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for 1995



Beetle Conservation in Lincolnshire

Mistletoe Survey

Micro-moth Recording

Harvest Mice at Spalding

Lincolnshire Natural History in 1995

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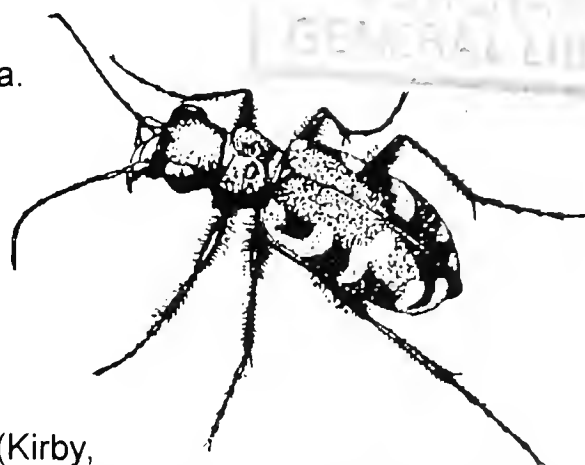
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BEETLES IN LINCOLNSHIRE - A CONSERVATION PERSPECTIVE.

Roger S Key

Lincolnshire's Beetle Fauna

Considering its latitude and agricultural history, Lincolnshire still has a remarkably rich beetle fauna. By the end of 1995, 1864 species had been found in the county, almost half of the total beetle fauna of the United Kingdom. Of these species, 71 are now considered so rare as to be described as Red Data Book species and a further 226 species designated Nationally Scarce (see box). The conservation significance of Lincolnshire beetles has been assessed to some extent in the Nature Conservancy Council's Invertebrate Site Register (Kirby, 1987, Key 1986, 1987). Beetles were not covered in depth in the Lincolnshire Red Data Report (Smith, 1988).



Extinct species and ones with no recent records.

A number of these scarce species have, however, not been seen in the county in the last twenty-five years and at least some of them are now probably extinct here. 42 of the RDB species, 168 of the nationally scarce species and almost 300 less scarce species have not been seen in this time. While this is in keeping with national trends, where there has often been a considerable contraction in range or decrease in frequency of records, a comparison of the last twenty-five years with the previous century and a half of recording

does not compare like with like. No doubt, there remain undiscovered populations of some of these species in the county. This is dramatically illustrated by the rediscovery of *Ernoporus tiliae* (RDB1) a little bark beetle that lives in small dead lime branches, in the Lincs Limewoods by Tony Drane in 1995 after 130 years with no records.

Some species are, however, almost certainly extinct in Lincolnshire, being sufficiently large and conspicuous as to make it almost certain that they would be noticed if they were still here. These

Beetle Species Status

Scarce beetles have been ascribed conservation status in a Red Data Book (Shirt, 1987) & National Review (Hyman & Parsons 1992 & 1994). These are abbreviated in the text & defined as follows:-

- RDB1** **Endangered.** Species in danger of extinction in Great Britain and whose survival is unlikely if the causal factors continue operating.
- RDB2** **Vulnerable.** Species believed likely to move into the Endangered category in the near future if the causal factors continue operating.
- RDB3** **Rare.** Species with small populations in Great Britain that are not at present Endangered or Vulnerable, but are at risk.
- RDBK** **Insufficiently Known.** Species considered to be Endangered, Vulnerable or Rare, but where there is not enough information to say which of the three categories is appropriate.

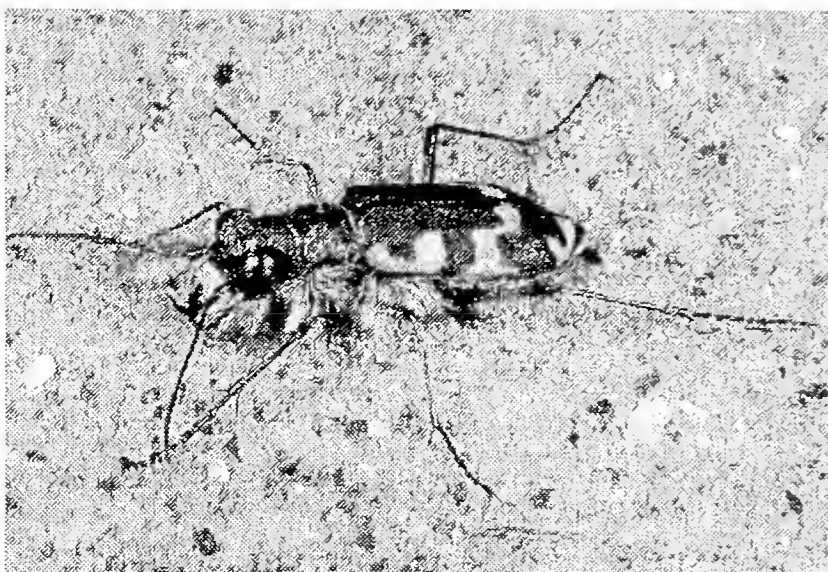
Nationally Scarce Categories

Species occurring in more than fifteen but less than 100 of the 10 km grid squares since 1980.

- NA** **Nationally Scarce Category A.** Species recorded from sixteen to thirty of the 10 km squares in Britain since 1980.
- Nb** **Nationally Scarce Category B.** Species recorded from 31 to 100 of the 10 km squares in Britain.

Beetle Conservation in Lincolnshire

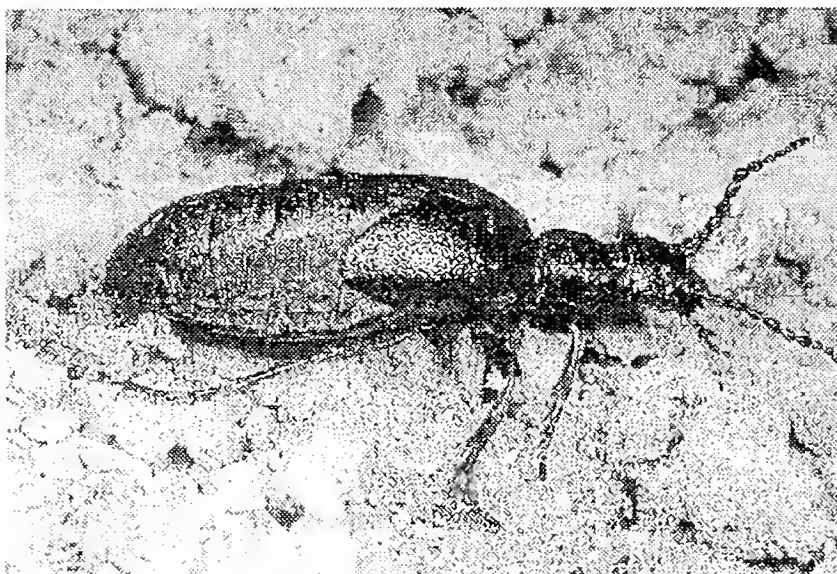
include the heath and dune tiger beetles *Cicindela sylvatica* (NA) and *C. maritima* (NB). Both of these conspicuous, fast running purple and cream beetles were only known from small areas of the county, the former from Manton Warren and the latter from Cleethorpes, and both have retreated in range nationally since they were last seen in Lincolnshire.



Cicindela maritima - extinct since last century.

photo R S Key

Other conspicuous species that have not been seen in recent years are the creeping willow leaf beetle,



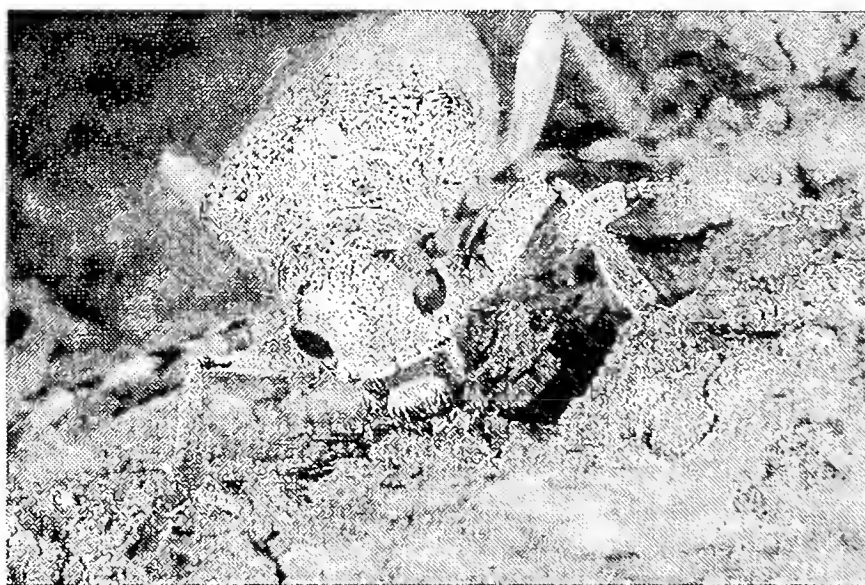
Mele proscarabaeus - a species now extinct in Lincs?

photo R.S. Key

Chrysomela populi which used to be quite widespread in the county. This is a large, handsome bright red and green species, unlikely to be overlooked. Our two species of oil beetle, *Meloë proscarabaeus* and *Meloë violaceus* (NB) appear also to have gone. Both were known from the Wolds and coast and depended on colonies of solitary bees, which have been drastically reduced in the Wolds by conversion of short grazed pasture to arable farmland.

Two spectacular species with no

recent records are our largest beetle of all, the Great Silver Water Beetle *Hydrophilus piceus* (RDB3) which lives in weedy ditches and fens, and our largest longhorn beetle, *Saperda carcharias* (NA) a handsome fawn and black species which lives in the timber of old poplars. The former is known from only a single record, from Holton Park in 1956 and so was probably very rare even then, while *S. carcharias* was recorded repeatedly from Skegness between 1911 and 1963 with scattered records elsewhere, but has not been seen since.



Saperda carcharias - our biggest longhorn beetle, not seen since 1963.

photo R S Key

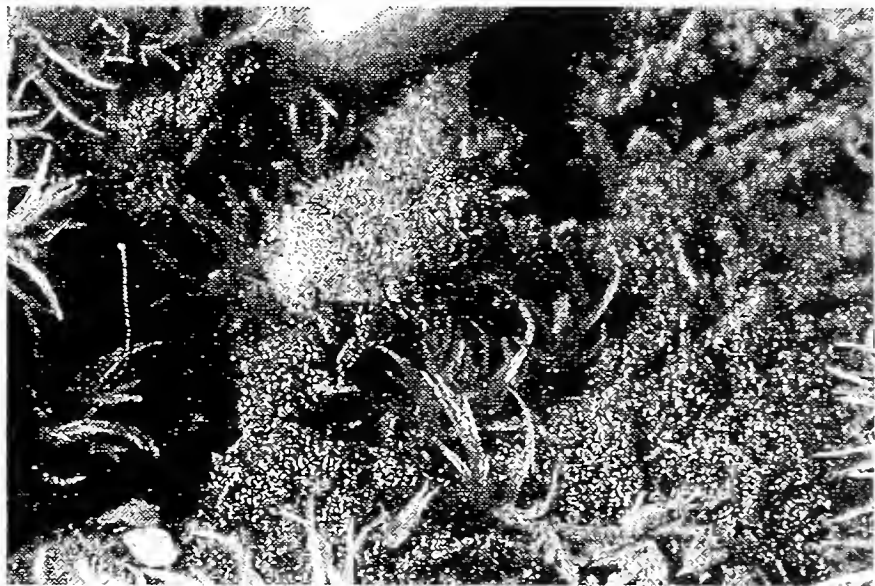
One species used to be sufficiently common to be regarded as a minor pest of beet crops (Roebuck, 1941). The "carrion" beetle (not really a carrion beetle at all, but a plant feeder) *Aclypea opaca* (NA) is almost half an inch long, covered in bright bronze hairs and runs along the ground in sunshine. It was last seen in the county in 1951 and has presumably been killed off by the application of pesticides.

A whole assemblage of species seems to have been lost from the county, the fauna associated with stony and sandy shoals on river margins which, if one looks and the canalised ruins of most of the county's rivers, is perhaps not surprising. One particularly rich site for this fauna was at Torksey on the banks of the Trent. Thornley (1895) found in 1895 what would today be an outstanding assemblage of riverine species, including the ground beetles *Bembidion stomoides* (NB), *B. lunatus* (NB), *Clivina collaris* (NB), *Pterostichus macer*, and *Trechus secalis* and the leaf beetle *Chrysolina orichalcea* (NB). At about the same time Mr S Pegler and Dr Cassel found there a number of species more typical of sand-dunes, such as the little scarab beetle *Aegialia arenaria*, the scavenger beetle *Baeckmanniolus dimidiatus* (NB) and also our only county record of the large black marram weevil, *Otiorhynchus atroapterus*, a species most unusual away from the coast. I have recently examined the Trent banks at Torksey for beetles and found no decent habitat for riverine or dune species at all. Dune-like conditions were, however, probably not uncommon alongside our larger rivers when they were allowed to meander freely and deposit their silt and sand on the inside of bends.

However, despite these undoubted losses, Lincolnshire still does have many nationally important species of beetle, some of which are recognised as being of international significance.

Internationally Scarce Species

The populations of a few species of beetle that still occur in the county are of international conservation importance. The mire pill beetle, *Curimopsis nigrita* (RDB1) occurs in Britain only at Crowle/Thorne Moors, Haxey Grange Fen and at Hatfield Moors in South Yorkshire and abroad seems limited to a few mires around the Baltic. It feeds on one species of moss on wet bare peat. It is one of Britain's very few beetles given some protection under Schedule 5 of the 1981 Wildlife and Countryside Act, in this case being illegal knowingly to destroy its habitat.

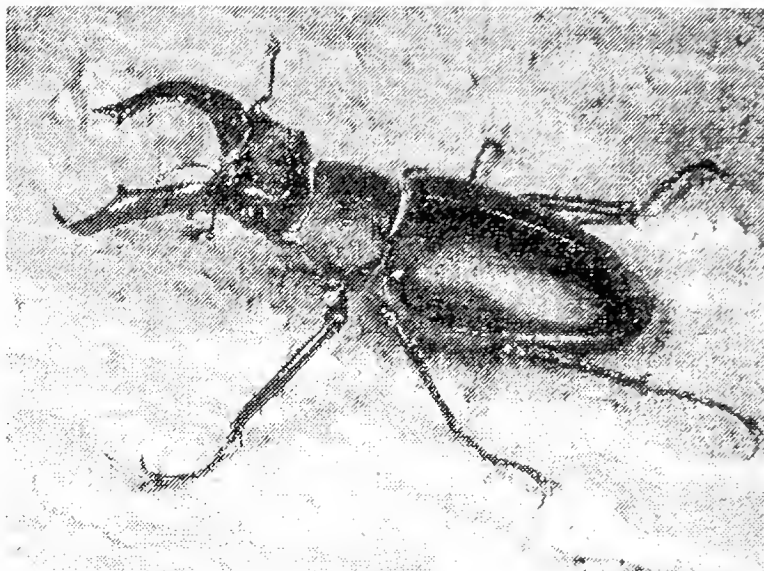


The mire pill beetle *Curimopsis nigrita* is well camouflaged as a speck of peat

photo R. S. Key

The stag beetle, *Lucanus cervus* (NB), which lives in very decayed wood of tree stumps, remains enigmatic in Lincolnshire. There are only two confirmed records, both nineteenth century importations with timber, but there are a host of recent claims for Lincolnshire stag beetles, in particularly in the south-west of the county, none of which can either be

confirmed or refuted. This species is listed on the Berne Convention on Endangered Species, the European Union Habitats and Species Directive and in the UK Biodiversity Action Plan (UK Steering Group, 1995). Britain has good populations in the New Forest and south east England, but a population in Lincolnshire would represent the edge of the species' range in Europe.



Do we have stag beetles in Lincolnshire?

photo S G Ball

One of our commoner species, *Biphyllus lunatus*, a hairy fungus beetle that lives in fungoid wood, seems to be extremely uncommon at least in central Europe (Valery Franck of Slovakia, pers comm.). There are at least fourteen sites for this species in Lincolnshire, including in my garden in Crowland!

Nationally Important Species

Two species of Lincolnshire beetles are included in the United Kingdom's Biodiversity Action Plan (UK Steering Group 1995), the United Kingdom's response to the 1992 Rio de Janeiro World Biodiversity Convention. This lists a number of species where the UK government will commit itself to implementing "Species Action Plans" aimed to ensure the species survival in Britain. For a number of species these action plans have already been drawn up and two of these species occur in the county. English Nature has already set up projects to find out more about their ecology and survey for possible further sites.

Panagaeus crux-major (RDB1) is a bizarre looking ground beetle, very bristly, with prominent eyes and black with a prominent cross in black and red on its wing-cases. It lives in wetlands with fluctuating water levels and used to be quite widespread in the fens of eastern England. Only three British populations are now known, one of which is on the Saltfleetby Theddlethorpe National Nature Reserve and its ecology is currently being studied by Mr David Hemingway.

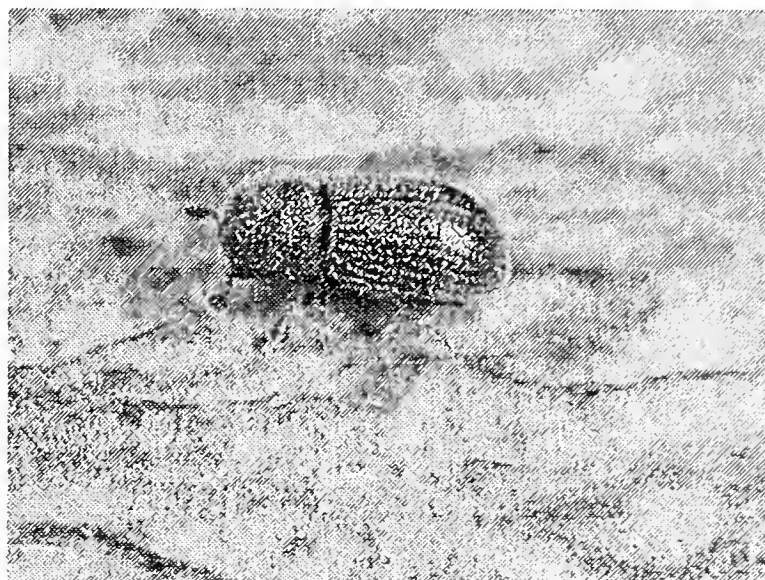
Cryptocephalus coryli (RDB 1) is a handsome orange and black leaf beetle that feeds on young tree foliage, especially of birch growing on heathland. Formerly widespread in coppice woodland throughout southern Britain, there are now only three small areas of the country where it still occurs, one being the heathlands on the western edge of the Wolds, from the Market Rasen to Woodhall Spa areas. Obviously this species has requirements other than the simple availability of its foodplant and Mr Alex Williams is working for English Nature to research this species' ecology in Lincolnshire.

A further species of beetle with an Species Action Plan used to occur in Lincolnshire. For many years Freshney Bog near Grimsby was the only known site in Britain for *Cryptocephalus exiguus* (RDB1), a small black and yellow wetland leaf beetle. It has been extinct in Lincolnshire since the destruction of this site in the 1960s and is now only known from a single site in Suffolk.

A number of other nationally rare Lincolnshire beetles are included on two further lists

included in the Biodiversity Action Plan for which Species Action Plans will eventually be written and implemented. These include two species already mentioned - the dune tiger beetle *Cicindela maritima* and the mire pill beetle *Curimopsis nigrita*. Other species are:

Ernoporus caucasicus (RDB1) A 1½mm bark beetle. Like *E. tiliae* mentioned above, this species feeds in small branches of lime and was discovered in 1995 for the first time in the county in the Lincolnshire Limewoods, where it now seems to be common, by Tony Drane. Otherwise it is known only from sites in Northants, Derbys, Herefords and Carms.



The minute bark beetle *Ernoporus caucasicus*

photo R S Key

Bembidion humerale (RDB1) A 3mm ground beetle that lives on bare and alga-covered peat, only on Crowle/Thorne and Hatfield Moors in the whole country.

Hydroporus rufifrons (RDB2) A 5mm water beetle that lives in very shallow pools in unimproved pastures. Our only recent record is from Epworth Turbary in 1984 but there is a nineteenth century record from Well Vale. It is one of our very few northern species that occur in Lincs. reaching its southern limit here.

The ground beetles *Badister peltatus* (NA), a species of coastal grazing marshes and *Bembidion testaceum* (NB), one of bare sand by rivers. Neither of these species has been seen in the county in recent years, the former since the 1860s and the latter since 1942.

Red Data Species

Of the 29 Red Data Book species that still occur in the county (table 1), two further species call for special mention.

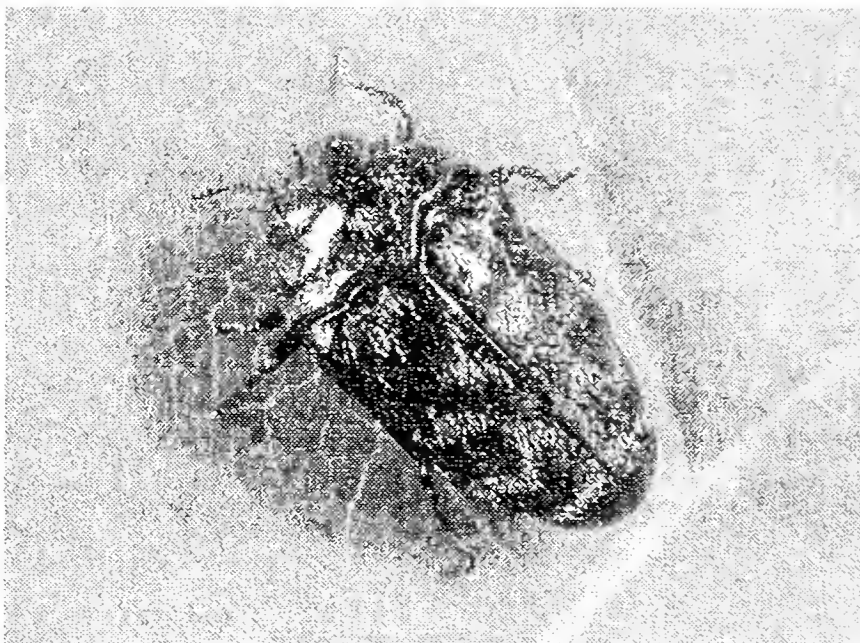
Table 1 Red Data Book Beetles still found in Lincolnshire - by habitat

Dune		Other Wetland	
<i>Panagaeus cruxmajor</i>	RDB1	<i>Telmatophilus schoenherri</i>	RDBK
Saltmarsh		<i>Calodera rufescens</i>	RDBK
<i>Pogonus luridipennis</i>	RDB3	Woodland/Dead Wood	
Scrub on Heathland		<i>Ernoporus tiliae</i>	RDB1
<i>Cryptocephalus coryli</i>	RDB1	<i>Ernoporus caucasicus</i>	RDB1
Aquatic Species		<i>Trachys minuta</i>	RDB2
<i>Hydroporus rufifrons</i>	RDB2	<i>Hypulus quercinus</i>	RDB2
<i>Agabus undulatus</i>	RDB3	<i>Corticeus unicolor</i>	RDB3
<i>Hydaticus transversalis</i>	RDB3	<i>Leptura sexguttata</i>	RDB3
<i>Acilius canaliculatus</i>	RDB3	<i>Gyrophana munsteri</i>	RDBK
<i>Hydrochus carinatus</i>	RDB3	Various Habitats	
<i>Hydrochus elongatus</i>	RDB3	<i>Acrotichis lucidula</i>	RDBK
<i>Hydrochus ignicollis</i>	RDB3	<i>Acrotichis norvegica</i>	RDBK
<i>Helophorus tuberculatus</i>	RDB3	<i>Colon appendiculatum</i>	RDBK
<i>Macroplea appendiculata</i>	RDB3	<i>Atheta testaceipes</i>	RDBK
Peatland		<i>Ilyobates nigricollis</i>	RDBK
<i>Bembidion humerale</i>	RDB1	<i>Aleochara inconspicua</i>	RDBK
<i>Curimopsis nigrita</i>	RDB1		

The 3½mm long black jewel beetle *Trachys minuta* (RDB2). The larvae of this species are

miners in tree foliage, especially lime. It used to be found throughout southern England, but now is known only from Norfolk, Hampshire, Buckinghamshire and Lincolnshire. It is regularly found in the Lincs limewoods.

