
Rockland	D. H.	1993	(53)		
Strumpshaw	K. L.	1983	(59)		
	A. J. W.	1991	(12)		
Wheatfen	M. J. D. C.	1935	(1)		
	N. M. M.	1991	(13)		
Caterpillar feeds on tufted vetch (<i>Vicia cracca</i>).					
Locally common in southern marshes.					
The herald (<i>Scoliopteryx libatrix</i>).					Common
Rockland	D. H.	1992	(53)		
Strumpshaw	K. L.	1983	(59)		
	A. J. W.	1991	(12)		
Wheatfen	M. J. D. C.	1936	(1)		
	N. M. M.	1992	(13)		
Caterpillar feeds on members of the willow family (<i>Salicaceae</i>).					
Beautiful hook-tip (<i>Laspeyria flexula</i>).					Local
Strumpshaw	R. G. P.	1985	(15)		
	R. G. P.	1986	(15)		
Wheatfen	T. N. D. P.	1971	(3)		
	W. M. W.	1989	(13)		
Caterpillar feeds on lichens growing on trees. A rather local southern species.					
Straw dot (<i>Rivula sericealis</i>).					Common
Buckenham	K. G. S.	1994	(58)		
Strumpshaw	R. G. P.	1985	(15)		
	A. J. W.	1991	(12)		
Wheatfen	E. A. E.	1937	(1)		
	N. M. M.	1991	(13)		
Caterpillar feeds on various grasses (<i>Gramineae</i>).					

The snout (<i>Hypena proboscidalis</i>).				Common
Buckenham Carr	K.G.S.	1994	(58)	
Rockland	D.H.	1992	(53)	
Strumpshaw	R.G.P.	1984	(15)	
	A.J.W.	1991	(12)	
Surlingham	K.G.S.	1988	(13)	
S.Church Marsh	A.R.B.	1986	(14)	
Wheatfen	A.G.B.R.	1937	(1)	
	N.M.M.	1991	(13)	
Caterpillar feeds on nettle (<i>Urtica dioica</i>).				
Buttoned snout (<i>Hypena rostralis</i>).				N/b
Wheatfen	E.T.D.	1938	(1)	
Caterpillar feeds on hop (<i>Humulus lupulus</i>). A much decreased species. Larvae are regularly recorded in the Brecks (K. Saul pers. comm.). As the adults rarely come to light, the species could still be present in the valley.				
Pinion-streaked snout (<i>Schrankia costaestrigalis</i>).				Local
Buckenham	C.H.	1994	(78)	
Cantley	R.K.	1994	(78)	
Strumpshaw	R.G.P.	1986	(15)	
Wheatfen	E.T.D.	1938	(1)	
	T.N.D.P.	1972	(3)	
Caterpillar food plant unknown. Restricted to marshy places.				
Common fan-foot (<i>Pechipogo strigilata</i>).				N/a
Wheatfen	E.A.E.	1937	(1)	
Caterpillar feeds on withered leaves. A much decreased species, once recorded through out the south but now rarely recorded outside the most southerly counties.				
The fan-foot (<i>Herminia (=Polypogon) tarsipennalis</i>).				Common
Strumpshaw	R.G.P.	1985	(15)	
	A.J.W.	1991	(12)	
Wheatfen	E.A.E.	1938	(3)	
	N.M.M.	1992	(13)	
Caterpillar feeds on the withered leaves of oak (<i>Quercus robur</i>), beech (<i>Fagus sylvatica</i>), bramble (<i>Rubus spp.</i>) and probably other plants.				

Small fan-foot (<i>Hemina</i> (= <i>Polypogon</i>) <i>nemoralis</i>).				Common
Strumpshaw	R.G.P.	1986	(15)	
	A.J.W.	1991	(12)	
Wheatfen	T.N.D.P.	1971-2	(56)	
	N.M.M.	1991	(13)	

Caterpillar feeds on decaying and living leaves of oak (*Quercus robur*) and alder (*Alnus glutinosa*).

Dotted fan-foot (<i>Macrochilo cribrumalis</i>).				N/b
Buckenham	K.G.S.	1994	(58)	
Buckenham Carr	K.G.S.	1994	(58)	
Cantley	R.K.	1994	(78)	
Coldham Hall	N.M.M.	1990	(13)	
Strumpshaw	T.N.D.P.	1973	(62)	
	P.W.	1994	(78)	
Wheatfen	E.A.E.	1937	(1)	
	T.N.D.P.	1971	(3)	

Caterpillar feeds on hairy wood-rush (*Luzula pilosa*), wood-sedge (*Carex sylvatica*) and various marsh grasses. A very local southern species. Also recorded at Strumpshaw by R. Pointer 1986 (15) and A. Whitehouse in 1991 (12).

APPENDIX 1

The following records have not been included in the main section of the inventory due to doubts about taxonomy or difficulties encountered when updating disused nomenclature.

PHYLUM UNIRAMIA (Insects, centipedes, millipedes and allies).

Order Hemiptera (Bugs).

Rhopalosiphum ribis

Wheatfen	M. J. D. C.	?	(1)
Recorded on blackcurrant (<i>Ribis</i> spp.)			

Order Coleoptera (Beetles).

Sacium pusillum

Wheatfen	A. M. M.	1960	(3)
----------	----------	------	-----

Chilosia similis

Wheatfen	E. A. E.	1943	(29)
----------	----------	------	------

Glischrochilus olivseri

Wheatfen	A. B. D.	1978	(3)
----------	----------	------	-----

Order Hymenoptera (Ants, bees, wasps and allies).

Cilissa leporina

Wheatfen	E. A. E.	1977	(3)
----------	----------	------	-----

Tetrastichus roesellae

Wheatfen	M. J. D. C.	1935	(1)
Galls on hazel (<i>Corylus avellana</i>). Specimen was determined by the British Museum of Natural History.			

Dineura nigricans

Wheatfen	M. J. D. C.	1938	(1)
----------	-------------	------	-----

Selandria aperta

Buckenham	J. B. B.	1887	(32)
-----------	----------	------	------

Pimpla detrita

Surlingham	C. M.	1912	(33)
------------	-------	------	------

Plectiscidea melanocera (= *Plectiseus melanocerus*?)

Buckenham	J. B. B.	1894	(34)
The only British record of this species at this time.			

Lissonota leptogaster

Strumpshaw	J. B. B.	1894	(34)
------------	----------	------	------

Trematopygus procurator
Buckenham J. B. B. 1894 (34)

Order Diptera (Flies).

Sticlodiplosis corylina
Surlingham A. E. M. 1935 (79)

Order Trichoptera (Caddis flies).

Phryganea obseleta
Strumpshaw M. J. 1987 (14)
May refer to *Agrypnia obseleta* which is an upland
species and therefore probably a misidentification.