The 5mm long brown melandryid beetle *Hypulus quercinus* (RDB2). A dead wood species known from a single specimen found at Grimsthorpe in 1994 by Annette Binding. This species again used to be widespread but is now only known from five sites scattered across the country.



The jewel beetle *Trachys minutus* - a Lincs Limewoods special photo R S Key

Beetle Habitats in Lincolnshire

Despite what has already been said above about the destruction of habitat in the county, there are still some pockets of excellent habitat. Most of the remainder of this article will be devoted to describing some of the best.

The Coast

The accreting coast of most Lincolnshire offers excellent habitat for a small number of intertidal beetles. A group of five species of rove beetles in the genus *Bledius*, some of which are quite interesting when seen close to, being bright red and black with spectacular horns and prongs on the head and thorax, and five species ground beetles of the genus *Dyschirius* which are specialised predators on *Bledius*. All live in burrows in silty sand on the upper shore, stopping up their burrows from inside at high tide and running conspicuously over the sand surface in sunshine between tides. These species can be found together on each of our dune reserves, being easiest to find at the mouth of a young dune slack that is still open to the sea, or at the edge of a creek which cuts through the dunes. Another species regularly patrols the intertidal sand, the 3mm long yellow and bronze ground beetle, *Bembidion ephippium* (NB). This species runs about like a clockwork toy over the sand surface, and occurs at Gibraltar Point and beside seasonal saltmarsh pools at Moulton Marsh.



Good intertidal and supralittoral beetle habitat at Gibraltar Point photo R S Key

Under strandline debris at Gibraltar Point and around the Wash, two scarce bronze ground beetles are county specialities. *Pogonus luridipennis* (RDB3) has otherwise only recently been found in Norfolk and Dorset, while *Pogonus littoralis* (NB) is slightly more widespread but still a very uncommon species. An enigmatic strandline species in Lincolnshire is the carrion beetle *Necrodes littoralis*, which elsewhere is typically found under dead birds etc. Our last coastal record in Lincolnshire is from 1895, but the species has recently turned up in a number of moth traps quite some distance inland.

Our saltmarshes are home to a number of scarce species, notably the long thin green malachite beetle *Dolichosoma lineare* (NB), which is restricted to saltmarshes and dune slacks in East Anglia and reaches its northernmost site at Spurn in East Yorkshire. One of the species that reaches its northern limit here is the attractive sea lavender weevil *Pseudoplemonas limonii* (plate 1), a lilac coloured species, ideally camouflaged as a fallen sea lavender flower, which is restricted to the saltmarshes of the East Anglian and Thames saltmarshes. In Lincolnshire it is known only from the Wash saltmarshes at Frampton. One enigmatic saltmarsh "species" is *Phaedon "regnianum"*, a distinctive dark bronze leaf beetle on scurvy grass and is found only in the east of England. Formerly regarded as a separate species, it is currently considered to be a form of the very common blue watercress leaf beetle *Phaedon cochleariae*. It is found in saltmarshes all along the Lincolnshire Coast.

The Lincolnshire dunes have a very rich beetle fauna and, although those at Saltfleetby-Theddlethorpe and Gibraltar Point have been particularly well studied, (Eyre & Rushton, 1992; Hill, 1984) casual observations indicate that the dunes at Donna Nook are probably almost as rich.

Typical dune species include the small globular scarab beetle *Aegialia arenaria* which "swims" through loose sand in foredunes just under the surface, making very characteristic trails. A particularly scarce dune species is the small ground beetle *Demetrias monostigma* (NB), a sandy brown species with a conspicuous black blob at the apex of the wing-cases, which is abundant among grass overhanging the sides of tracks on the National Nature Reserve at Saltfleetby-Theddlethorpe.



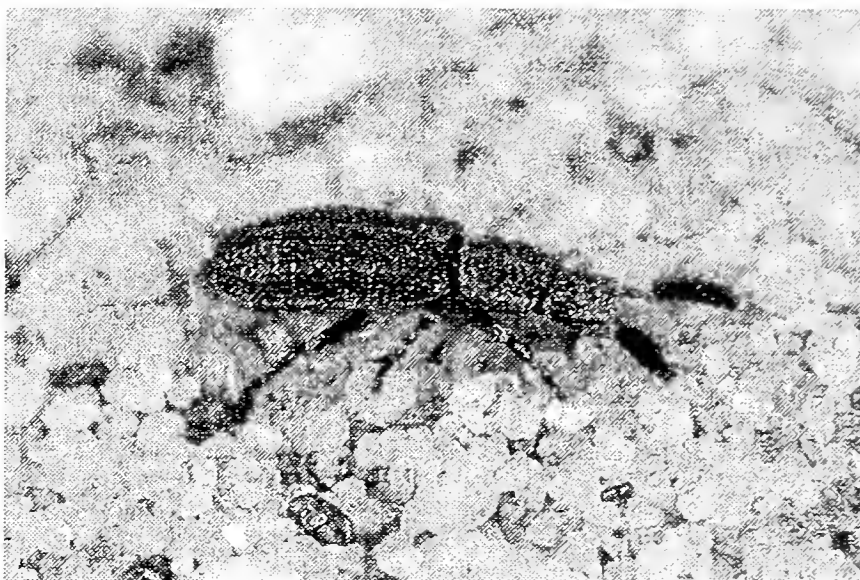
Aegialia arenaria is a duneland relative of the dung beetles photo R S Key

Heathland

Quite a number of species normally thought of as typical of coastal dunes are also found on Lincolnshire's heathlands. Although some of these species are found occasionally inland on the Surrey and Yorkshire heaths, it is only in the Brecklands of Norfolk and Suffolk where this dune/heath fauna is better represented than in Lincolnshire.

Such species include the inch long matt-black rove beetle *Broscus cephalotes*, the monoceros beetle *Notoxus monoceros*, with its extraordinary thoracic horn over its head,

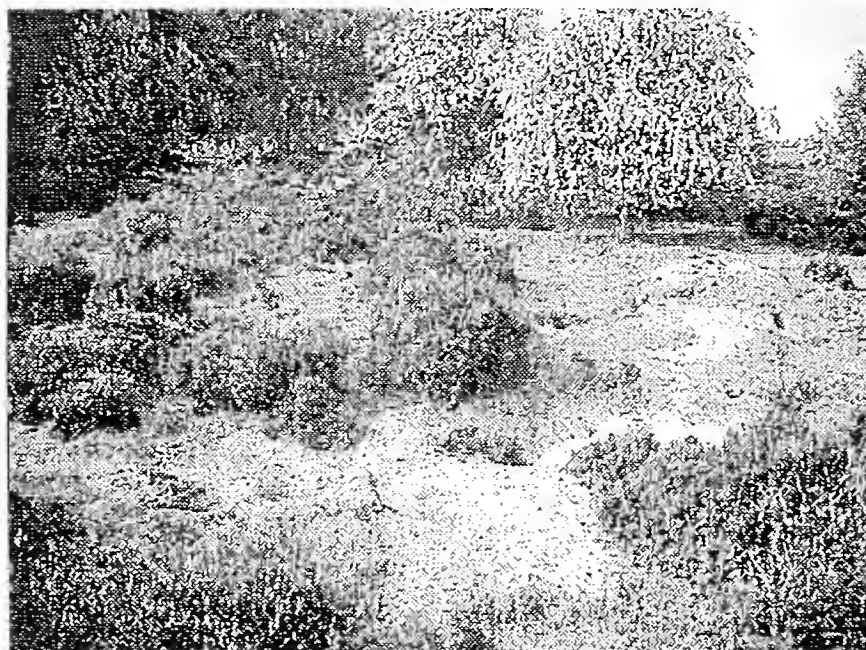
Orthocerus clavicornis (NB) with its extraordinary brush-like antennae, the huge thistle weevil *Cleonus piger* (NB), the grey marram weevil *Philopodon plagiatus*, the ground beetle *Calathus mollis*, the dune chafer *Euchloria dubia*, the blue rove beetle *Ocypus ophthalmicus* (NA) and the darkling beetle *Melanimon tibialis* are all very scarce species away from the coast and yet occur together with a rich assemblage of other heathland species on the coversand heaths around



Orthocerus clavicornis with its bottle-brush antennae

photo R S Key

Scunthorpe. Risby Warren (plate 2), Atkinson's Warren & Skippingdales have a particularly rich "Breckland" assemblage, the latter having Lincolnshire's only known colony of the handsome red and green leaf beetle *Chrysolina marginata* (NA), which feeds on toadflax on the edge of the old slag bank there. We found elements of this fauna on the coversands over Conesby Mine in 1994, but sadly the best parts of this site have since been destroyed.



Excellent heathland beetle habitat at Kirkby Moor

photo R S Key

Lincolnshire's southern heathlands, particularly Kirby Moor, have recently been shown to have a very rich assemblage of ground dwelling beetles, among them the ground beetles *Calathus cinctus* and *Amara equestris* (NB) and darkling beetle *Crypticus quisquilius* (NB), with some species reaching their northern limits here. Unlike the lowland heathlands of the Vale of York a few tens of miles further north, there are no records of any of the northern moorland species such as *Miscodera arctica*, which is found on the Yorkshire lowland

heaths, Lincolnshire species having a predominantly southern or eastern distribution.

Pools on Lincolnshire's heaths have a naturally species-poor water-beetle fauna, but one species *Acilius canaliculatus* (RDB3), a typical acid-water species, has declined considerably in recent year but is still found in the ponds on Scotton Common and still may occur on Crowle Moors.

Calcareous Grassland

The chalk grasslands of the Wolds have surprisingly never produced very many beetle species of note, even in Wallis-Kew's and Fowler's days in the nineteenth century when semi-natural grassland with a rich chalk flora still covered much of the Wolds. This is

doubly surprising when one notes the quite rich calcicole fauna of the Yorkshire Wolds just over the Humber. Now, I cannot even find the common calcicole species such as *Aphthona herbigrada*, the little flea beetle usually abundant on rock-rose, even on the chalk grassland reserves and SSSIs such as at Red Hill and Swallow Wold. Perhaps these sites are now just too small and too isolated among the arable prairies that cover most of the Wolds.



Female (top) and male (bottom) glow-worm *Lampyris noctiluca* photos R S Key
It is only the females that glow brightly.

The limestone grasslands of the southern part of the Lincoln Edge, particularly in the Stamford to Sleaford area, still retain a rich fauna, particularly in the old limestone quarries where one can still find glow worms *Lampyris noctiluca*. This is a particularly vulnerable species that lives in discrete colonies and is very poor at dispersing as the female is wingless. Plant-eating species such as the tiny flea beetle *Epitrix atropae* (NB), that feeds on deadly nightshade, *Phyllotreta nodicornis*, which feeds on mignonette and dyers rocket, and the red and green tortoise beetle *Cassida vibex*,

which feeds on knapweeds and saw-wort can still be found. Good sites include Rauceby Warren, (doubly interesting because the covering of sand also supports a heathland beetle fauna), the old quarries around Castle Bytham and on the Grimsthorpe Estate such as Elsea Pit, the West Glen valley at Swinstead, the margins of the old Roman road along the Drift and the disused railway cuttings in the area that are not too overgrown with scrub. The fauna of rock rose, including species such as the rock-rose pollen beetle *Meligethes solidus* (NB) and flea beetle *Mantura matthewsi* (NB) and seed beetle *Bruchidius cisti* (NB), have been shown to be widespread in this area (Davis, 1986).

Wetlands

The Lincolnshire Fens, grazing levels of the Lincolnshire Marsh and the Humberhead Levels must once have been superbly rich places for beetles and, while good habitat remains only on a few small nature reserves, these still have a very rich fauna of aquatic and wetland beetles.

The Fens at Baston and Thurlby have particularly rich beetle faunas including such species as the sedge weevil *Notaris scirpi*



The water beetle *Hydaticus transversalis* turned up in 1995 at both Baston and Thurlby Fens.

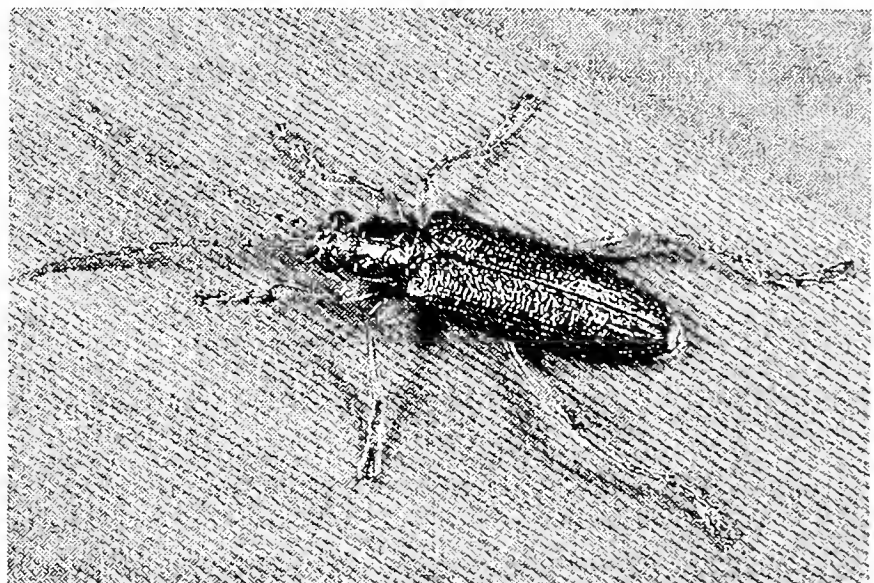
photo R S Key

(NB), the water beetle *Agabus undulatus* (RDB2) and *Hydrochus elongatus* (RDB3) and the tiny little yellow and black spotted reedmace beetle *Psammoechus bimaculatus*. The very rare large water beetle *Hydaticus transversalis* RDB3 turned up at both of these fens in 1995 (see "Lincolnshire Natural History in 1995 - Beetles" in this issue). Another nationally scarce fenland species is the small ground beetle *Demetrias imperialis* which lives in the leaf-sheaths of old reedmace stems and reaches its northern limit in Britain at Crowland Falls. Reedmace is often regarded as a nuisance species in conservation wetlands, but it is certainly necessary to retain some, particularly in winter, for this scarce species. The reedbeds of the Humber Flats and marshes are home to a closely related and equally scarce ground beetle, *Dromius longiceps* (NA). This species lives in reed litter and has been found in the brick pit reed-beds around Barton-upon-Humber.

Another fenland species, the tiny bright red malachite beetle *Anthocomus rufus* (plate 3), sometimes turns up unexpectedly in fenland gardens. This is also common in the reedbeds at Crowle Brick-pits and is otherwise found further north only on the Lower Derwent Valley National Nature Reserve in the Vale of York.

The fenland ditches, even among apparently inimical intense arable farmland, sometimes support surprisingly rich faunas, while the odd fenland scarcity occasionally turns up in even the most uninspiring field drains, like the attractive black and bronze-red ground beetle *Badister unipustulatus* (plate 4) which turned up at Crowland in 1995 (Key, 1996). Some of these ditches, together with the large land drains in the fens and levels, and the marginal vegetation of some of the fenland rivers have been found to hold quite a diversity

of species of reed beetles - donaciines -. These semi-aquatic leaf beetles develop in air-filled galls on the roots of various species of water plants such as common reed, *Potamogeton*, bur-reed and float grass and the adults are usually brightly metallic with bright silvery hairs on their underside which allow them to trap air and breathe underwater. Sixteen species of these attractive beetles have been found in Lincolnshire, although there are no recent records of two of them and all species are either Nationally Scarce or else very local.



The reed beetle *Donacia clavipes* (NB)

photo R S Key

The water-beetles of the fenland ditches and drains have been studied in considerable detail (Foster et al 1990) and there are a few drains which support outstanding faunas with scarce species. Exceptional among these is the Cross Drain (plate 5), just north of Market Deeping, where almost a third of all British water beetle species have been found, including very rare species such as *Agabus undulatus* (RDB3), *Hydrochus ignicollis* (RDB3), and *Macrolea mutica* (RDB3). Some of Cross Drain's species have been recorded elsewhere in fenland drains, but nowhere seems as rich, possibly because very clean water seeps into the drain from underlying gravels and so is less heavily influenced by agricultural nutrients.

Parts of the drain have been notified as a Site of Special Scientific Interest on the basis of its water beetle fauna and rich aquatic vegetation.

The peatlands of Crowle Moors have already been mentioned with respect to endangered wetland species, the tiny ground beetle *Bembidion humerale* (RDB1) and the mire pill beetle *Curimopsis nigrita* (RDB1). This relict site, much damaged by draining, peat cutting and invasion by birch and bracken, still holds an extraordinarily rich beetle fauna, including wetland species, heathland species and dead wood species. The nearby Haxey Grange Fen is also a rich site, retaining two scarce species typical of burnt heathland, the very knobby water beetle *Helophorus tuberculatus* (RDB3) and shiny black ground beetle *Pterostichus angustatus* (NB), after the fire there in late 1980s.

Old pollarded willows in the fens often support relict faunas of dead wood species. This must have been a very widespread habitat in former times and many of the ancient willows are now collapsing and, sadly, many have been grubbed out. In the 1950s the Washlands around Crowland used to be called the "Everglades" by local children because of the density of withy pollards and coppice. Willow wood-boring beetles such as the 5cm long metallic green musk beetle *Aromia moschata* (NB) (plate 6), a type of longhorn, and the withy-weevil, *Cryptorhynchus lapathi* (NB), which resembles a bird dropping, must once have been common. The former has not been seen in Lincolnshire since 1953 and there are few recent records of the latter. The decaying wood in the trunks of big old willow pollards along the Welland, between Uffington and Deeping St James are the only sites in the county for the large black darkling beetle *Prionychus ater* (NB). These old willows also support local leaf feeding beetles, such as the golden green flea beetle *Chalcoides plutus* (NB) and the larger and darker blue green *Plagioderma versicolor*, which reaches its northern limit in Lincolnshire.

Parkland

The richest dead wood beetle faunas, however, survive where there has been the longest continuity of very old trees producing large quantities of dead wood, both on the ground and on the trees themselves, in the form of dead branches, rot holes and hollows etc. Such conditions are to be found in old medieval deer parks that have survived the landscaping carried out in the 16th and 17th centuries and the agricultural changes of the 20th century which resulted in mass felling of parkland trees. Lincolnshire used to have a large number of parklands around its



Grimsthorpe Park - one the most important sites for dead wood beetles in Britain

photo A P Fowles

larger estate houses and farms, but only a few of them date back to medieval times. Most have now gone, indeed Lincolnshire may have had among the largest proportion of parklands destroyed of any county in the country. By far the most important of those remaining is Grimsthorpe Park, a site designated as a Site of Special Scientific Interest

purely on the basis of the beetles associated with old trees and dead wood (Table 2), and rated among the 25 most important sites for this fauna in Britain (Harding & Alexander, 1993). No other parks remaining in Lincolnshire have so many old trees, nor the continuity that has kept the fauna at Grimsthorpe so rich. Exploratory visits to parklands such as Irnham or Stenigot, still shown as parkland on the OS map, invariably prove disappointing, with very few really old trees and only a handful of dead wood beetle species, although a few interesting species have turned up at Belton Park.

Woodland

Lincolnshire supports a number of woodland types, some with distinctive beetle faunas.

The woodlands on chalk and limestone of the Wolds and Lincoln Edge appear not to support any particularly rare woodland beetles, but do have an overall diverse fauna, with beetles such as the large brown weevil *Barynotus moerens* feeding on dogs mercury. One species of ground

beetle, the handsome bronze *Pterostichus oblongopunctatus* (NB) appears to be remarkably widespread in woodland on all soil types in Lincolnshire - on a recent recording excursion in Lincolnshire the British Myriapod and Isopod study groups found this species in every one of 15 woods they visited.

Table 2. Dead Wood Species from Grimsthorpe Park (species at their only Lincolnshire site are asterisked).

* <i>Hypulus quercinus</i> (RDB2)	<i>Ptilinus pectinicornis</i>
* <i>Gnathoncus buyssoni</i> (NA)	<i>Thanasimus formicarius</i>
<i>Batrisodes venustus</i> (NA)	<i>Carpophilus sexpustulatus</i>
* <i>Aulonium trisulcum</i> (NA)	<i>Pediacus dermestoides</i>
* <i>Mycetochara humeralis</i> (NA)	<i>Cryptolestes duplicatus</i>
* <i>Tetratoma desmaresti</i> (NA)	<i>Silvanus unidentatus</i>
<i>Plegaderus dissectus</i> (NB)	<i>Biphyllus lunatus</i>
* <i>Nossidium pilosellum</i> (NB)	<i>Rhizophagus bipustulatus</i>
* <i>Quedius scitus</i> (NB)	<i>Rhizophagus dispar</i>
* <i>Quedius ventralis</i> (NB)	<i>Dacne bipustulata</i>
* <i>Sepedophilus testaceus</i> (NB)	<i>Dacne rufifrons</i>
* <i>Bibloporus minutus</i> (NB)	<i>Cerylon ferrugineum</i>
* <i>Ampedus quercicola</i> (NB)	<i>Cerylon histeroides</i>
* <i>Selatosomus bipustulatus</i> (NB)	<i>Enicmus testaceus</i>
<i>Ctesias serra</i> (NB)	<i>Cis alni</i>
<i>Ptinomorphus imperialis</i> (NB)	<i>Cis bidentatus</i>
<i>Mycetophagus piceus</i> (NB)	<i>Cis bilamellatus</i>
<i>Eledona agricola</i> (NB)	<i>Cis nitidus</i>
<i>Ischnomera cyanea</i> (NB)	<i>Pseudotriphyllus suturalis</i>
* <i>Aderus oculus</i> (NB)	<i>Triphyllus bicolor</i>
<i>Phymatodes alni</i> (NB)	<i>Litargus connexus</i>
<i>Anaglyptus mysticus</i> (NB)	<i>Mycetophagus atomarius</i>
<i>Platyrhinus resinosus</i> (NB)	<i>Mycetophagus multipunctatus</i>
<i>Platystomos albinus</i> (NB)	<i>Mycetophagus quadripustulatus</i>
<i>Scolytus mali</i> (NB)	<i>Bitoma crenata</i>
* <i>Xyleborus dryographus</i> (NB)	<i>Pyrochroa serraticornis</i>
<i>Abraeus globosus</i>	<i>Corticeus bicolor</i>
<i>Paromalus flavicornis</i>	<i>Tetratoma fungorum</i>
<i>Anisotoma humeralis</i>	<i>Orchesia undulata</i>
<i>Phloeonomus punctipennis</i>	<i>Alosterna tabacicolor</i>
<i>Xylodromus concinnus</i>	<i>Rhagium mordax</i>
<i>Dropephylla ioptera</i>	<i>Grammoptera ruficornis</i>
<i>Dropephylla vilis</i>	<i>Clytus arietis</i>
<i>Atrecus affinis</i>	* <i>Phymatodes testaceus</i>
<i>Gabrius splendidulus</i>	<i>Leiopus nebulosus</i>
<i>Dorcus parallelipipedus</i>	<i>Tetrops praeusta</i>
<i>Sinodendron cylindricum</i>	<i>Phloeophagus lignarius</i>
<i>Ampedus balteatus</i>	<i>Scolytus intricatus</i>
<i>Melanotus villosus</i>	<i>Scolytus multistriatus</i>
<i>Denticollis linearis</i>	<i>Scolytus scolytus</i>
* <i>Stenagostus rhombeus</i>	<i>Dryocoetinus villosus</i>
* <i>Lyctus brunneus</i>	<i>Xyleborus saxeseni</i>
<i>Xestobium rufovillosum</i>	<i>Leperisinus varius</i>

On acid soils on the Coversands and Spilsby Sandstone, oak and birch woodland support

species such as the darkling beetle *Corticeus unicolor* (RDB3), an elongate shiny brown species living in birch polypore bracket fungi and restricted to a few sites, all within about a fifty mile radius of Sherwood Forest. Another species of decaying birch is the click beetle *Ampedus balteatus*, a small but handsome black and orange species which not only feeds as a larva on red rotted birch and oak, but is one of the few insects able to feed on peat, as at Crowle Moors, although it does supplement this un-nutritious diet by predated other insect larvae.



The darkling beetle *Corticeus unicolor* most often found in birch polypore fungus

photo R S Key

The richest woodland beetle fauna in Lincolnshire, however, undoubtedly is that of the lime woodlands on clay soils of the Bardney Forest area. This was recognised in the 19th century when "Langworth Wood" was one of the classic sites referred to in the national entomological literature of the day, in particular as a result of the beetle collecting carried out by the great Canon William Fowler. As far as we know, Langworth Wood does not, and



Lime coppice with oak standards at Hardy Gang Wood
Was this Fowler's "Langworth Wood"?

photo R S Key

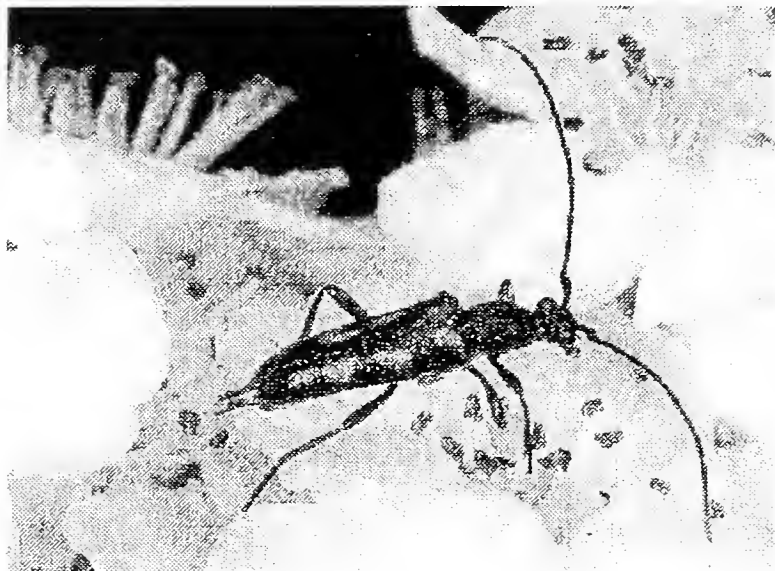
indeed, never did exist under that name. We assume that what was referred to was the woodland in the general area of Langworth, which includes superb woodlands such as College Wood, Hardy Gang Wood and the various woods of the Chambers Farm complex.

These woods still support an extraordinarily rich assemblage of Red Data Book and Nationally Scarce species, species which seem to have survived the chequered history of coniferization and neglect that

happened in the first two thirds of the twentieth century. They now seem to be thriving under the enlightened policies of the Forestry Commission, with the reinstatement of broadleaves and coppicing in some woods and the designation of non-intervention conservation areas in others.

Species such as the little black jewel beetle *Trachys minutus* (RDB2), very rare elsewhere in Britain, positively swarm in the limewoods, as does the gorgeous metallic green and bronze leaf-rolling weevil *Bytiscus betulae* (NA) (plate 7). Both of these species feed on lime foliage, whereas the very rare lime bark beetles *Ernoporus tiliae* (RDB1) and

Ernopus caucasicus (RDB1) live in the stringy under-bark of small lime branches and seems to be benefitting from the resumption of coppicing. The spectacular red and black net winged beetle *Pyropterus nigroruber* (NA) (plate 8) is common in the ride-side vegetation, its larva feeding on decaying wood and, like *Corticeus unicolor*, being almost restricted to woods within a few miles of Sherwood Forest, although in this case, inexplicably also turning up again in the Strathspey area of Scotland.



Small longhorn *Leptura sexguttata* is a limewoods speciality

photo R S Key

The lime woods also support the highest number of longhorn beetles in the county, most of which feed on dead wood. Indeed, with it being possible to see as many as 16 species in a day, one of the highest diversities of these species anywhere in the country. Scarcest of these longhorns is the small species *Leptura sexguttata* (RDB3), a dull black species with six dirty yellow spots on the wing-cases, usually found on may-blossom. Other than the limewoods, this species is found in the New Forest, woods in north Dartmoor, and a small area of Ryedale in North Yorkshire. It was formerly much more widespread in the

country. Another scarce species is *Phymatodes alni* (NB), a small, black, red and white banded species, possible a mimic of the velvet ant that has a vicious sting, This species favours small branches and has been seen laying its eggs in the coppice wood piles in College Wood that were destined for the charcoal burner. Two species of longhorn from the lime woods feed in the pithy stems of hogweed and thistles. Both these species; *Agapanthia villosoviridescens* and *Phytoecia cylindrica* (NB) reach their northern limit here.

One enigmatic longhorn from the lime woods is *Grammoptera "holomelina"*. This is considered by some entomologists just to be a form of the very common *Grammoptera ruficornis*, a tiny species usually found in hawthorn flowers in June, but one that has been found nowhere else in the world other than Britain (Hammond, 1996). It is certainly a distinctive form, being a good bit larger, shinier and much darker than normal *G ruficornis*. Perhaps one day it will be re-instated as a good species. It occurs in Chambers Wood.

The introduced conifers in the lime woods support another longhorn, one that has remained undiscovered by coleopterists in Lincolnshire because it flies at night but it turned up at moth traps in quite a number of sites in 1995. This is *Arhopalus rusticus*, a large, dark chestnut-brown species sometimes thought of as a pest in plantations. As the conifers are replaced with broadleaves, no doubt this species will become less common again in the limewoods.

Conclusion.

Despite the appalling destruction of much of the insect habitat in Lincolnshire's countryside this century, we still have a surprisingly rich beetle fauna, one where we are still discovering new species, rediscovering ones that we think we have lost and observing increases in species that are thought to be scarce.

I am guardedly optimistic for the future. Surprisingly few of the best known beetle sites of earlier times have been totally destroyed (†Freshney Bog, R.I.P), although many, such as Scotton and Manton Commons have been drastically reduced in size. Most of the remaining best sites for beetles have some degree of protection and increasingly are becoming managed with conservation as one of, or the main objective, (although not usually with beetles in mind!).

Conservation, landscape and agricultural schemes such as MAFF's Countryside Stewardship, English Nature's Reserves Enhancement Scheme and The Environment Agency's plans to recreate fenland on arable land all should benefit the conservation of beetles, but entomologists need to make the beetles' conservation needs known at an early stage to avoid damage to their habitat unwittingly being done with the very best of intentions. An example might be the recent reversal of the neglect of our heathlands as part of a large heathland initiative. Heathlands have been disappearing under rampant birch regeneration on Lincolnshire for the last half century. Recent initiatives to regenerate our heathlands have been extremely successful at some sites, such that I am confident that some of our heathland ground beetles etc will benefit enormously. However, one of Lincolnshire's and Britain's rarest beetles, the previously referred to leaf beetle *Cryptocephalus coryli* (RDB1), lives on young birch on heathland. We don't know why it remained rare when birch was busy invading heathland all over the country, but we need to make sure that our conservation efforts don't push species like this over the brink. It is therefore important for the entomologists to let the conservationists know as much as possible about what species occur where, and what species' requirements are.

In the fens, sufficient numbers of species of interest survive in the odd field ditch or old willow that I am again quite optimistic that any newly created fens will be colonised by fenland beetles, especially if the new fens are situated close to sites like Baston and Thurlby Fens, although an exciting experiment would be to recreate areas of fen in the arable prairies away from these sites and just wait to see what turns up. Countryside Stewardship management of chalk grasslands in the Wolds is bringing a few sites back into suitable condition and it will be especially interesting to investigate them.

I am pleased to see that the level of beetle recording in the county is now as high or higher than it has ever been before and we now have a pretty good baseline of information from which to observe future changes. The next few years are going to be interesting for the conservation coleopterist.....

Roger Key, the 102nd president of the Lincolnshire Naturalists Union in 1995/6, is an entomologist working for English Nature. He presented this paper as Presidential Address in Lincoln on 23rd March 1996. A summary and history of beetle recording in Lincolnshire was given in Key (1993a & b).

LNU Coleopterist Presidents

There have been three earlier LNU presidents who have had beetles as their main object of study. The earliest, Canon William Weekes Fowler (president in 1896 & 1897), remains one of the greatest coleopterists that Britain has produced. His major work on the British Coleoptera (Fowler 1887 - 1891; Fowler & Donisthorpe 1913) remains the best identification guide available for some groups of families, and the combination of keys,



Canon William Weekes Fowler

hand-coloured illustrations and intricate descriptions of each species has yet to be bettered in a work on British Beetles.

His recording work was continued by two subsequent LNU coleopterist presidents, the Rev Arthur Thornley (president 1901 & 1902) and Dr William Wallace (president 1911 & 1912, presidential address on the counties beetles; Wallace, 1912) who laid

down a valuable base-line of information in their county fauna (Thornley & Wallace, 1907-1915).

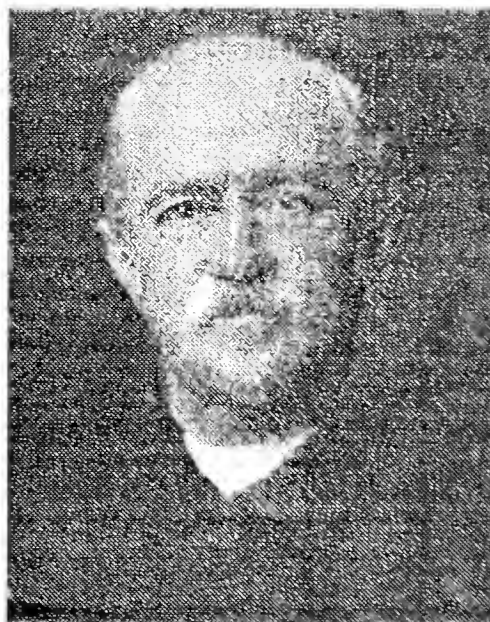


Dr William Wallace



Mr Carey Riggall

Carey Riggall (president 1955, presidential address on the county's beetles, Riggall, 1955) was recorder in the 1940s to early 1960s and produced a wealth of useful information on the more interesting species of beetle in his annual beetle report in this journal.



Rev Arthur Thornley

Both Wallace's and Riggall's presidential

addresses described aspects of the county's fauna, family by family and so, to avoid repeating their endeavours, I have chosen to look at the changes in the county's fauna, by habitat, and to consider their conservation implications.

Acknowledgements

The recent beetle records referred to are by no means all my own and I am grateful to all the recorders who supply records to me as LNU beetle recorder. Special thanks are due to the Binding family, who produce far more beetle records than I do and have an unerring eye for finding the rare species, to John Bratton who has done so much water-beetle recording, to Andy Godfrey, who has put Lincolnshire's tree holes on the map, to Rex Johnson, who has opened up the world of night-flying beetles, and to my wife Rosy, who invariably finds more interesting species of beetle than I do when we are out in the field!

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THE NATIONAL MISTLETOE SURVEY 1994-1996.

Irene Weston

The National Mistletoe Survey set up in 1994 by Plant Life and the Botanical Society of the British Isles finished in April 1996. In Lincolnshire we are not well blessed with the "Golden Bough" but our records nevertheless have some significance.

A little about mistletoe (plate 9). - *Viscum album* L. - in the family Loranthaceae. *Viscum* means sticky, as its berries have a glutinous juice - *album* - white for its berries. The English name is mistletoe, or bird-lime mistletoe but in Brittany it is called Herbe de la Croix. In the fourteenth century it was called Mystyldene and also Lignum Crucis, names taken from religious lore.

Mistletoe, popular at Christmas time as a kissing bough and sold extensively, is harvested from the South in Herefordshire, Worcestershire and Somerset, although much is imported from the continent where it sometimes comes from conifers. It was greatly revered by the Druids as a sacred plant. They gathered it with great ceremony,

cutting it from oak with a golden knife - needless to say at a particular phase of the moon. The oaks were sacred too. In the ceremony of the mistletoe the oaks were danced around to the tune of "Hey derry down, down, down derry" when mistletoe was found. In Scandinavian lore mistletoe is an emblem of love and it was ordained that everyone who passed under it should receive a kiss.

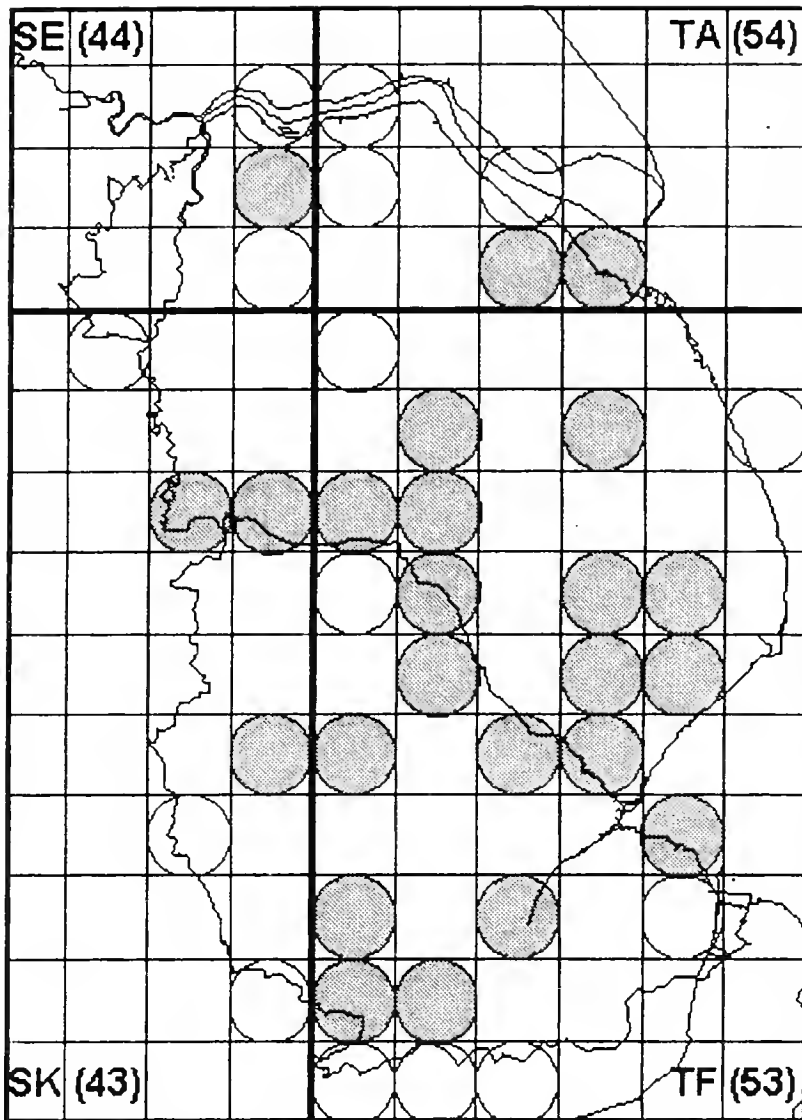
The botanist Dr John Ray recommended mistletoe as a specific for epilepsy and useful in apoplexy and giddiness. These snippets and more can be found in the modern Herbal by M Grieve FRHS from which a few of these notes were taken.

Mistletoe is an evergreen shrub fastening itself to the bark of trees. It is a semi-parasitic species as it takes its water and mineral salts from its host but, being green, can photosynthesise carbohydrates. It is dioecious (separate male or female plants) and its flowers are very inconspicuous having no petals. Therefore a plant can only be identified as definitely female when in berry.



A heavy load of mistletoe on an old lime at Grimsthorpe photo I Weston

Mistletoe Survey



Distribution of Mistletoe in Lincolnshire. Shaded circles - Plant Life/BSBI Survey 1994-1996. Open Circles - Pre 1980 records (shared squares may not be a Lincs record).

Mistletoe grows on apple (in orchards and gardens) crab apple, lime, field maple, hawthorn, poplar, horse-chestnut and false acacia. These hosts have been recorded in Lincolnshire. It also grows on oak but has not been recorded on this species in Lincolnshire. Some of the records on apple in gardens and orchards may well be accounted for by deliberate introductions of the species by rubbing berries on bark etc but obviously the records of mistletoe high up on poplars and lime and on hedgerow hawthorn seem to be bird sown - hence Mistle-thrush? Even though the official survey is now finished, do keep a lookout, especially as some records have not been rediscovered.

This Yuletide shrub is not found north of Yorkshire and is mainly centred in the southern English and Welsh borders. Despite the map, it is not a common plant in Lincolnshire - the presence of a dot in a square may indicate but one plant on one tree, whereas in Worcestershire, Herefordshire and Somerset a dot may indicate hundreds of trees with

garlands of mistletoe, particularly in those counties' orchards. The Lincolnshire mistletoe seems to be concentrated around Grimsthorpe and West Keal where there are a number of records for the squares.

My thanks to all Lincolnshire Naturalists' Union members who contributed to the mistletoe survey in Lincolnshire.

P.S. Please can you help? I have an old record for Mistletoe Cottage near Skegness, TF56, but can't find it.

Irene Weston is the recorder for Lincolnshire for the Botanical Society of Britain and Ireland

MICRO-MOTH RECORDING IN LINCOLNSHIRE

Rex Johnson

Bradley and Fletcher's "Indexed List of British Butterflies and Moths" (Bradley and Fletcher, 1986), gives the Microlepidoptera species numbers from 1 to 1524, Butterflies from 1525 to 1630, and Macrolepidoptera from 1630 to 2495. A simple subtraction shows that there are many more micros than macros on the British list. This division of families of Lepidoptera is traditional rather than scientific and can be confusing to newcomers to lepidoptera as some of the micros are larger than a number of the macros!

Writing the "Butterflies and Larger Moths of Lincolnshire and South Humberside" (1983), with Joe Duddington gave me familiarity with the macro lists of GW Mason in early LNU Transactions (which were remarkably accurate and complete) and drew my attention to Mason's micro list, making me realise that there were substantial numbers of moths in Lincolnshire (including Red Data species) which had not been recorded since around 1918.

On taking over as lepidoptera recorder from Joe in 1986, I determined to interest myself in the micros attracted to my mercury vapour (MV) light and I tried to compare my lists with Mason's originals. This proved to be extremely difficult due to changes in nomenclature over the last century, so I made a systematic translation of the early lists. It turned out to be a long and difficult task but, tackling it a bit at a time and delving into the relevant books by Heslop, Ford, Newman, Kirby, Bradley/Fletcher, Bradley/Tremewan/Smith, Emmet, etc., I eventually had Mason's lists and a version of the modern equivalent nomenclature on computer, side by side. Also, by this time, with the help of other LNU recorders I had collected quite a lot of recent micro-data and I had contacted other micro recorders around the country in a search for additional Lincolnshire material.

I contacted Maitland Emmet (Mr AM Emmet, MBE, MA, FLS, Hon FRES), Editor of "The Moths and Butterflies of Great Britain and Ireland" published by Harley Books and the leading micro specialist. He immediately interested himself in the Lincolnshire records, asking to see them, and volunteering to check my nomenclature translation of the original lists. These were sent to him at the end of May 1995. He replied almost immediately to say "What a splendid list! You have given me just over 100 new vice-county records and I shall be giving you over 60 species "new" to Lincolnshire" (i.e. recorded by him and others but not known to me). He wrote "I congratulate you on your nomenclature. There are a few changes...." for which I was extremely grateful.

The "new" species sent to me covered two closely typed sides of A4, with a further 6 sides of comments on my nomenclature, giving data for many species. Without Mr Emmet's expertise, his willingness to share it, and in particular his knowledge of what species Mason had meant in his original lists, I am aware that my forthcoming check-list would have had a number of inaccuracies!

Mr Emmet noted in his letter that our county list was "a bit thin" on leaf-mining species and I was delighted to read "By next October I shall be aged 87, but I think Lincolnshire will still be just within my driving range. Could we not arrange a day's recording with you and perhaps others at a locality with a good range of vegetation".

This recording session was duly arranged for the weekend of 4-5 November 1995, with Mr Emmet staying as our guest overnight at the Washingborough Hall Hotel where, on the Sunday morning, he insisted in searching for and successfully finding a tenanted mine of *Phyllonorycter platanoidella* in a leaf of Norway Maple, another new county record.

We chose the Chambers Farm complex as the venue and Jane Ostler, Phil Porter, Allan, Annette and Jillian Binding, Mark Joy, Jim Rance, Wendy and myself added extra eyes to the search.

On 7 November Mr Emmet sent a list of species found and showed that we had recorded 10 species new to Lincolnshire and another 17 new to Vice County 54. In total, from evidence in the leaves, over 80 species were identified over the weekend, without our seeing a single moth. Quite amazing! Additionally, there may be more to add in 1996, as Mr Emmet took home a few doubtful leaf mines to breed through.

The week before his visit I had collected a number of mines from Chambers Farm on 28th October and from Messingham nature reserve on 3rd November in case the weather on the weekend turned difficult. My earlier records from these sites and the species recorded with Mr Emmet are listed below :

Microlepidoptera recorded at Chambers Farm Wood, 4-5 November 1995, by R.Johnson, AM Emmet *et al.*, and by R.Johnson on a previous visit:

Names are preceded by the Bradley & Fletcher Log Book number (Bradley & Fletcher, 1986) and the author's name omitted.

Abbreviations used

**	new to Lincolnshire	TM	tenanted mine
*	new to VC54	VM	vacated mine
ab	abundant	C	larval case
s	several	LF	larval feeding
c	common	A	adult;
f	few		
1,2 etc	number of individuals		

AME Comments by Maitland Emmet

- | | |
|--|---|
| *23 <i>Ectoedemia argyropeza</i> TM on aspen; c. | *55 <i>S. aeneofasciella</i> VM on agrimony; 2. |
| *25 <i>E. intimella</i> TM on <i>Salix caprea</i> ; 1. | *58 <i>S. ulmariae</i> TM, VM on meadowsweet; 2. |
| *28 <i>E. angulifasciella</i> TM, VM on rose; ab. | "The most northerly record from eastern |
| 29 <i>E. atricollis</i> VM on hawthorn; f. | England, though it reappears in southern |
| 31 <i>E. rubivora</i> TM, VM on bramble; f. | Scotland. Found at Pillow Wood (VC53) in |
| 34 <i>E. occultella (argentipedella)</i> VM on birch; f. | 1988." AME. |
| 37 <i>E. albifasciella</i> VM on oak; ab. | 63 <i>S. marginicolella</i> VM on elm; f. |
| 38 <i>E. subbimaculella</i> TM on oak; ab. | 67 <i>S. plagicolella</i> VM on blackthorn; f. |
| 39 <i>E. heringi</i> TM on oak; c. | 68 <i>S. salicis</i> TM, VM on willow; s. |
| 40 <i>Bohemannia pulverosella</i> VM on pear; f. | 73 <i>S. trimaculella</i> VM on poplar; c. |
| 42 <i>Fedalmia septembrella</i> TM on St John's | **74 <i>S. assimilella</i> VM on aspen; 1 (RJ)."The |
| wort; s. | most northerly English record but it reappears |
| 50 <i>Stigmella aurella</i> TM, VM on bramble; ab. | in central Scotland and the Highlands." AME. |
| 53 <i>S. splendidissimella</i> TM, VM dewberry; s. | *75 <i>S. floslactella</i> VM on hazel; s. |

- 77 *S. tityrella* TM, VM on beech; s.
 **78 *S. incognitella* (*pomella*) VM on apple; 2.
 *80 *S. ulmivora* VM on elm; s.
 83 *S. atricapitella* TM, VM on oak; c.
 *84 *S. ruficapitella* TM, VM on oak; c.
 *86 *S. roborella* VM on oak; s. "Difficult to separate from *S. atricapitella*, but I collected sufficient mines with the correct characters to feel sure of the determination. A common species." AME.
 89 *S. basiguttella* VM on oak; s.
 **90 *S. tiliae* VM on lime; c. (RJ)
 92 *S. anomalella* VM on rose; 2.
 95 *S. viscerella* VM on elm; 1.
 97 *S. malella* VM on apple; s.
 99 *S. hybnerella* VM on hawthorn; f.
 100 *S. oxyacanthella* VM apple & hawthorn; s.
 111 *S. microtheriella* VM on hazel; c.
 112 *S. luteella* TM, VM on birch; ab.
 123 *Tischeria ekebladella* TM on oak; c.
 125 *Emmetia marginea* TM on bramble; c.
 **127 *Emmetia angusticollella* TM on rose; c.
 154 *Heliozela sericiella* mine found (1996) at base of oak leaf with a *Phyllonorycter* species.
 *157 *Heliozela hammoniella* VM on birch; 1.
 263 *Ly1tia clerkella* VM on apple & pear; s.
 271 *Bucculatrix albedinella* VM on elm; 1.
 **273 *B. thoracella* VM and LF on small-leaved lime; f (RJ). "The most northerly record on the eastern side of England though it reaches Lancashire in the west. A local species recorded from only 20 vice-counties." AME.
 *287 *Caloptilia robustella* old LF on oak; f.
 288 *C. stigmatella* old LF on goat willow; 1.
 297 *Calybites auroguttella* TM St John's Wort; f.
 301 *Parornix betulae* VM and LF on birch; f.
 303 *P. anglicella* VM and LF on hawthorn; s.
 304 *P. devoniella* VM, TM and LF on hazel; c.
 308 *P. finitimella* VM and LF on blackthorn; f.
 310 *Callisto denticulella* VM and LF on apple; f.
 320 *Phyllonorycter quercifoliella* VM on oak; c.
 321 *P. messaniella* VM on beech; s.
 323 *P. oxyacanthella* TM on hawthorn; c.
 326 *P. blancardella* TM on apple (bred - emerged 3/1996- identified by AME)
 **327 *P. cydoniella* TM on apple (bred - emerged 3/1996- identified by AME) "Has an odd distribution, previously in the east only to Cambridgeshire, but in the west to Lanarkshire, and it reappears in south-eastern Scotland. Probably under-recorded, as it can't be claimed from mines alone." AME.
 329 *P. spinicolella* (*pomonella*) TM blackthorn; c.
 **330 *P. cerasicolella* TM on cherry; 1.
 332 *P. corylifoliella* TM, VM on apple and hawthorn; c.
 334 *P. viminetorum* TM on osier, s. "Very local." AME
 341 *P. maestingella* M on beech; 1 (RJ).
 342 *P. coryli* TM on hazel; c.
 **347 *P. anderidae* TM on birch; locally c.
 ?351 *P. lautella* TM on oak; f. Confirmation needed by rearing adult. "I'm 95% certain of the mines, but it would be safer to rear the adult, or examine the pupae (probably not yet formed). It would be new to VC 54." AME.
 *352 *P. schreberella* TM on elm; f.
 353 *P. ulmifoliella* TM on birch; s.
 354 *P. emberizaepenella* TM on honeysuckle; 2.
 356 *P. tristrigella* TM on elm; f.
 362 *P. acerifoliella* (*sylvella*) TM on maple; s.
 *368 *Phyllocnistis unipunctella* TM on poplar; f.
 *443 *Cedestis subfasciella* VM on pine; f.
 490 *Coleophora lutipennella* C on oak; s.
 491 *C. gryphipennella* LF on rose; s.
 492 *C. flavipennella* C on oak; f.
 493 *C. serratella* C on ?birch; 1 (RJ).
 495 *C. spinella* (*cerasivorella*) old C on apple; 1.
 *513 *C. potentillae* LF on dewberry; 1. "The most northerly English record, but it reappears in central and western Scotland. Recorded quite commonly in Morkery Wood in 1988 and Stapleford Wood in 1990 (both VC53)." AME.
 **664 *Diurnea phryganella* A ; three (RJ). "It is incredible that this common species is new to the county! I suppose the earlier microlepidopterists packed up for the winter too soon. It is now recorded from every county in England." AME.
 883 *Mompha raschkiella* VM on rosebay; f.
 **896 *Cosmopteryx orichalcea* TM on reed canary-grass; 1. "The larva is alive. It is just possible that the two leaves of Phalaris I was given contain full-fed larvae. The most northerly English record, though it has been recorded from Flintshire. It has its headquarters in fens and damp woodland rides in East Anglia and Huntingdonshire." AME.
 1097 *Endothenia gentianeana* LF on teasel; 1.
 Still to be determined by rearing:
Phyllonorycter spp. on oak.
P. salicicolella and/or **P. dubitella* and/or **P. hilarella* (*spinoella*) on willow.
 By larval examination:
Coleophora alticolella and/or *C. glaucinella* on *Juncus* spp.

Note:The French entomologist Patrice Leraut has split the vast worldwide genus *Tischeria* and named half *Emmetia* in honour of AME. 125 & 127 above are now *Emmetia* spp.- RJ)

Two other records by AME on 5.xi.95:

**363 *Phyllonorycter platanoidella* TM in grounds of Washingborough Hall Hotel.

747 *Chrysoesthia sexgutella* TM found on roadside near Bardney.

A high spot of the recording session for me, was to have confirmation of 90 *Stigmella tiliae*, and 273 *Bucculatrix thoracella*, as both these are mainly small-leaved lime specific. In "The Moths and Butterflies of Great Britain & Ireland" Vol.1, (1976) p245, the distribution map of the former species shows a handful of counties in Wales and the far west of England. There is absolutely no indication of it in the east. Similarly, in MBGBI -1985- Vol.2, 236, the map for *B. thoracella* shows it in many counties in the southern half of the country, but not in counties adjacent to Lincolnshire. Following the Chambers weekend, on 7th November, Wendy & I found both the above species at Wickenby also.

Immediately before leaving Chambers Farm, Maitland Emmet asked if *Endothenia gentianeana* (1097 above) had been recorded in Lincolnshire and I replied that I thought there were a couple of records for the early 1980s (from Rick Pilcher & Dick Lorand). Mr Emmet then dismantled a teazel to show us where the larva was to be found. The next day 6th November we found it at the Messingham Nature Reserve, and a few days later on the 12th November it was common at Far Ings. As one could say about all natural history recording - it is all a matter of knowing where to look!

Leaf-mines collected by Rex Johnson at Messingham Nature Reserve on 3rd November 1995 :

*28 <i>Ectoidemia angulifasciella</i> on rose.	100 <i>S. oxyacanthella</i> on apple.
29 <i>E. atricollis</i> on hawthorn.	112 <i>S. luteella</i> on birch.
37 <i>E. albifasciella</i> on oak.	114 <i>S. glutinosae</i> on alder.
38 <i>E. subbimaculella</i> on oak.	*115 <i>S. alnetella</i> on alder.
39 <i>E. heringi</i> on oak.	263 <i>Lyonetia clerkella</i> on apple and hawthorn.
50 <i>Stigmella aurella</i> on bramble.	*282 <i>Caloptilia elongella</i> on alder.
68 <i>S. salicis</i> on willow.	332 <i>Phyllonorycter corylifoliella</i> on hawthorn.
73 <i>S. trimaculella</i> on poplar.	335 <i>P. salicicolella</i> and/or * <i>P. dubitella</i> and/or
83 <i>S. atricapitella</i> on oak.	<i>P. hilarella (spinoella)</i> on willow.
*84 <i>S. ruficapitella</i> on oak.	345 <i>P. rajella</i> on alder.
*86 <i>S. roborella</i> on oak.	*368 <i>Phyllocnistis unipunctella</i> on poplar.
97 <i>S. malella</i> on apple.	883 <i>Mompha raschkiella</i> on rosebay.

The above is the first substantial micro list to be published by the LNU since the early years of the century. To date records are in hand for about 800 micro species in Lincolnshire (he macro total stands at 630). Over 100 new species of micro became known in 1995 alone.

Mason lived in Barton on Humber, so a large number of his records came from VC54, as have the majority of my records. VC53 is very under-recorded and a large number of undiscovered species must be out there waiting to be found.

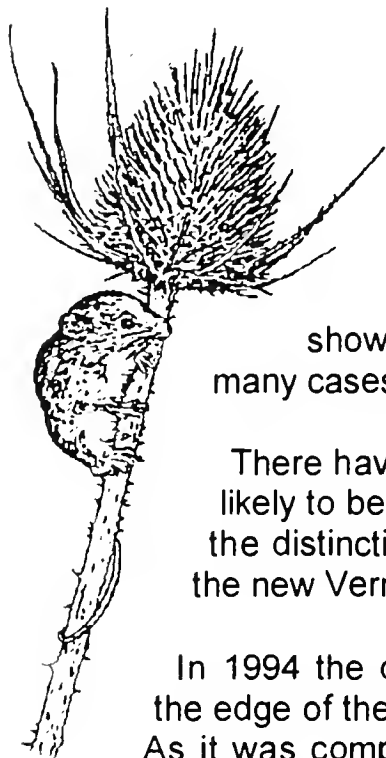
Reference

BRADLEY, J.D. AND FLETCHER, D.S. 1986. Indexed List of British Butterflies and Moths

Rex Johnson Dip. Ed., M.Ed. is Moth recorder for the Lincolnshire Naturalists' Union

HARVEST MICE AT VERNATT'S NATURE RESERVE, SPALDING

Annette Faulkner



The harvest mouse *Micromys minutus*, emblem of the Lincolnshire Naturalists' Union, is one of our mammals about which least is known. At one time it was thought to be extremely scarce and declining in Lincolnshire as it was rarely found in its traditional cornfield habitat. However, research showed it also to be found in rough grassland and reedbeds, and in many cases it was not so scarce after all - simply overlooked.

There have been few records for the South Holland fens, though this is as likely to be a paucity of recorders as of mice, so I was delighted to discover the distinctive summer nests of harvest mice when we first started work on the new Vernatt's Nature Reserve in Spalding.

In 1994 the district council bought a three-and-a-half acre piece of land on the edge of the industrial area in the north of the town to link up two footpaths. As it was completely hemmed in by the Vernatt's Drain, a disused railway line, a horticultural site and Spalding Cemetery, with the industrial area to the east, it was decided to turn it into a nature reserve and I was asked to take part in the preliminary survey.

Our first discovery was that this was already a rich area and an immensely varied habitat for such a small site. It was very overgrown, however, with field scabious, *Knautia arvensis*, (the last known site in TF22) and other plants struggling under a vast growth of creeping thistle, *Cirsium arvense*, nettles, *Urtica dioica*, and bramble, *Rubus spp.*, particularly along the single track railway line that more or less bisects it.

After various meetings a management plan was put together and it was decided that although the council would retain overall control the reserve would be run by a team of volunteers.

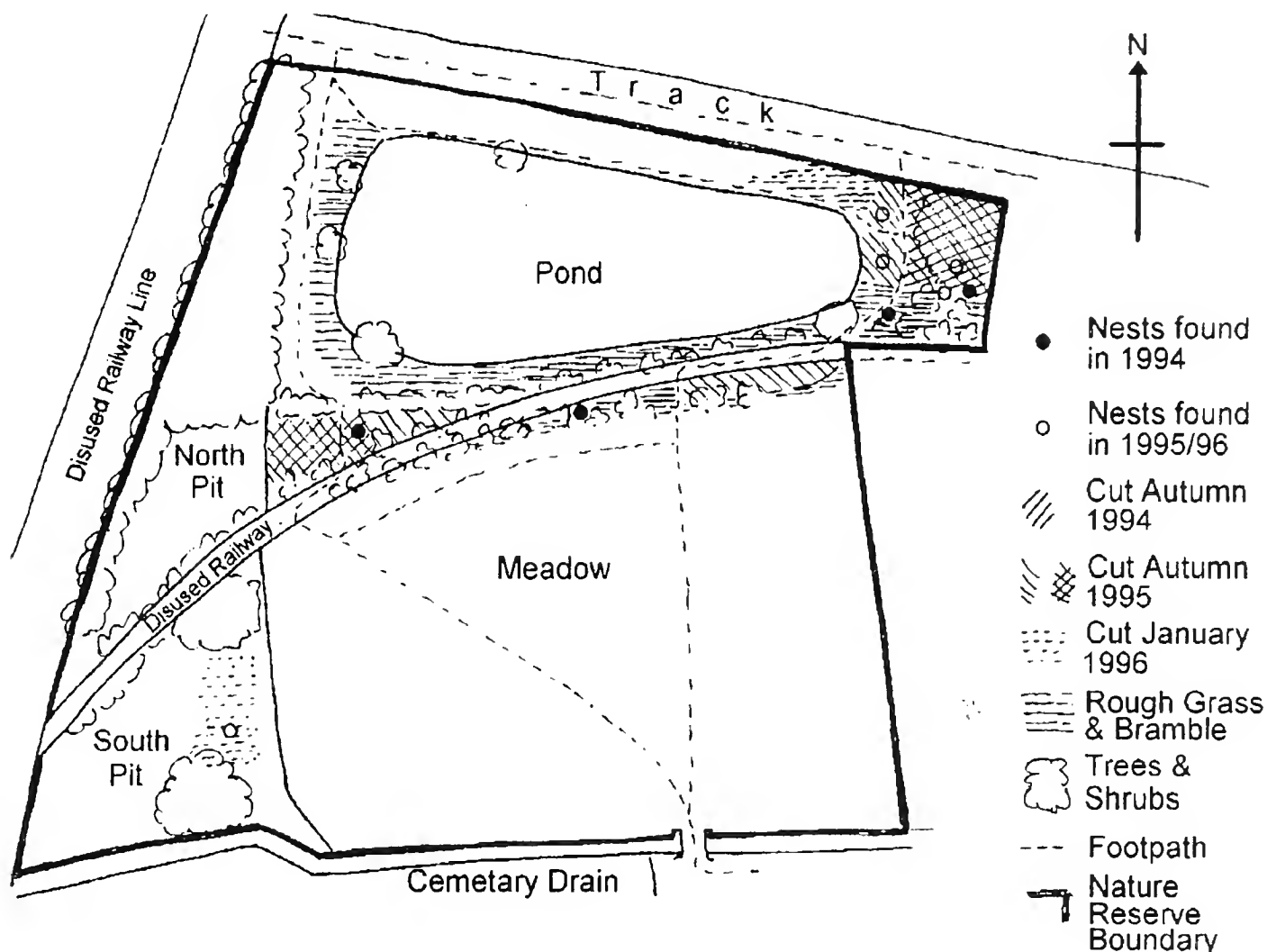
Work started on the site that autumn, with the site for scabious being cut by hand because of the large number of anthills. It was here that the first harvest mouse nest was found, about 12" from the ground amongst bramble and grass stems. It was the first record for this area, but coincidentally a dead harvest mouse turned up on our allotment nearly two miles away, with a puncture wound on the side of its head. Presumably it was dropped by a bird of prey, as there is no suitable habitat adjacent.

Since this early find we have found eight more nests, mostly during autumn grass cutting, and all in the area of the railway track and the pond, except for one found in the sedge and reed of the south pit. The areas most favoured seem to be ones with dense bramble and tall grass (mainly false oat grass, *Arrhenatherum elatius*, common reed, *Phragmites australis*, and cock's foot grass, *Dactylis glomerata*). They have not so far been found in stands of pure reed, nor have they been found in the field.



Harvest Mice at Vernatt's Nature Reserve, Spalding

It has been difficult to find detailed information about harvest mice, but a feature in British Wildlife magazine has proved invaluable. Management is being orientated as far as possible towards conservation of the mice, with most grass cutting being done in small sections in autumn on a rotational basis. Unfortunately, a grass fire in August 1995 ripped through the first area to be cut in autumn 1994, where the first nest was found, so it was not possible to see if the change of management had any effect on the mice. However, at the east end of the Reserve, also cut in autumn 1994, mice nests were found in 1995.



Harvest mouse nests at Vernatt's Nature Reserve, Spalding

The Vernatt's Nature Reserve is fully open to the public, which limits the amount of surveying that can be done. Nevertheless, we shall continue to monitor our harvest mice over the next few years to see what difference - if any - management appears to have on their numbers. At the time of writing our main concern is how they fared during the hard winter of 1995/'96. This we shall not know until the autumn.

Reference

PERROW, M. & JOWITT, A. 1995. What future for the Harvest Mouse? *British Wildlife Magazine*. 6. 356-365.

LINCOLNSHIRE NATURAL HISTORY IN 1995

1995 was an exceptional year with very early warm weather in late winter and early spring, following a very mild winter with few hard frosts and almost no snow. There was below average rainfall throughout most of year except the autumn, which was slightly above average, this being the third of a series of very dry years. The summer was extraordinarily hot and dry with mid-day temperatures in the nineties, sometimes high nineties, during much of July and August, when many wetlands became dry and parched and heathland and grassland vegetation browned off almost completely. After a moist autumn the early winter started mild, but 1995 came to a close with a three week long intensely cold snap, when there were record-breaking low temperatures for December, getting down almost to minus twenty degrees Celsius and extensive snow with deep drifts on the Wolds and Edge. This cold-snap finished just in time for us not to have a white Christmas, when the weather returned to England's normal cold, cloudy and damp winter climate for the New Year.

Notes are given on significant observations on Lincolnshire Natural History by the Section Recorders of the Lincolnshire Naturalists' Union.

FUNGI

†Jack Houghton & Ken Rowland

Two or three weeks before he went into hospital Jack rang and asked me if I had any information that he could use for the Annual Transactions Mycological Report, I put together what information I had and went to visit him and together we started to formulate a brief report, it was a great blow to me personally when he died, and a very great loss to the LNU.

This report will be very brief containing only the details which he and I discussed and agreed. There will be no general lists, or county records as this information had not been sorted, neither does it contain credits to people sending in lists as again the information had not been collated at that time, (I hope those persons who have sent in records will bear with me on this). As I was not able to attend all the Summer Field meetings myself due to my own illness, for some meetings I have had to rely on information passed on by members who were present.

As everyone will remember 1995 was a very dry summer and therefore not many fungi showed up during the middle part of the year. In fact it seemed touch and go whether there would be much of a fungus season at all. However when the Annual Fungus Foray was held this year at Haugham Wood near Louth (TF3581) on 15th October, we had had a little rain and hopes were that something would turn up. In the event it was a very productive meeting, one hundred and fifty species being recorded during the afternoon and no doubt it would have been much higher if Jack had been with us but on that day he did not feel up to it. Nevertheless he later confirmed all of the records including *Pluteus depauperatus* a rare species and the handsome little birds' nest fungus *Cyathus olla* (plate 11).

The following brief reports are from other Field Meetings some of which I attended and others where I have had to rely on information from other members.

Tunman Wood 21st May (SK8864)

Weather conditions good, the area covered included Housham Wood and Stocking Wood, whilst it was fairly early in the season some twenty species were recorded including *Tricholoma gambosum*, St George's Mushroom, an unusual one *Strobilurus tenacella* which grows on buried Pine cones, and the most interesting was *Bertia moriformis* looking like small black pimples on an old Birch branch.

Swanholme Nature Reserve 31st May (SK9468)

Conditions were now very dry, and as Swanholme is sandy and dry anyway only six species were recorded, mostly rusts and smuts.

Skippingdales and Atkinsons Warren 25th June (SE8812)

Conditions dry hot and dusty. Not good fungus conditions, but twenty seven species were recorded mostly rusts and smuts, including *Puccinia brachypodii* var *arrhanatheri* on False Oat Grass, but only two agarics on the list. Nevertheless an interesting meeting.

As I said at the beginning, this is the briefest of reports, now that we have sadly lost the mainstay of the LNU Mycological Section it is to be hoped that we can in some small way continue with the enormous amount of work that Jack Houghton has done over the last thirty years while he was Mycological Secretary (he collected over 37500 records). This will take a lot of living up to and maintaining.

MOSSES, LIVERWORTS AND LICHENS

M.R.D.Seaward

Since the previously published cartographical interpretations of 10 km x 10 km grid square recording in Seaward (1993, 1993a), there have been considerable advances in our knowledge of both the bryophytes and lichens of our county. Several bryophytes, not seen

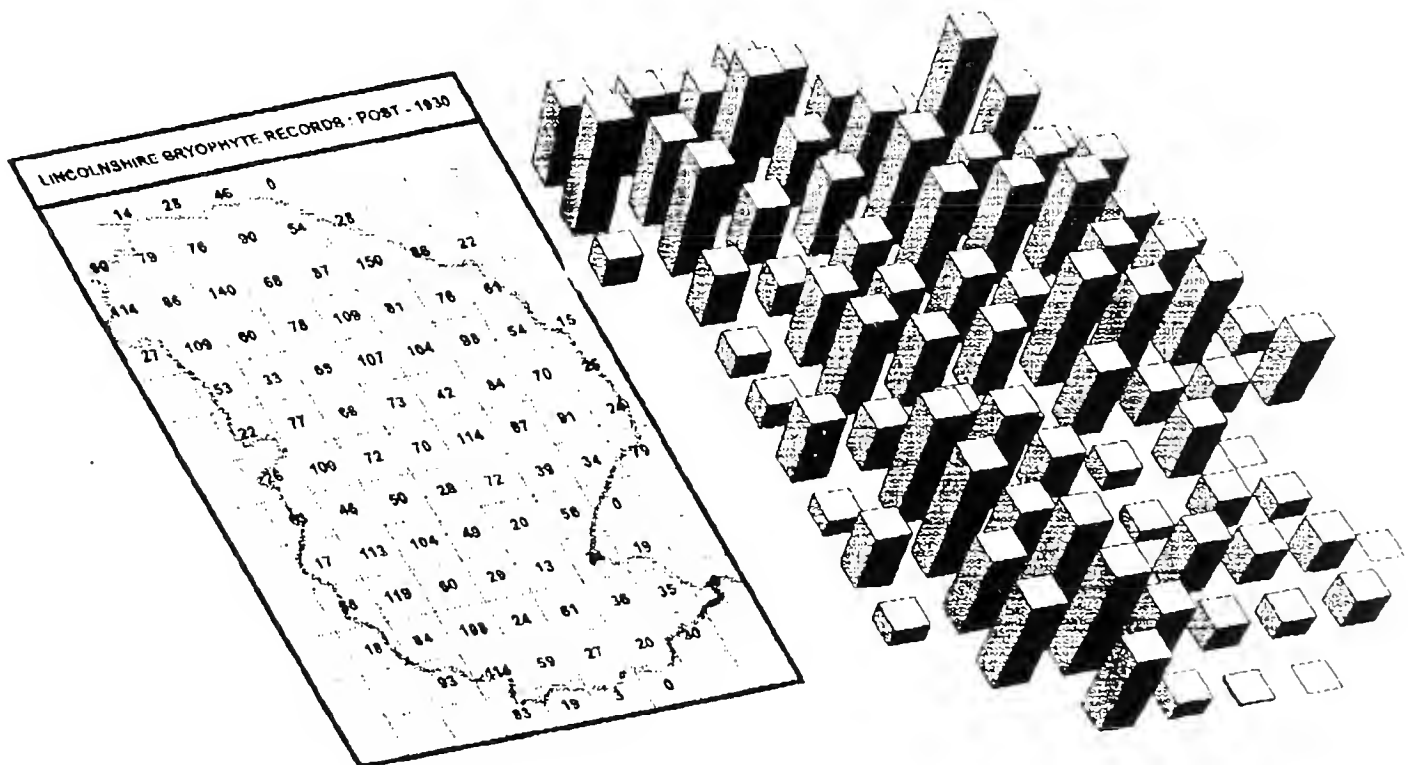


Figure 1. Current state of post-1930 bryophyte recording.

for more than 50 years (cf. Seaward 1993, Table 1), have been refound, eg. *Pohlia prolifera*, *Philonotis calcarea* (previously assumed to be extinct) and *Ulota phyllantha*.

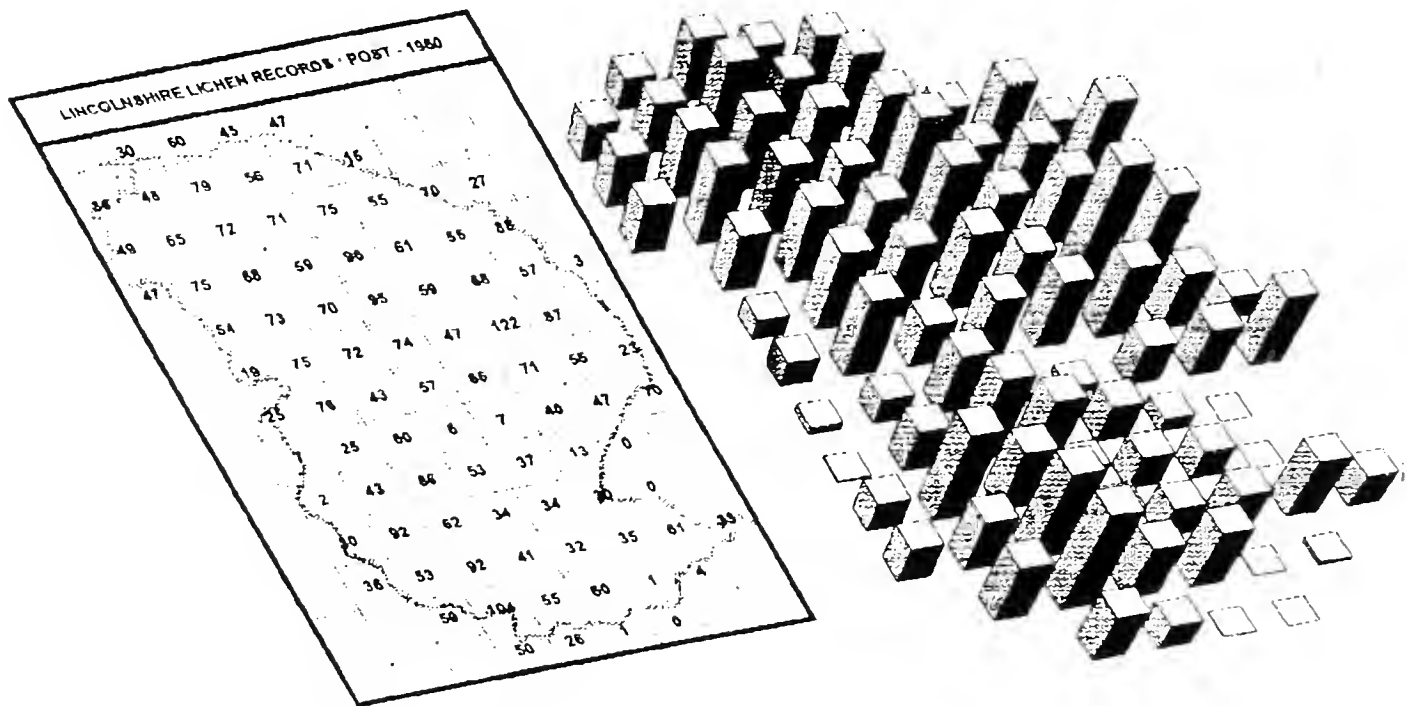


Figure 2. Current state of post-1960 lichen recording.

The extensive fieldwork of F.R.Lammiman and the published records of Smith (1994, 1995) and Smith and Bailey (1993) from selected habitats have been the main reason for this upsurge in bryological activity. Figure 1 shows the current state in post-1930 recording - an overall 7.4% increase in records over the past three years (cf. Seaward 1993, p.90).

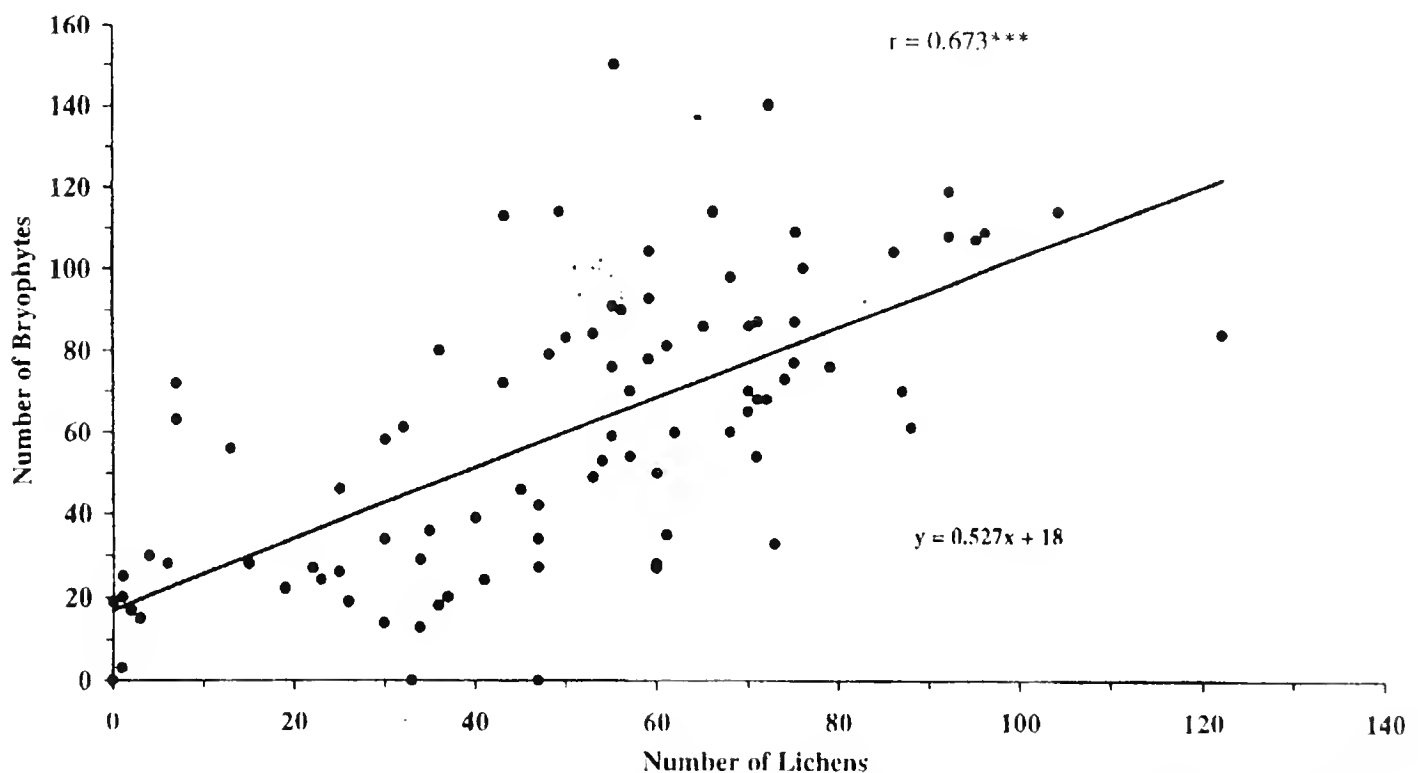


Figure 3. Relationship between bryophyte and lichen recording for each of the Lincolnshire 10km x 10km grid squares.

The increase in lichen records over the same period is even more dramatic (Figure 2), mainly due to the author's participation in the British Lichen Society's churchyard survey; overall there has been a 26.1% in 10 km x 10 km records (cf. Seaward 1993a, p.93).

The preponderance of records from churchyards (a good habitat for lichens in Lincolnshire) has resulted in a less significant correlation between bryophyte and lichen recording: correlations greater than 0.70 prior to 1992, based mainly on fieldwork undertaken in more natural habitats (eg. heathland, chalkland, woodland, dunes and abandoned quarries), have been reduced to 0.673 (Figure 3).

Mosses & Liverworts

The following new county divisional records have been contributed by F.R.Lammiman (FRL), N.G.Hodgetts (NGH) and T.Smith (TS)

NCR = new county record and **VCR** = vice-county record.

Hepatics

Aneura pinguis (L.)Dum. 15 (TS)

Metzgeria furcata (Dicks.)Evans 15 (NGH)

Riccia sorocarpa Bisch. 10 (TS)

Mosses

Amblystegium riparium (Hedw.)Br.Eur. 6
(FRL)

A.varium (Hedw.)Lindb. 15 (Belton Park,
4/1994, NGH; **VCR**)

Fissidens cristatus Wils.ex Mitt. 13 (FRL)

Isopterygium elegans (Brid.)Lindb. 11 (TS)

Leskea polycarpa Hedw. 15 (NGH)

Orthodontium lineare Schwaegr. 18 (NGH)

Orthotrichum diaphanum Brid. 7 (TS)

O. pulchellum Brunton 15 (Belton Park,
1/1994, NGH; **VCR**)

O. tenellum Bruch ex Brid. 15 (NGH)

Phascum cuspidatum Hedw. 9 (FRL)

Plagiothecium nemorale (Mitt.)Jaeg.
8 (TS), 11 (TS)

Platygyrium repens (Brid.)Br.Eur. 15 (NGH)

Pohlia wahlenbergii (Web.&Mohr)Andrews
6 (FRL)

Polytrichum piliferum Hedw. 8 (TS), 9 (FRL)

Pottia starkeana (Hedw.)C.Muell. 10 (FRL)

Pseudephemerum nitidum (Hedw.)Reim.
6 (FRL)

Rhizomnium punctatum (Hedw.)Kop.
11 (TS)

Rhytidiadelphus loreus (Hedw.)Warnst. 15
(Denton Reservoir, 9/1995, NGH; **VCR**,
since the record of S.C.Stow from Court
Leys in 1898 is not supported by
herbarium material)

R.squarrosus (Hedw.)Warnst. 18 (NGH)

Tortella flavovirens var. *glareicola*
(Christens.) Crundw.& Nyholm 9 (NGH),
11 (Gibraltar Point, 1993, NGH; **NCR**)

Trichostomopsis umbrosa (C.Muell.)Robins.
15 (Belton Park, 11/1993, NGH; **NCR**)

Ulota phyllantha Brid. 11 (NGH),
15 (Twyford Wood, 11/1995, NGH; **VCR**)

Weissia microstoma (Hedw.)C.Muell. 15
(Little Ponton Quarry, 3/1994, NGH; **VCR**)

Zygodon conoideus (Dicks.)Hook.& Tayl. 15
(Belton Park, 12/1994, NGH; **NCR**)

Lichens

All records are attributable to the author (MRDS) unless otherwise indicated: PME-B = P.M.Earland-Bennett, GC = G.Clayton, NGH = N.G.Hodgetts and JM = J.Margetts.

Acarospora smaragdula (Wahlenb.)Massal.
4 (Little Coates, 3/1995, MRDS; **VCR**)

Agonimia tristicula (Nyl.)Zahlbr. 6

Aspicilia calcarea (L.)Mudd 4

- A. contorta* (Hoffm.)Krempelh. 4
Bacidia sabuletorum (Schreber)Lettau 2
Buellia punctata (Hoffm.)Massal. 18
Caloplaca decipiens (Arnold)Blomb.& Forss. 4
C. flavovirescens (Wulfen)Dalla Torre & Sarnth. 3, 18
C. isidiigera Vezda 5, 9
C. teicholyta (Ach.)Steiner 4
Candelariella vitellina forma flavovirella (Nyl.)A.Henderson 4 (Irby-on-Humber, 10/1995, MRDS; **NCR**)
Cetraria chlorophylla (Willd.)Vainio 3 (JM)
Collema crispum (Huds.)Weber ex Wigg. 6
C. tenax (Swartz)Ach. var. *ceranoides* (Borrer) Degel. 16 (Callans Lane Wood, 10/1994, MRDS; **NCR**)
Diplotomma alboatrum (Hoffm.)Flotow 2, 9
Dirina massiliensis Durieu & Mont. forma *sorediata* (Mull.Arg.) Tehler 2
Evernia prunastri (L.)Ach. 9, 18
Haematomma ochroleucum (Necker)Laundon 4
Lecanora conferta (Duby ex Fr.)Grognot 4, 7 (Kingerby, 8/1994, MRDS; **NCR**), 8, 9
L. intricata (Ach.)Ach. 4, 5, 9
L. orosthea (Ach.)Ach. 5, 6
L. pannonica Szatala 6, 9
Lecidea fuscoatra (L.)Ach. 3, 4, 5, 9
Lepraria lobificans Nyl. 9, 18 (Holbeach, 9/1995, MRDS; **VCR**)
Leproloma vouauxii (Hue)Laundon 2, 18
Leproplaca chrysodeta (Vainio ex Rasanen) Laundon 2, 6
Micarea denigrata (Fr.)Hedl. 18 (E of Nene Outfall, 9/1995, MRDS; **VCR**)
Ochrolechia parella (L.)Massal. 2, 4
Parmelia caperata (L.)Ach. 15 (Denton Reservoir, 9/1995, NGH; **VCR**, since the record for S.Lincs. in F.A.Lees (1892) *The Botany of Lincolnshire, in White's History, Gazetteer and Directory of Lincolnshire* is unlocalized)
P. mougeotii Schaerer ex D.Dietr. 4
P. revoluta Florke 15 (Denton Reservoir, 9/1995, NGH; **VCR**)
P. saxatilis (L.)Ach. 4, 5, 9
Phaeophyscia nigricans (Florke)Moberg 2
Physcia dubia (Hoffm.)Lettau 2
Placynthiella icmalea (Ach.)Coppins & P.James 3, 18
Porpidia crustulata (Ach.)Hertel & Knoph 4, 5
Protoparmelia badia (Hoffm.)Hafellner 2
Psilolechia leprosa Coppins & Purvis 2, 5
Ramalina farinacea (L.)Ach. 13 (GC)
Rhizocarpon obscuratum (Ach.)Massal. 9, 13
Rinodina teichophila (Nyl.)Arnold 6
Sarcogyne regularis Korber 2, 4
Scoliciosporum umbrinum (Ach.)Arnold 18
Tephromela atra (Huds.)Hafellner ex Kalb 4
Toninia aromatica (Sm.)Massal. 4, 5
Trapelia coarctata (Sm.)M.Choisy 2, 4, 5
T. involuta (Taylor)Hertel 4, 5, 6, 9
T. placodioides Coppins & P.James 9
Usnea subfloridana Stirton 15
Verrucaria baldensis 4, 7
V.hochstetteri Fr. 4, 18
V.macrostoma Dufour ex DC. forma *furfuracea* B.de Lesd. 2, 4, 6, 18
V.muralis Ach. 4
V. simplex McCarthy 15 (Little Ponton, 10/1993, PME-B; **NCR**)
V. viridula (Schrader)Ach. 4
Xanthoria calcicola Oxner 18
X. polycarpa (Hoffm.)Th.Fr. ex Rieber 18

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photo R S Key

Plate 1 - The Sea Lavender Weevil *Pseudaplemonas limonii*. (Page 7)

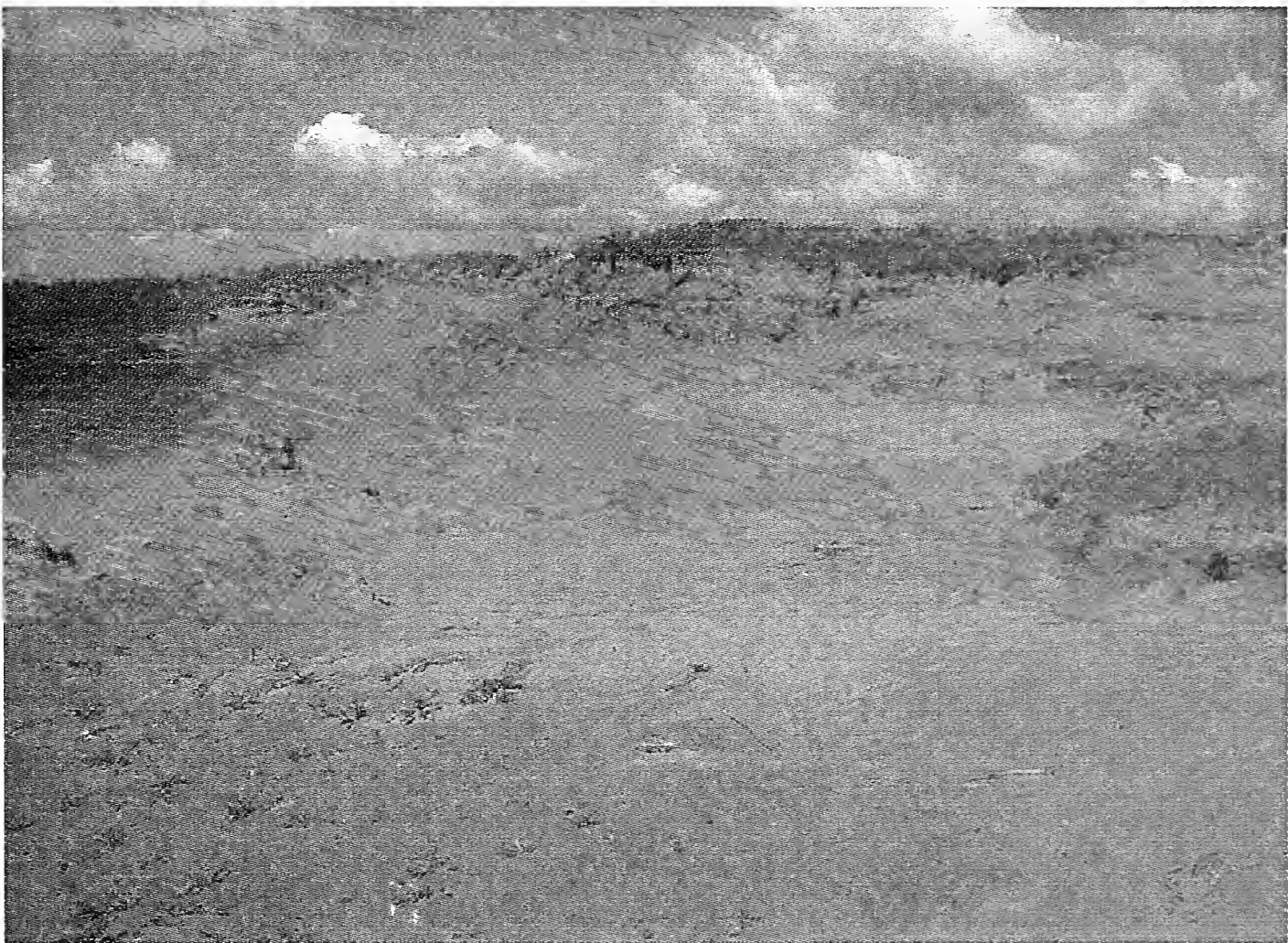


photo R S Key

Plate 2 - Inland dunes at Risby Warren. Important heath and dune beetle habitat. (Page 8)



photo R S Key

Plate 3 - A wetland malchite beetle *Anthocomus rufus*. (Page 10)



photo R S Key

Plate 4 - A scarce fenland ground beetle *Badister unipustulatus*.
(Pages 10 & XX)



photo A P Fowles

Plate 5 - The Cross Drain SSSI - A top national site for water beetles. (Page 10)

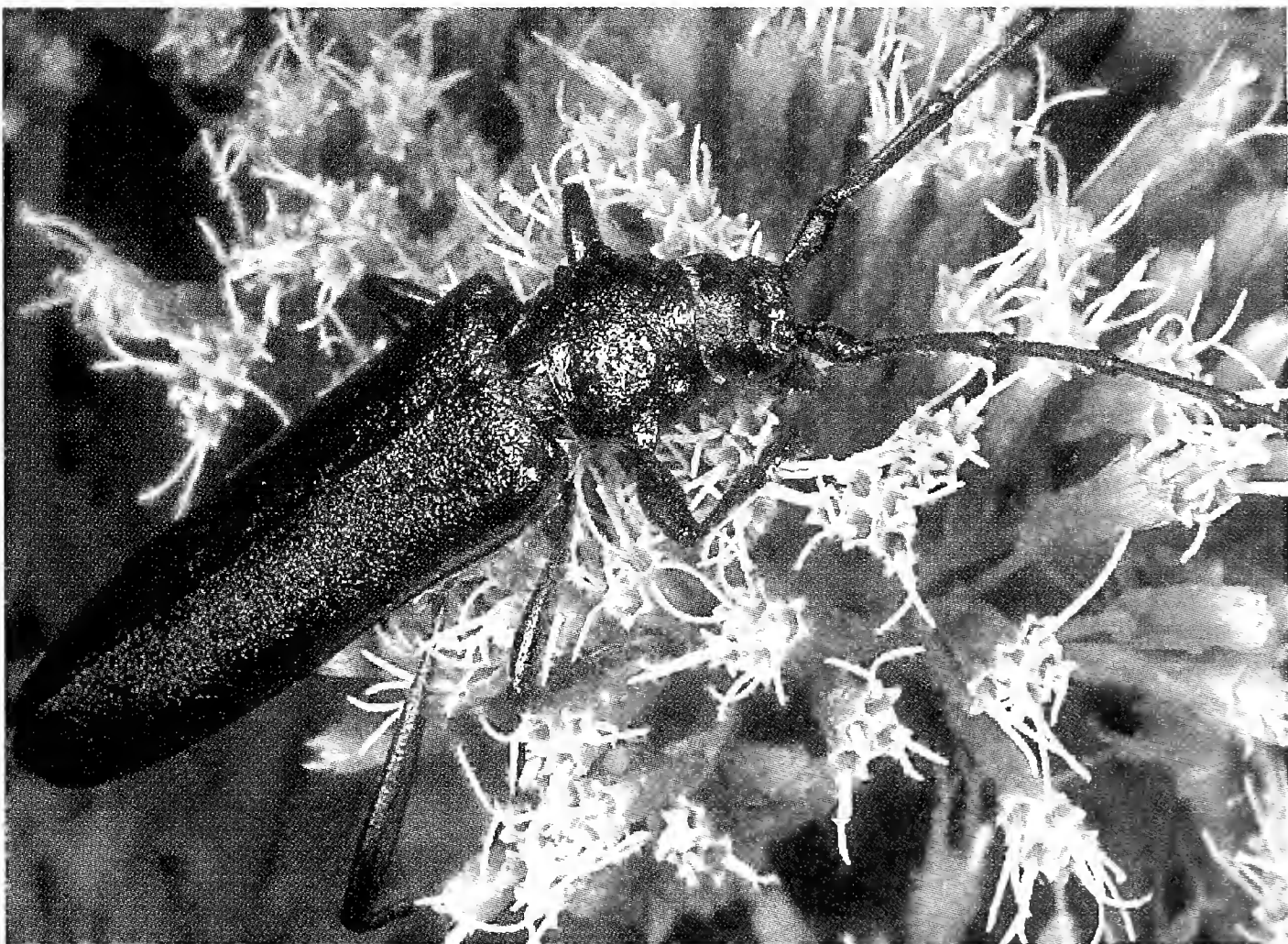


photo R S Key

Plate 6 - The Musk Beetle *Aromia moschata* likes willow pollards. (Page 11)

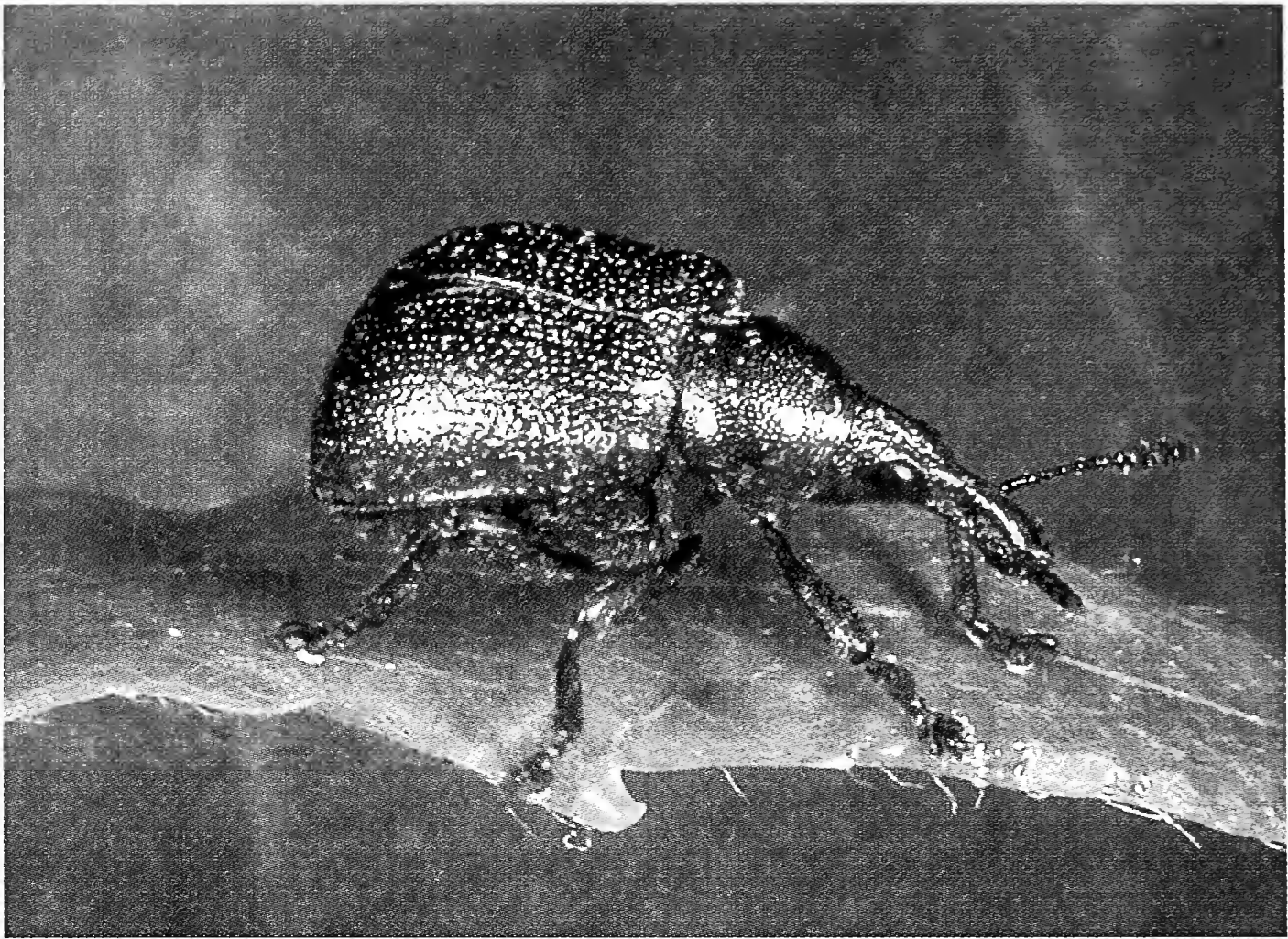


Plate 7 - A leaf-roller weevil *Bytiscus betulae* characteristic of the Limewoods. (Page 13)

photo R S Key

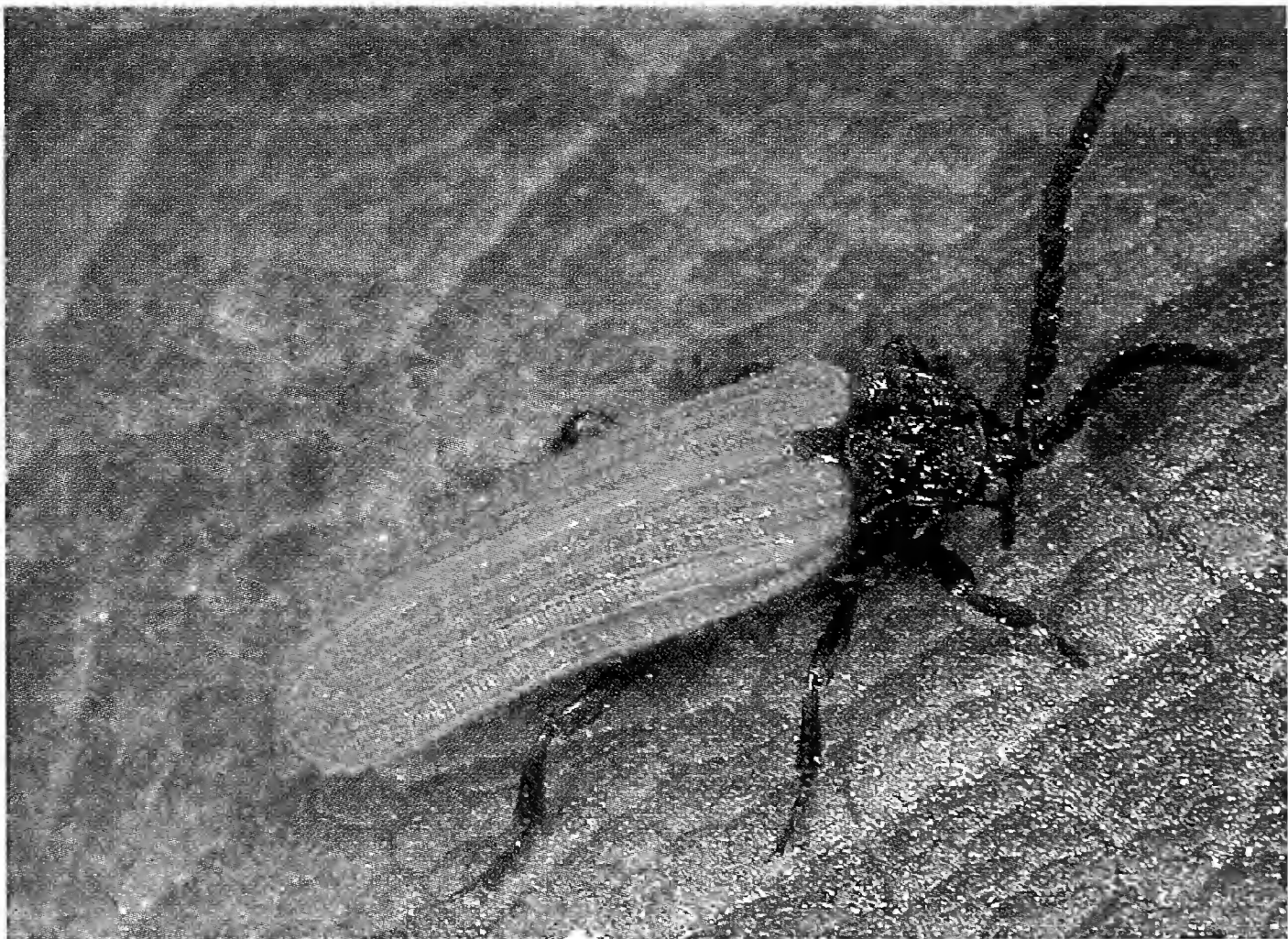


Plate 8 - A net-winged beetle *Pyropterus nigroruber* also a Limewoods speciality. (Page 13)

photo R S Key



Plate 9 - Mistletoe *Viscum album* subject of a Botanical society national survey. (Page 18)

photo I Weston



Plate 10 - Harvest Mouse nest in bramble at Vernatt's Reserve. (Page 24)

photo A Faulkner



Plate 11 - Bird's Nest Fungus *Cyathus olla* on the fungus foray at Haugham Wood.

photo K Rowland



Plate 12 - 1995 was an excellent year for Yellow Winged Darters *Sympetrum flaveolum*. (Page 39)

photo K Wilson

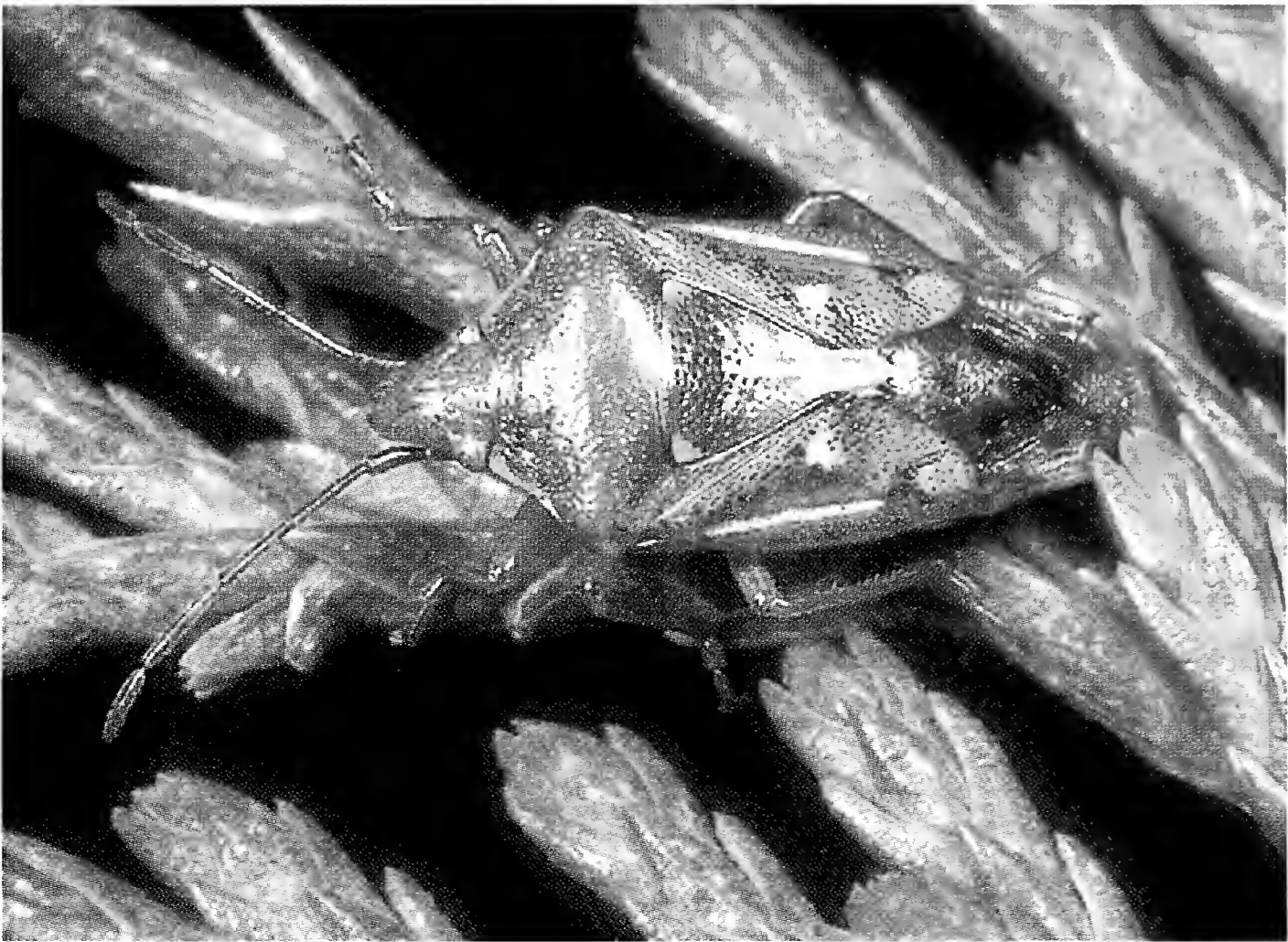


Plate 13 - Shield bug *Elasmostethus tristriatus* appears to be spreading in the county on garden cypresses. (Page 42)

photo A Binding



Plate 14 - There were more Camberwell Beauties *Nymphalis antiopa* in 1995 than any year since 1976. (Page 48)

photo R Johnson

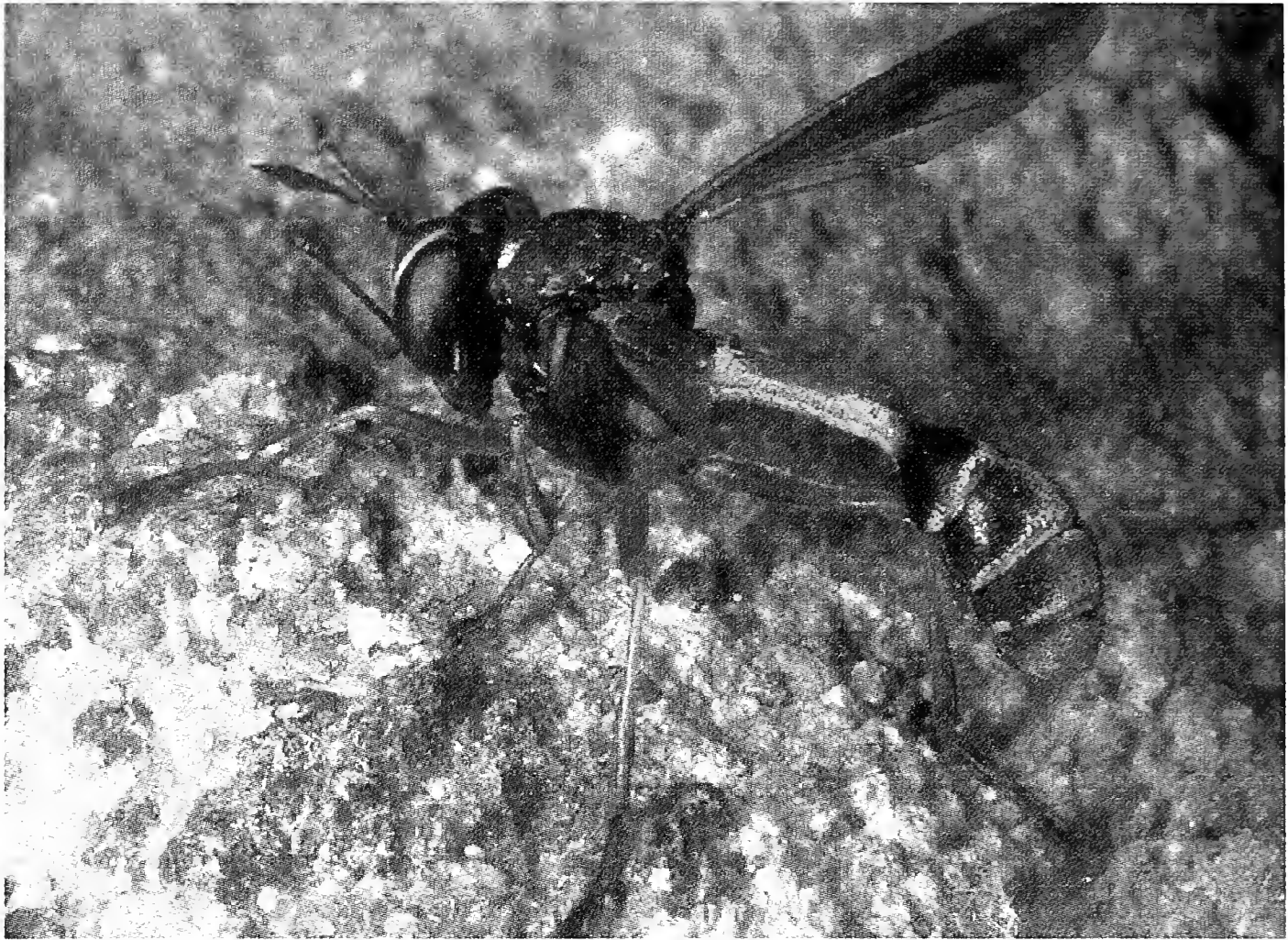


Plate 15 - A conopid fly *Physocephala rufipes* at Vernatt's Reserve, Spalding. (Page 52)

photo R S Key



Plate 16 - The Lincolnshire Naturalists at Morkery Wood. (Page 62)

photo R S Key

DRAGONFLIES AND DAMSELFLIES

John Redshaw

1995 will be remembered as the year when the yellow-winged darter *Sympetrum flaveolum* (plate 12) invaded our shores *en masse*. In Lincolnshire, following the occurrence of one, possibly two males at Gibraltar Point National Nature Reserve (TF55) in 1994, eight males and a female appeared along the Outer Ridge and by Prince's Pond on 3rd August 1995. Subsequently one male was seen by the Borrow Pits on 8th and 14th, another by The Mere on the latter date, followed by twenty along the Borrow Pits on 15th August, when a pair was seen ovipositing by Kevin Wilson. Two black darters *Sympetrum danae* were seen on the same day (Wilson 1996).

At Donna Nook nature reserve (TF49) at least five *Sympetrum flaveolum* were present on 6th August with up to two on the 7th and 12th (PT). The species was also recorded at Saltfleetby-Theddlethorpe National Nature Reserve (TF49) where two were seen in the third week of August (JW). these occurrences providing new records for the 10km square.

The main immigration of *Sympetrum flaveolum* has been traced back to the continent where, on 31st July, hundreds of males were seen leaving the shores of Holland, having originated in a mass emergence in southern Scandinavia. On 1st August high pressure and south easterly winds brought the first specimens onto the Norfolk and Suffolk coasts, with 100 in Great Yarmouth cemetery on 2nd and 600 there the next day, when they were accompanied by numbers of black darters *Sympetrum danae*, ruddy darters *Sympetrum sanguineum* and vagrant darters *Sympetrum vulgatum*. From 1st August *Sympetrum flaveolum* moved rapidly inland and had reached the west coast at Birkdale National Nature Reserve near Liverpool by the 3rd. Subsequently it was recorded from many English and Welsh counties (Silsby, 1996).

The discovery of a "thriving colony" of the red-eyed damselfly *Erythromma najas* at Revesby Reservoir (TF36) by Peter Wilson is a welcome addition to the small number of sites known in the county for this species.

Other new 10km square records received during the year were as follows:

SE71 Crowle Waste nature reserve <i>Aeshna cyanea</i> (AF)	TF27 West Ashby <i>Enallagma cyathigerum</i> (KR)
SK91 Castle Bytham (Jackson & Bottleneck NR) <i>Libellula depressa</i> (KH)	Goulceby <i>Sympetrum striolatum</i> (KR)
TF16 Stixwold Wood <i>Coenagrion puella</i> (KR)	TF27 Bell's Yard Pit, Horncastle <i>Ischnura elegans</i> (KR)
TF22 Pinchbeck <i>Brachytron pratense</i> (JR)	TF37 Swaby <i>Ischnura elegans</i> (KR)
TF26 Banovallum House, Horncastle <i>Libellula depressa</i> (DB) <i>Aeshna mixta</i> (JR)	Stockwith Mill <i>Lestes sponsa</i> , <i>Sympetrum</i> <i>sanguineum</i> (KR)
Kirkby-on-Bain Pits <i>Orthetrum cancellatum</i> (KR)	TF46 Skendleby, garden pond <i>Anax imperator</i> , <i>Aeshna grandis</i> , <i>Libellula depressa</i> , <i>Enallagma</i> <i>cyathigerum</i> (TS)

Two additional records for 1994

SE90

Bottesford Beck, Bottesford
Calopteryx splendens (AMcG & GA)

SK89

Hardwick Hall, Laughton
Libellula depressa (AMcG & GA)

During 1995 all twenty species on the post 1970 county list were recorded and, with the ovipositing record of *Sympetrum flaveolum* from Gibraltar Point, all have been recorded breeding within the county and on the County trust's reserves. 1995 was, therefore, a very satisfactory year with many obvious gaps being filled in, especially along the Bain Valley and in the Wolds area.

In addition to my own observations, records were gratefully received from G Askew, D Bromwich, C Hart, K Heath, A Faulkner, A McGovern, K Robinson, A Smith, T Smith, P Troake, J Walker, KM Wilson, & PJ Wilson. I am also grateful to David Bromwich for preparing the dragonfly recording form which has proved most useful and copies of which can be obtained from myself or Dave Bromwich.

Erratum in 1994 report

Please note that entries under the names K Richardson and K Robinson relate to K Robertson.

References

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SHIELDBUGS (1993-1995)

Annette Binding

Since I began to record Shieldbugs in Lincolnshire in 1993, all but 5 of the 18 species previously recorded in the County have been found. The commonest species in the County are hawthorn shield bug *Acanthosoma haemorrhoidale*, birch shield bug *Elasmotherus interstinctus*, parent bug *Elasmucha grisea*, forest bug *Pentatoma rufipes* and pied shieldbug *Sehirus bicolor*.

The hawthorn shieldbug turns up in a wide variety of habitats from urban gardens to parks and woodlands and there are records from throughout the County. Birch and parent bugs are also widespread throughout the county on birches and alder with both adults and nymphs feeding on the catkins of these trees. The forest bug, as its name



Last instar nymph of the forest bug *Pentatoma rufipes* photo G Ellis

suggests is mostly found in woodlands although one turned up in Lincoln Castle grounds in September 1994. Usually found on plants during the day, Rex Johnson recorded one which came to his mercury vapour light at Burton Pits Reserve on 11 August 1995.

The pied shieldbug feeds on white dead-nettle *Lamium album* and black horehound *Ballota nigra*. A fairly large black and white species it has been found in a large number of sites from mid and south Lincolnshire wherever its foodplant occurs. Records received for 1995 included Snipe Dales Reserve, Grimsthorpe Estate and Washingborough.

Another shieldbug which is dependent on labiates, most commonly hedge woundwort *Stachys sylvatica* is *Eysacoris fabricii*. This pretty little purple, grey and bronze bug can be found in very large numbers where its foodplant occurs. It feeds on the developing seed pods pushing itself down into the calyx after the flower has dropped. Records for 1995 included Chambers and College Woods, Scottlethorpe Quarry and Morkery Wood.

The gorse shieldbug *Piezodorus lituratus*, as its name suggests, feeds on gorse and related plants such as broom. It is also turning up in gardens on *Genista* species grown as garden plants. Mrs C Gallimore regularly records this species in her garden at Grantham. It can be found in fairly large numbers at Whisby Nature Park and Snipe Dales Reserve and it was also recorded at Atkinson's Warren and Skippingdales in June 1995.

Troilus luridus and *Picromerus bidens* are both woodland species. They are predatory, with both nymphs and adults feeding on lepidoptera and sawfly larvae and occasionally adult beetles such as ladybirds. There are fairly regular records of *Troilus luridus* although none from the north of the county and 1995 records included Gibraltar Point Reserve, College Wood, Skellingthorpe Old Wood and Morkery Wood. *Picromerus bidens* prefers damp, marshy areas and there are records from only two sites in the county, Kirkby Moor Reserve and Chambers Wood. There were no records in 1995. In appearance the species is large and very like the related forest bug but it has sharply pointed shoulders whereas the shoulders are square in the forest bug.

Related to the pied shieldbug and very like it in appearance is *Legnotus limbosus*. It is smaller than the pied shieldbug and feeds on bedstraws, usually cleavers or ladies' bedstraw. There are seven Lincolnshire sites although I had only one record in 1995 from Washingborough roadside verge. The adults come out of hibernation on warm days from mid-April to June. The food plants of this species are very common so it is probably overlooked although it does need a light soil as the adult bugs spend the winter hibernation period buried underground. It also has a tendency to fall from the plant at the least touch making it difficult to catch in order to confirm identification.

Sehirus luctuosus is also related to pied shieldbug but it is mainly a southern species and there have been only two Lincolnshire records, the last one being from Gibraltar Point Reserve. The specimen is in the Gibraltar Point collection and was captured by Dr D Hill in June 1993 and identified by myself in 1994. Dr Hill told us that his specimen was one of several but although we looked again in 1994 and 1995 we have found no further insects. That and a record for Risby Warren in 1987 remain the only County records.

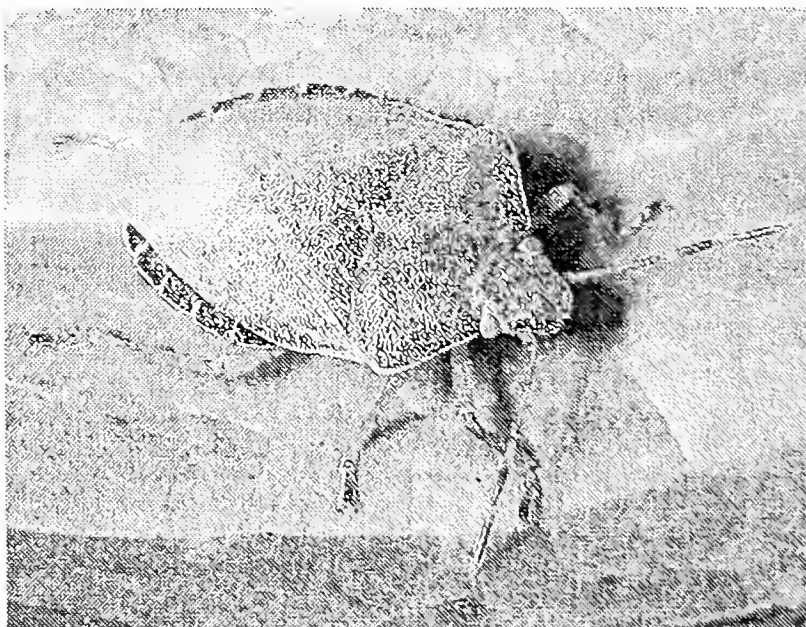
One of the most beautiful shieldbugs found in our county is the blue bug, *Zicrona caerulea*. Although it is bright metallic blue there were only two previous Lincolnshire records, both from Crowle in May 1888, so we didn't expect to find it again. However Dave Bromwich,

warden at Whisby Pits Reserve, told me that he had found a number of these bugs at the Reserve in 1993. He looked again in 1994 and a specimen confirmed the previous year's record. In 1994 we found it at Linwood Reserve on heather and at Chambers Wood where we found adults in June. At the LNU meeting in July 1994, Alan Lazenby found a 5th instar nymph hunting on willow. The blue bug is another predatory bug, the nymphs and adults feed on the larvae of leaf beetles, including those of the flea beetle, *Altica lythri* on willowherb. In 1995 there were two more records of this bug - both new sites. In May I took several specimens of *Altica* flea beetles from great willowherb *Epilobium hirsutum* at Snipe Dales Reserve. When I examined them later under the microscope I was amazed to find that one of the beetles was an adult female blue bug. The bug laid several eggs and I was able to rear five nymphs which were then released back at the reserve in the same area. The other 1995 record was from Mrs Gallimore who caught one in her garden in April. This may well be another overlooked species and since I could collect one without noticing it, it is probably worth looking more closely at willowherbs with *Altica* flea beetles on them. The beetles are a similar bright blue to the bugs and roughly the same size. (We have found blue bugs in some numbers together with *Altica* beetles at Clumber Park, Notts.).

The most recent addition to the county list is *Elasmotherus tristriatus* (Plate 13). Until recently this vegetarian species which feeds on lowland juniper was almost entirely confined to southern English counties where its food plant grows. Then ornamental conifers became popular as garden plants and the bug decided that it found them very palatable and began to spread. There is one specimen in the Gibraltar Point Reserve collection, caught in 1990 by Dr D Hill which is the first known record for the County. Since then we have had one or two records each year mainly from the south of the County. In 1992 Mr & Mrs Hebdon photographed one at Gosberton Clough and Dr P Kirby recorded it at Springfields Garden, Spalding in 1993. One turned up in Washingborough, also in 1993, found by Mr K Skelton and in 1994 a further site was added when Mr G Taylor found one at the Callans Lane Wood LNU Meeting in October. There was only one record in 1995 but several insects were found. This record was from Mr D Burrows who found the first insect on 15th October on a window ledge in his house. He wrote to us again a few days later to say that he had found another one which, when released in his garden, flew straight to a tall cypress tree from which he had earlier been lopping branches. This pretty little shieldbug is similar in appearance to a Birch Shieldbug to which it is closely related. It may well be much more common in county gardens than these few records show; as junipers and *Cupressus* shrubs are now very popular as hedging and ground cover plants.

I am grateful to all those members who have sent me records and specimens in the last few years. I am certain there are many more shieldbugs to be discovered and perhaps we may find again the five other species:-

1. *Palomena prasina*, the green shieldbug a large green bug similar to the gorse bug.



The Green Shieldbug *Palomena prasina* - Does it still occur in Lincolnshire?

photo G Ellis

2. *Legnotus picipes* - a shieldbug related to the pied shieldbug *Legnotus limbosus*, and which feeds on bedstraws in sandy places.
 3. *Podops inucta* - The European turtlebug.
 4. *Rhacognathus punctatus* - a predatory heathland species.
 5. *Neottiglossa pusilla* - one record from Moor Farm in 1973 (specimen in the Gibraltar Point Reserve collection).
-

MOTHS

Rex Johnson

The year proved to be a mothing year without parallel. Prolonged suitable weather at the time of peak activity enabled more recording to be done than ever before and over the July/August period we were out 60 nights out of 62, including a number of all-night sessions. Recorders' initials are given with records and full names are included in the acknowledgements section at the end.

Finding a new macro species for the county after all these years of recording is always exciting, but in 1995 we found three new species of macro-moth, with a fourth new species dramatically confirmed. Additionally, in 1995, we re-discovered a number of micro moths not seen since the time of Mason's lists published in Transactions in the early years of the century. It was a strange feeling to put on computer a micro record for Scotton Common - for the identical place and date for which the species had last been seen by Mason eighty years ago.

All 1995 data is now on the computer and I now have over 40,000 moth records on "Recorder" to cover the last decade. A new publication on the Lepidoptera of Lincolnshire is nearing completion, which will include a full checklist with significant records of both the macro and micro moths.

Migrants

Migrant species were recorded in 1995 every month from April to October and some were present in large numbers across the county. Records are too extensive to list in full. What follows is a summary:

Margaritia sticticalis A scarce migrant micro-moth in recent years. Roughton Moor, 18th August, JJ.

Udea ferrugalis A better known migrant micro-moth - also at Roughton Moor, 15th September, JJ.

Nomophila noctuella another micro, was recorded widely from the end of July to early September.

The Vestal A rare migrant (2 in last 10 years) was at Spilsby on 17th August. JA & J G. It was also at Roughton Moor, 12th October, JJ.

Oleander Hawk Only four records this century, it was at Donna Nook, on 20th July. SL.

Humming-bird Hawk A regular over the last decade, was seen across the county from April to October.

Convolvulus Hawk Almost an annual visitor, was recorded several times between 25th August & 30th September.

Kent Black Arches Gibraltar Point, 15th July. RJ & KMSW. It was also at Saltfleetby-Theddlethorpe, on the same date JJ & GW. It was recorded in 1994 for first time in twenty years) and it has to be suspected that the 1994 migrants have established a colony on the coast.

Dark Sword-grass A common migrant. Large numbers in both Vice Counties from early May to mid-October.

Pearly Underwing Crowland, 15th August RSK; Far Ings Reserve, 20th August AM & AC; Roughton Moor, 31st October JJ.

Great Brocade Usually a very occasional migrant but came in the

larger numbers than previously. Laughton, Grimsby, Dalby, Roughton, Little Cawthorpe, Messingham and Muckton. This was the darker grey Scandinavian form.

Golden-rod Brindle Only previously seen Little Cawthorpe, 1973, was at Gibraltar Point on 19th August, KMSW, & Far Ings, 25th August, AM & AC.

Small Mottled Willow Only previously at Mablethorpe & Boston, was at Roughton Moor, 26th August, JJ.

Scarce Bordered Straw Only 3 records in last decade- was at Muckton, 4th October GW.



Convolvulus Hawk Moth

photo R Johnson

Macro-Moths

In 1995 the number of species seen was 475, 34 more than the previous record year 1994, which represents well over 75% of all the macro species ever recorded for Lincolnshire. Over the last decade we have recorded 95% of the Lincolnshire's resident larger moth species. Quite remarkable!

Dr. Paul Waring undertook a survey of the Lincolnshire limewoods for English Nature and organised the running of MV traps, manned mainly by LNU recorders, in four woods on four all-night sessions between June and late September. This led to the discovery of some of our rarer macro moths and of 3 new micro species for the county.

New Species for the County.

Triangle *Heterogenea asella* (Limacocicacae) Found in the Central Lincolnshire Limewoods (site not named to protect this rare species) on the 19th July, RJ & WJ. This is a Rare (Red Data Book 3) species in Britain. It is mainly found in mature woodland in south-east Kent, Sussex and south Hampshire and it has also been found in Oxon., Wilts., Bucks., Essex, Surrey, Warwick, Worcs., Devon and Cornwall. This Lincolnshire record, verified by Dr. Paul Waring, is the most northerly ever and far from the species' usual range. The larval food plants are oak and beech in warm areas in woods.

Beech-green Carpet *Colystygia olivata* (Geometridae). Found at Well Vale on the 29th July, RJ, WJ, WGH, MED. This is a very local species in Dorset, Oxon., Bucks. and Glos. and is more frequent in northern England. It is a coastal/woodland species, with larvae feeding on bedstraws *Galium* and associated with chalk/limestone districts.

Pauper Pug *Eupithecia egenaria* (Geometridae). This is another Rare (red Data Book 3) insect in Britain and it was thought to be restricted to the Wye valley in Monmouthshire and Gloucestershire and an area of south west Norfolk. The larvae feed on limes *Tilia cordata* & *T. platyphyllos*. In June 1993, I considered that a pug caught by Mark Joy at Gosberton was of this species but it seemed so very unlikely that I felt I could not publish the record until some further confirmation was found. On 25th June the first night of the limewoods survey, Dr. Paul Waring had specimens of the Pauper Pug to light at Stainfield Wood, Great West Wood, and Ivy Wood. This was the most important discovery of the survey and it now makes the 1993 record credible.

Vine's Rustic *Hoplodrina ambigua* (Noctuidae) Found at Spilsby on the 24th August, JA & J G; at Messingham on the 12th September, RJ; and Roughton Moor on the 15th September, JJ. This species is resident in the British Isles with numbers re-inforced by immigrants. It is well established in southern England and East Anglia, but has been considered a casual migrant elsewhere, though it is now thought by Dr Paul Waring that it may be extending its range across Lincolnshire & other areas of the country. It inhabits gardens and waste places and the larvae feed on " low plants".

Other important macro records for 1995

Barred Chestnut A second good year at Laughton Forest, Aug.-Sept., RJ & WJ.

Beautiful Carpet Widespread. 9 records. Numbers unusual. Scarce/absent most years.

Beautiful Yellow Underwing Crowle, 1st July. Larvae on heather, RJ.

Black Rustic In decline since mid-1980s. One at Gibraltar Point, 11th October, KMSW.

Bordered Gothic Aunsby, DF.

Campanula Pug Market Rasen, CS.

Confused Frampton Marsh, 14th July, RJ, MJ, AJ. Very few this century.

Currant Clearwing Spalding, 2nd July, AF.

Dark Umber Stainfield, 8th July, JJ & GW; Scotton, 16th July, RJ & WJ.

Dentated Pug Laughton Forest, 18th July, RJ & WJ, very few this century.

Dingy Shell Willingham Forest, 12th July, RJ & WJ, rarely recorded.

Four-spotted Ripplingale Fen, 20th July, JL; Swinstead Valley, 23th July, AF. Very interesting. The species may extending its range northwards into Lincolnshire.

Foxglove Pug Spilsby, 28th July, JG; Willingham & Mkt. Rasen, CS.

Grass Rivulet Saltfleetby, 26th May, JJ & GW; Gibraltar Point, 31st May, KMSW.

Grass Wave Roughton Moor, 17th June, JJ; Kirkby Moor, 23rd June, JJ & GW.

Great Prominent Roughton, May 1995, JJ & KR. Wider range evident.

Mere Wainscot College Wood, Baston Fen (RJ); Birthorpe, (NG); Stainfield, (JJ & GW); Gibraltar Point., (KMSW); Bourne, (AG). Many more than usual.

Merveille du Jour Roughton Moor, KR & JJ; Far Ings, 6th October, AM&AC.

Muslin Footman Last recorded 1983. Rippingale Fen, 16th July, JL; Hemswell, in numbers, 20th July, RJ & WJ, GE.

Netted Pug Bottesford, 20th May, JP.

Northern Spinach North Cotes, 12th August, RL; Scotterthorpe, 14th August, RJ & WJ

Oak Nycteoline Black Walk Nook, 4th May, Laughton, 2nd August, RJ; Roughton Moor, 19th October, JJ.

Oblique Carpet Spilsby, 28th May, JA & J G.

Old Lady Bulby, August 1995, JL. Wings of this species found under a bat roost.

Orange Moth Always considered rare in Lincs. with odd ones flying in sunshine in the central limewood area. In July 1995, while running a MV trap during the limewood survey JJ & GW had hundreds of this species all around the trapping area.

Pinion-spotted Pug Burton Pits, 5th June, RJ & WJ; Spilsby, 25th June, JA & J G.

Purple-bordered Gold Crowle Waste, 1st July, two specimens at BENHS meeting.

Reddish Light Arches Gibraltar Point, 19th June, KMSW; Frampton Marsh, 14th July, RJ

Red-green Carpet Laughton, 2nd August, RJ & WJ; Roughton Moor, 14th October, JJ.

Scarce Pug Gibraltar Point (has only ever been seen here), 12th July, KMSW.

Scorched Carpet Normally rare. Only three years in last decade. Laughton, 28th July & 2nd August, good numbers, RJ & WJ; Roughton Moor, 29th July, JJ.

Sharp-angled Carpet Willingham, 4th August, RJ & WJ; Boultham Mere, 11th August, KS.

Shaded Pug Gibraltar Point, 15th July, RJ & WJ.

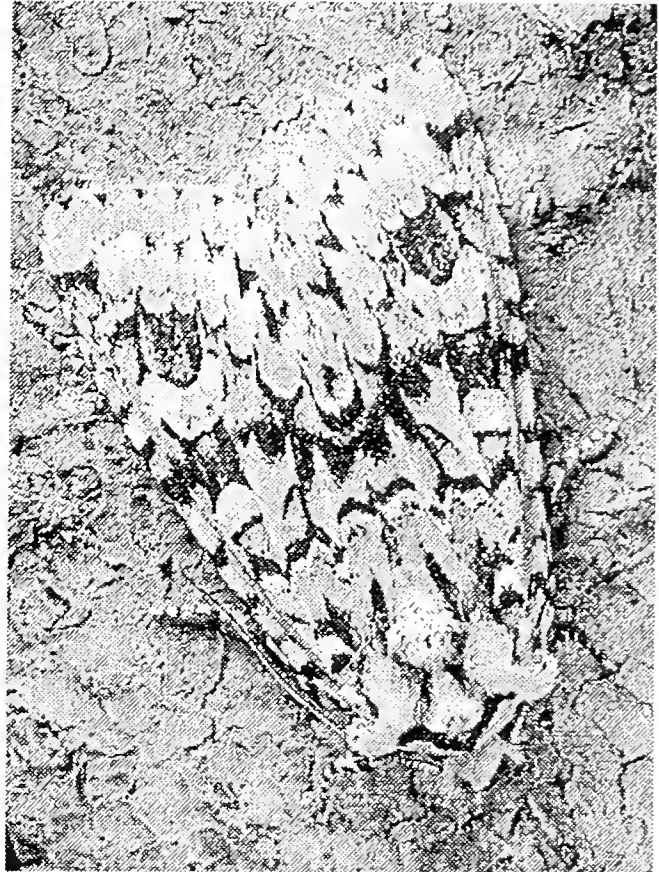
Shore Wainscot Gibraltar Point, 12th July, KMSW.

Six-belted Clearwing Morkery Wood, 22nd July, RSK. Discovery of this new site is welcomed, as its former habitat in a quarry at South Ferriby has recently been destroyed by new mining of chalk and by a new age travellers' camp.

Small Seraphim Roughton Moor, 13th July, JJ.

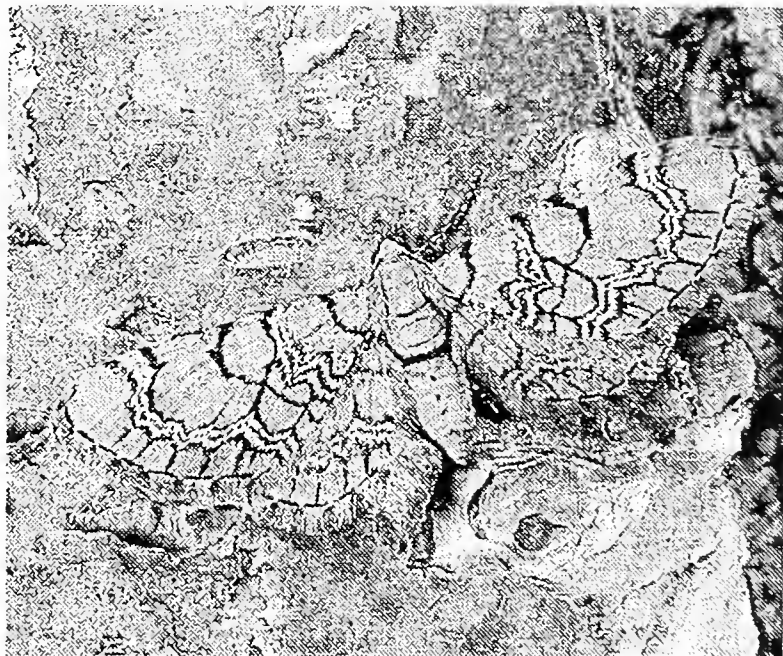
Striped Twin-spot Carpet Only 1840 & 1971 previously. Roughton Moor, 23rd July, JJ; Crowle Waste, 1st July, RJ (BENHS meeting).

Treble Brown Spot Gosberton, 1st July, MJ; Willingham, July, RJ & WJ, & CS.



Merveille du Jour

Photo R Johnson



Netted Pug

photo J Petyt

Twin-spotted wainscot Bourne, AG; Roughton, JJ; Gibraltar Point, 7th August, KMSW.
Webb's Wainscot Roughton Moor, 28th July, JJ.
Wormwood Bottesford, 29th July, JP.
Yellow Belle Gibraltar Point, 27th May, KMSW.

Micro-moths

On the micro-moth front the year was even more exceptional. Interest in these smaller species only started to be revived in the mid-1980s after a dearth of recording of over 80 years. With the help of several recorders much was added to our knowledge in 1995. Graham Weaver loaned me data from a prolonged period of recording at the Saltfleetby-Theddlethorpe Nature Reserve, and this enabled me to find over 30 new species to add to a new county list being drawn up to cover all lepidoptera.

In 1995 I submitted all our micro records to Mr Maitland Emmet, well known micro moth expert and editor of the Moths and Butterflies of Great Britain and Ireland series, for vetting. He thanked me for a "splendid" list which had given him over 100 new Vice County records for Lincolnshire - and sent to me over 60 species "new" to Lincolnshire that I did not know had ever been recorded here. Since we appeared to be a little "short" of records for leaf miners, Mr Emmet volunteered to drive up to Lincolnshire from Essex in November 1995 for a weekend searching for these species, aided by a number of LNU lepidoptera recorders. Without seeing a single moth, we found enough evidence on leaves at Chambers Plantation to record a total of 79 species, 17 of which were new to VC54 and 9 new to Lincolnshire. I have written up this expedition more fully in "Micro-Moth Recording in Lincolnshire", earlier in this volume.

The many new micro records for 1995 are, with one exception, being held over for publication in the imminent new county fauna and check-list. There is not room for them here. I do, however, wish to report on one species new to Lincolnshire - namely:

Oecophora bractella. The larvae of this species feeds under bark of dead wood and the adult has "retiring habits and is difficult to obtain in the adult stage" (Emmet, 1988). This is considered a rare (pRDB3) species and its range is well to the south of Lincolnshire, making this the furthest north it has been seen. It was discovered at Southrey Wood, 8/7/1995, by Mr Gavin Boyd of Cambridgeshire- attending the joint field meeting as a BENHS member. While I ran an MV light all night, Mr Boyd roamed the wood with a Tilley lamp - the first time I had seen one used - and he recorded a remarkably good list of species. Two weeks later I attracted the species to light in College Wood, and a little later still had two specimens come to MV at Great West Wood. Other recorders found the species during the limewoods survey, and while it was never present in numbers, it is clearly well established in central Lincolnshire.

Acknowledgements

As always a considerable debt of gratitude is owed to the people submitting records- Many have submitted records which are not mentioned above- but knowledge of distribution of the commoner species is just as important as finding the rarities, so I have been grateful for all data. Sincere thanks to the following:

Ms R Bavin, Mr HE Beaumont, Miss J Binding, Mr & Mrs A Binding, Mr G Boyd, Mr K Bradshaw, Ms S Bright, Mr D Bromwich, Mr D Brown, Mr D Burrows, Mr J Chainey, Mr K

Cooper, Mr A Credland, Mr M Crick, Mrs ME Dawson, Mrs G Ellershaw, Mr AM Emmet, Ms D Fairchild, Mrs A Faulkner, Mr AJ Gardiner, Miss N Goom, Mr WG Hoff, Mr J Jaines, Mr ANA Johnson, Mrs WJ Johnson, Mr T Jones, Mr M Joy, Dr RS Key, Mr T Lamin, Dr JR Langmaid, Mr AS Lazenby, Mr R Lorand, Mr S Lorand, Mr A Mc Govern, Mr A McGowan, Mrs J Ostler, Mr M Parsons, Mr C Penney, Mr J Petyt, Mr C Plant, Mr P Porter, Mr C Potts, Mr B Redman, Mr & Mrs K Robertson, Mr K Rowland, Dr D Sheppard, Mr & Mrs K Skelton, Mr R Skelton, Mr C Smith, Mr M Speight, Dr PH Sterling, Mr M Tyszka, Dr P Waring, Mr G Weaver, Mrs V Wilkin, Mr KMS Wilson, Mr G Wright.

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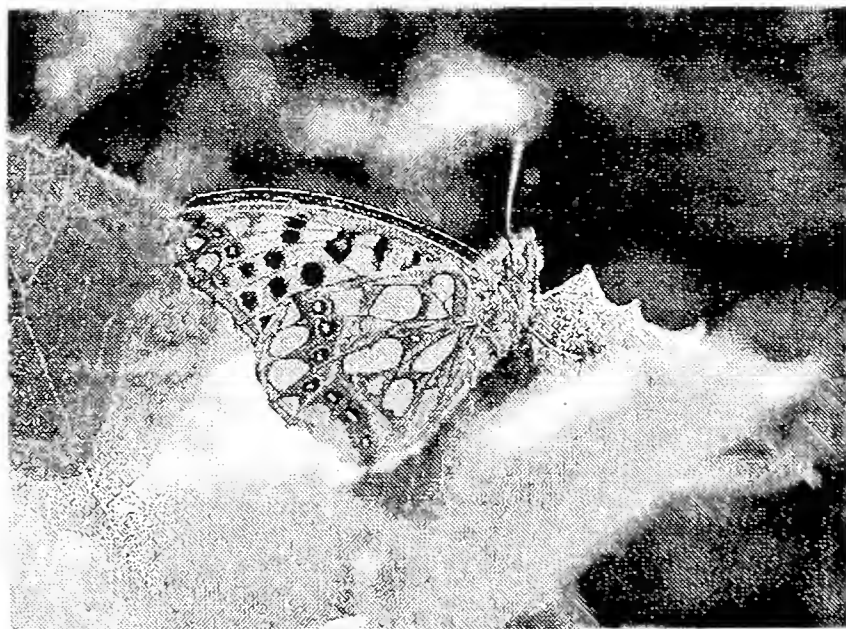
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BUTTERFLIES

Allan Binding

1995 turned out to be a very good year for most species of butterflies. In Vice County 54 (N Lincs), the largest number of records were in the weeks from 31st July to the 13th August (Weeks 31-32), while in Vice County 53 (South Lincs) the largest number of records were between 24th July to 30th July (Week 30) (figure 1). As can be seen, there appears to be a marked difference to the peak flight weeks between the two Vice Counties. Small white was the commonest butterfly in 1995 followed by small tortoiseshell - green-veined white - peacock and meadow brown. Holly blue is still being recorded in small numbers.

Migrants had a mixed year, with only one record of clouded yellow. Very few painted lady butterflies were recorded but red admirals were very common and the first record was received in Mid April.



Queen of Spain Fritillary

photo R Johnson

The most exciting record of a migrant this year was of the Queen of Spain fritillary found by Lincolnshire Trust warden Paul Troak at Donna Nook. This is the first confirmed record of this very rare migrant has been seen in Lincolnshire (although there is an unconfirmed record from Boston in 1963). At least two were seen, one of which was verified by Peter Cawdell of Butterfly Conservation.

Camberwell beauty butterflies (Plate 14) have turned up all over Britain including Manchester, Clumber Park in Notts and in Lincolnshire. Annette Binding found

a dead specimen on the 19th August on the East Dunes footpath at Gibraltar Point National Nature Reserve. Another was found in Mr P Trevethicks garden at South Cockerington on the 30th August. Butterfly Conservation Lincs Branch had two more sightings reported to them at The Manor at Fulbeck, where five Camberwell Beauties were seen feeding on fallen plumbs on the 11th of September and one was seen in a garden next to Skellingthorpe Wood. This is the first time that Camberwell Beauties have been seen in Lincolnshire in such numbers since 1976 when it was recorded from fifteen sites.

Brown argus were seen again at Gibraltar Point as well as Nr. Ancaster and other sites in the county. Many Duke of Burgundy fritillaries were recorded again at two adjacent sites in South West Lincolnshire.

Dark green fritillaries and chalk hill blue have also been recorded in the county this year, the former in Swinstead Valley and in the Langworth and Grimsby districts and the latter on the Ancaster Verges, where it has curiously recently reappeared after a long absence.

Butterfly Conservation received media coverage this year when they released specimens of the chequered skipper back into Lincolnshire in the lime woods under licence from English Nature. This introduction will be monitored closely to determine how successful they might be in re-establishing.

I am very grateful to all the LNU members who have sent their records to me this year and I look forward to receiving records in 1996.

FLIES

Andrew Godfrey & Jillian Binding

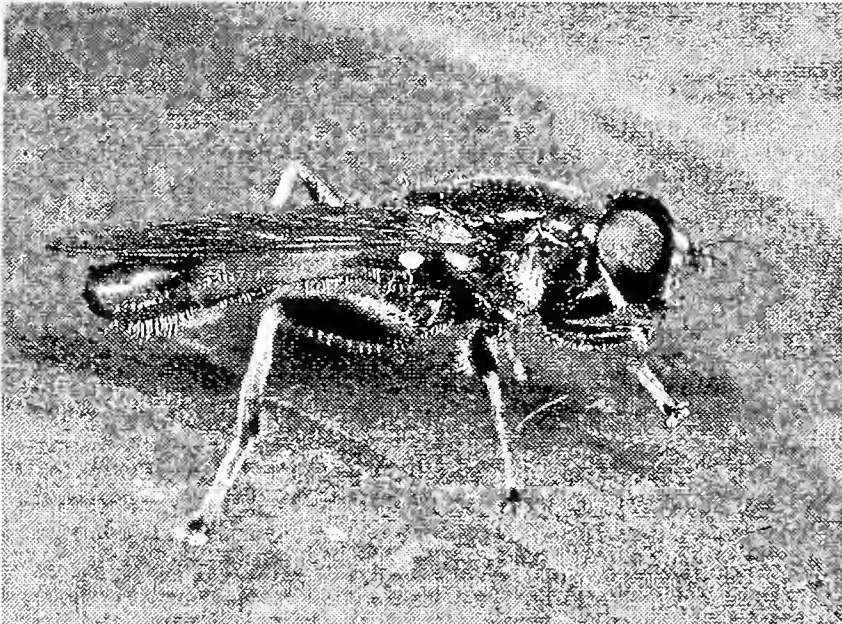
Hoverflies - Jillian Binding

The 1995 season was not the best for hoverflies due in some part to the extreme heat and drought conditions. Nonetheless over the year a number of interesting species were found at various sites in the county and these have helped fill in some of the gaps in Lincolnshire Diptera recording.

In early April I visited College Wood and whilst identifying the specimens in the winter I had two pleasant surprises in the form of *Cheilosia albipila* and *Melangyna lasiophthalma*. *Cheilosia albipila* is a pretty, early spring species, which is covered in long orange hairs. *Melangyna lasiophthalma* is another spring hoverfly. It looks very similar to a number of other species but microscope examination enabled me to confirm identification. Both of these are local species, generally abundant where they are found but being very early in the year they are frequently over-looked.

A visit to Gibraltar Point in August did not produce many species but I was amazed at the large numbers of *Helophilus trivittatus* flying over the saltmarsh. It is usually only seen as a single specimen but on this day I counted well over one hundred specimens. This species is very similar to the common sunfly, *Helophilus pendulus* but has a longer body and is more lemon yellow in colour.

A number of wetland sites were visited during the year and these have continued to produce some very good wetland hoverfly species. *Parhelophilus frutetorum* was an excellent record (Coll. Mr A Lazenby) for Lincolnshire, being the second known record and the only post 1960 record for the county. Its close relative *Parhelophilus versicolor* along with *Anasimyia lineata*, has also been found regularly in the better wetland areas in Lincolnshire. These species I feel are generally under recorded as they are being found at every wetland site visited and therefore they are probably more common than previously thought in Lincolnshire.



Xylota sylvarum

photo R S Key

Butterfly Conservation were able to arrange for us to have access to make several visits to Grimsthorpe Park during the summer months. June and July were quite successful although there was little variety, but by August the park was very dry and quite arid with little in the way of flowers to attract any insects. Several woodland species were found including *Xylota sylvarum* and *Sphegina clunipes* both of which like dappled sunlight in glades. These species tend to be quite common where they are found but otherwise local.

On the 8th July the Lincolnshire Naturalists' Union and the British Entomological and Natural History Society held a joint meeting at Southrey Wood. I was very grateful when Dave Bromwich pointed out a large, yellow-striped hoverfly sitting on some brambles at the edge of a ride. I managed to get a good look at the insect before it took off, flying at high speed deep into the depth of the wood. It was *Sericomyia silentis*, a scarce hoverfly in Lincolnshire. This is due to the larva which is only known to feed in boggy areas such as at the edge of streams or in a peat bog. Having just returned from Derbyshire where this species is very common, it came as rather a surprise to see this in the middle of a Lincolnshire wood!

At the LNU Morkery Wood meeting on July 22nd, after much persistence and the help of several other members I finally managed to net and identify *Xanthogramma pedissequum*. This species is rare in Lincolnshire as it tends to be seen south of a line from the Wash to the Severn. This hoverfly's larvae are thought to be associated with ants nests, although more research is required to confirm a direct association.

Overall the year produced some lovely records particularly in confirming the status of various species in Lincolnshire. The coast is one of the main areas, along with the Wash, where more visits would be welcomed as I have little knowledge of this area's Diptera population. I would like to thank all members and non-members who have helped me with records in the last year. Even the most common hoverfly, the marmalade fly - *Episyrphus balteatus*, has not been recorded for every 10km square in the county yet, although I am sure it can be found in all gardens in the summer. I can easily provide identification help to anybody who is keen to study this appealing family of Diptera. Specimens can be sent

to me and I will provide details of final identification to all members who submit them.

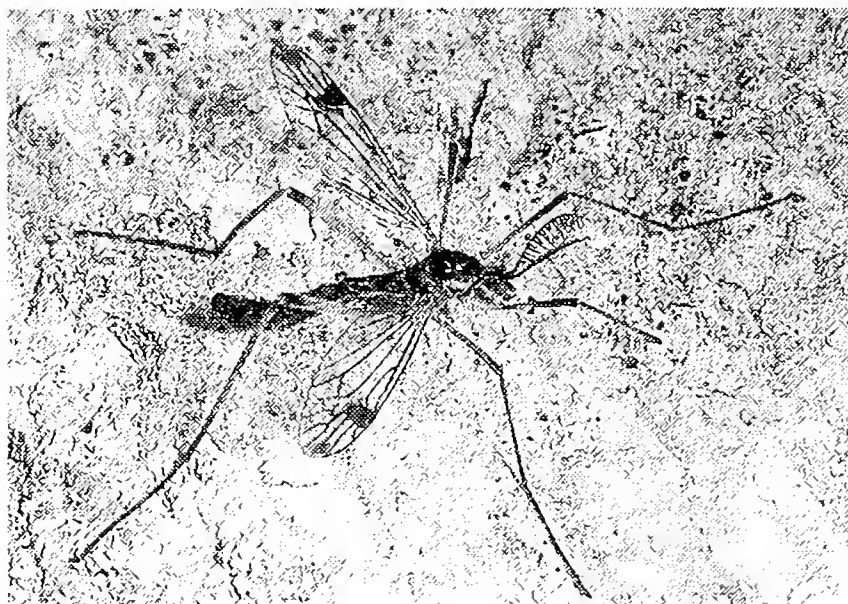
Other Flies - Andrew Godfrey

I was able to carry out fewer surveys in 1995 than in previous years, due mainly to pressure of work and domestic commitments. Several interesting new species were recorded, however, which are mentioned below. Sites visited included Tattershall Sand & Gravel Pits SSSI, Hagnaby Priory nr Spilsby, Grimsthorpe Park and the Redbourne-Spirdlington area.

I visited Tattershall Sand & Gravel Pits in June. A number of uncommon sand-loving species recorded previously were in evidence (the bee fly *Phthiria pulicaria*, the small fly *Trixoscelis obscurella*, etc) with the most interesting new species to the site being the scatopsid fly *Aspistes berolinensis*. Despite being small (2.5mm) and black, it is very distinctive because it has a curious humped thorax. It is described as "rare, associated with sandy places, in Britain apparently with coastal sand-dunes but continental records are from far inland" in Freeman & Lane (1985) and they list it from three counties. It has since been recorded from one inland site in Britain (a sand & gravel pit in Cambridgeshire) and I have seen it on machair dunes on Islay. The Tattershall records may therefore represent only the second inland and fifth British localities.

Dr Martin Drake of English Nature also carried out a survey of Tattershall Sand & Gravel Pits on 10th August. He recorded four Nationally Scarce and 55 local species. The notable species included the attractive black and yellow soldier fly *Oxycera morrisii* and the snail killing fly *Colobaea punctata* (I had previously recorded its relative *Colobaea distincta* which is also Nationally Scarce from this site).

Interesting records from Hagnaby Priory near Spilsby include the tiny dolichopodid *Achalcus melanotrichus* and muscid *Phaonia cincta* both from a rot-hole and the attractively marked woodlouse-parasite fly *Paykullia maculata* which entered an office there. The *Achalcus* record may represent the most northerly British record as all published records are from southern England.



Ctenophora bimaculata

photo R S Key

I visited Grimsthorpe Park on 10th June. The uncommon snipe fly *Ptiolina atra* was pooted off a fallen limb whilst I observed anthomyiid flies belonging to the genus *Eustalomyia* flying about a standing tree with nesting solitary wasps. *Eustalomyia* spp are infrequently recorded and are parasitic on solitary wasps. A number of uncommon and rare species were later reared from sappy wood taken from a hollow in a horse chestnut. These included the empid *Drapetis arcuata*, the dolichopodids *Systemus scholtzi* & *S. leucurus* and the muscid *Phaonia cincta*.

The large impressive crane fly *Ctenophora bimaculata* was also reared from pupae found in wood debris.

At Grimsthorpe Park Jillian Binding found two species of some interest. The first was the Conopid *Physocephala rufipes* (Plate 15). The larvae of this rather local species are parasitic on adult bees. Roger Key also found this species at Vernatt's Reserve, Spalding, in July. The second was the picture-winged fly *Oxyna flavipennis* the larvae which make root galls in Yarrow, *Achillea millefolium*. This fly seems to be very uncommon this far north with recent records occurring in Norfolk.

My thanks to Jill Binding for a computer printout of her records and those sent to her. I received very few records from anyone else and would ask that if anyone has any Diptera records, knows of the whereabouts of records or has any specimens they want identifying, to get in contact with either Jill (anything pretty or colourful) or myself (hairy black jobs).

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BEETLES

Roger Key

A combination of a period of unprecedented activity by coleopterists, possibly coupled with a long hot summer, has made 1995 one of the most productive years for beetles for half a century in Lincolnshire, with no less than 13 new species found and with more records of scarce species than it is possible to include here. Statuses used are defined in the paper on beetle conservation (page 1).

The Lincolnshire lime woods have turned up many species of significance this year. The most significant was the small bark beetle *Ernoporus caucasicus*, new to Lincolnshire, found by Tony Drane in young dead small-leaved lime at Hatton, Hardy Gang and Great West Woods on 27th October. This species is classed as RDB1 Endangered in the Red Data Book and included in the Biodiversity Action Plan (see Beetles in Lincolnshire - this issue page 1), With it was found *Ernoporus tiliae* another RDB1 species which has not been found here since 1865, when Charles Turner recorded it from "Fisherwick" (=Fiskerton?), in "bast" (small leaved lime) near Lincoln (Power, 1865, Fowler, 1891).

Another important new dead wood species for the limewoods is the false darkling beetle *Conopalpus testaceus* (NB). One specimen of the variety *vigorsi*, which is all black rather than the normal yellowish with dark marks, turned up at Rex Johnson's MV light at Southrey Wood on 8th July.

Annette Binding made a number of significant finds in the limewoods in 1995. On 9th April she found the metallic blue *Rhynchites interpunctatus* (NB) at College Wood, and again at Birch Wood on 14th July. This primitive weevil feeds on oak and is new to the county. She also found the similar *Rhynchites cavifrons* (NB) in Tunman Wood on 21st May. There is a single recent record from Hatton Wood, by Alan Stubbs in 1993 and 3 much older

records, all from woods in the Lincoln area. Other finds included the large weevil *Tropiphorus terricola* (NB) at Southrey Wood, only the third county record, and the black spotted orange leaf beetle *Phytodecta decempunctata* (NB) on aspen at College Wood. This is the first record of this attractive species for 55 years and there are only 3 previous records. She also found *Trox scaber*, a dumpy brown species usually associated with old bones and animal skins, at light at College Wood on 19th July. It is only the third Lincs record and the first since 1909. Another find at light was the red and black ground beetle *Trechus discus* (NB), at College Wood on 19th July. This species is usually found beside water and is partly subterranean, often living in vole nests. Earlier records are from Forty Foot Drain, by John Bratton in 1989 and I found it on Alkborough Flats in 1979.

An extraordinary community of scarce and local heathland beetle species was found by Amanda Borrows while pitfall-trapping for spiders at Kirkby Moor between May and July. This included three species not seen before in the county, the local ground beetle *Amara equestris*, here now found at its northernmost site in Britain, the scavenger beetle *Paralister purpurescens* and the small shiny black armadillo beetle *Agathidium convexum*. A further ten species that were found are known from less than five records in Lincolnshire, the most significant being the darkling beetle, *Crypticus quisquilius* (NB). This dune species is very rare inland other than in Breckland as is the tiny *Orthocerus clavicornis* - an extraordinary looking species which has enormous tufts of hair on the antennae. This species was also found at Kirkby Moor and has only been found before at Risby Warren.

Another scarce heathland species was found by Robin Hunt on the Atkinson's Warren meeting at Scunthorpe on 25th June. The handsome metallic green and red leaf beetle *Chrysolina marginata* (NA) has only otherwise been found at Cleethorpes at the turn of the century. It feeds on yarrow in sandy places and has declined dramatically this century over most of Britain. Several people turned up the brown ground beetle *Amara fulva* (NB). The only other recent record is by Gordon Askew at Messingham Sand Quarry in 1986. Other county records are from Biscathorpe, the Trent banks and Cleethorpes, all more than fifty years ago.

Significant finds on the coast in 1995 have been the attractive black and red ground *Panagaeus bipustulatus* (NB) and very large thistle weevil *Cleonus piger* (NB), both found at Donna Nook by Amanda Borrows while pitfall trapping in the summer. Apart from a record by Peter Kirby from Cleethorpes in 1988, all other records of the conspicuous *P bipustulatus* are from Saltfleetby/Theddlethorpe, where it hasn't been seen for 50 years.

There have been a number of finds of scarce wetland species in 1995. On 8th April John Bratton found the water beetle *Dryops similaris*, new to the county, in borrow pits adjacent to the River Glen near Thurlby Fen. This species is typical of temporary pools in fen country. All *Dryops* species are very difficult to identify, needing dissection of the male genitalia. He also found another new species for the county, the small beetle *Cyphon phragmiteticola*, also a difficult species requiring dissection, at Holbeach Community Centre pond on 16th July. John also found the large Red data Book water beetle *Hydaticus transversalis* at Baston Fen on 29th July. This appeared to be the first record since Frank Balfour-Browne found it in a drain near Saltfleetby in 1938. A couple of weeks after John's discovery, Dr Dave Bilton wrote saying that he had found it at Thurlby Fen on 22nd July, 7 days earlier! This is a very rare species, otherwise now known only from the Norfolk Broads, Somerset and Gwent Levels and on the Scilly Islands.

Mr A Harris found the small black, red and ochre coloured weevil *Gymnetron villosulum* (NB) which feeds on brooklime and other aquatic species of *Veronica*, at Whisby Pits on 26th August, the only other recent record being in Cross Drain, near Market Deeping, in 1993 by John Bratton. There are three other scattered records from early this century.

While searching unsuccessfully for additional locations around Crowland for the rare beetle *Stenolophus skrimshiranus*, which I found in my garden last year, I came across two specimens of the attractive red and black ground beetle *Badister unipustulatus* (NB) (Plate 4) by a ditch on Crowland Alderlands. This scarce fenland species has only been seen thrice before in the county, near Boston in 1858 and 1860 and by myself by a similar ditch at Taumberland in 1989. Unfortunately the Crowland Alderlands are now being built on and the ditch has been put into a concrete pipe.

This has also been a good year for finds of dead-wood species. In July, Andy Godfrey found pale brown, soft-bodied beetle *Prionocyphon serricorne* (NB) in its typical habitat, a water-filled tree rot hole, in horse chestnut at Hagnaby. It is new to the county. Rex Johnson found the longhorn *Arhopalus rusticus* at light at Laughton Forest on 28th July, and again at Hendale Wood on 1st August. This species feeds on dead conifer timber and seems to be spreading in Britain. This is the first time it has been found in Lincolnshire.

At Grimsthorpe Park on 28th May and again on the 17th June Annette Binding found the fungus weevil *Platystomus albinus* (NB), a species hitherto only found at Skellingthorpe Wood in the 1947 and 1951. This beetle is well camouflaged as a bird dropping and the male has much longer antennae than the female. Alan Lazenby found the brightly patterned wood-boring beetle *Ptinomorphus imperialis* (NB) on ivy on an old oak at Carr Dyke, Blankney on 18th April. Apart from a single record at Grimsthorpe Park in 1964, the other seven county records are earlier than 1910.

Grassland species included Annette Binding's find at Scottlethorpe Quarry on 23 July of the small hairy flea beetle *Epitrix atropae* which feeds only on deadly nightshade. It has not been found in the county before. She also found the weevil *Omiamima mollina* (NA) at Elsea Pit, Grimsthorpe on 25th May. This spiky, hedgehog-like weevil lives at plant roots in dry grassland and the only other recent record is also from Grimsthorpe, in 1983 (Drane, 1985). The other three county records are all from before 1911. On 8th June Andy Godfrey found the tiny black scavenger beetle *Kissister minimus* at Rauceby Warren. This species is usually found at grass and sorrel roots in dry places. The only other county record is from Humberston in 1909 by W Wallace. A spectacular beetle sighting was of at least 500 specimens of the midsummer chafer *Amphimallon solstitialis* at Broughton on 6th July by Andrew Credland. This species is noted for occasional spectacular population explosions in dry grassland, these having been recorded in 1901, 1937, 1944 and in the early 1950s.

Miscellaneous other records of note in 1995 include *Mezium affine*, a spider beetle that is most often found indoors, feeding on seeds and sometimes animal skin. Annette Binding found the first Lincolnshire specimen of this species in a hotel in Washingborough on 7th May. It is a species with an extraordinary appearance, with greatly inflated elytra which are very shiny transparent brown. Dr Martin Drake found the reddish weevil *Curculio rubidus* (NB), new to the county, at the old gravel pits at Tattershall on 26th July. This species has a very long rostrum and feeds on birch catkins. Remains of a specimen of the large predatory black rove beetle *Platydracus latebricola* (NB) was found by Annette Binding at Whisby Pits in July. The only other record is from Gibraltar Point in 1952.

A few significant records from 1993 and 1994 came in too late to be included in earlier reports, or have taken some time for the identification to be confirmed by experts.

On 19th June 1993 Alan Lazenby found a tiny black jewel beetle at Rauceby Warren and identified it as *Trachys minuta*, a very rare species that feeds on tree foliage but which occurs at a number of sites in the Lincolnshire Lime-woods and is one of our "specialities". The Rauceby specimen subsequently turned out to be *Trachys scrobiculatus*, (NA), a species which feeds on ground ivy and which is new to the county. Two other new species found by Alan in 1993 are *Elodes koelleri*, a soft bodied, pale brown marsh beetle, found at Keal Carr on 24th July, and the tiny grey brown scavenger beetle *Liocytusa minuta* (NB), found at Rauceby Warren on 19th June.

Andrew Godfrey found the small black, weevil-like beetle, *Salpingus reyi* at Black Dyke near Waddingham on 21st December 1994. This is the first confirmed record for this species which is thought to be associated with partially burnt wood.

Although found at Guy's Head on 14th May 1994, we only managed to get identification of the flea beetle *Longitarsus parvulus* (NA) confirmed in 1995 and it turned up in my own garden in Crowland on 9th October 1995. It had only once been found in the county, at Sleaford in 1950 by A Roebuck. It feeds on flax and may possibly be increasing with the planting of linseed throughout the county. Alan also found the black rove beetle *Philonthus longicornis*, only once before found in Lincolnshire, at Cleethorpes in 1909, and the tiny ground beetle *Tachys scutellaris* (NA) at Guy's Head on 14th May 1994 of which there is a single, somewhat doubtful, record from Biscathorpe Gravel Pits in 1949.

Finally, a weevil found in 1994 has taken some time to identify. On 14th May Alan Lazenby found an unusual spider-weevil at Gedney Drove End. He identified this as *Barypithes pyrenaeus*, a rare species confined to south west England and sent it to me for confirmation. It circulated among a number of British weevil experts and was eventually tracked down to the variety *pseudopyrenaeus* of the common spider weevil *Barypithes araneiformis*, characterised by being similar to *B pyrenaeus*, thus making the original misidentification very understandable.

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SPIDERS

Roy Kent

There has been little activity on my part during 1995, but thanks to Annette Binding, Amanda Borrows and Rex Johnson, approximately 100 records were collected. Most were of spiders common in the county, but Annette recorded a number of the harvestman spider *Pholcus phalangioides* from Washingborough. Although not a county first, this was the furthest north in Lincolnshire that this spider has been found. Amanda's possible sighting of a very rare spider, reported last year, could not be confirmed, but she did manage a county first with a record of *Theridion blackwallii* from Kirkby Moor. I was pleased to record a spider from the county red data book (Smith, 1988) *Steatoda phalerata*, (previously *Aragonea phalerata*), from the same area.

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MOLLUSCS

John Redshaw

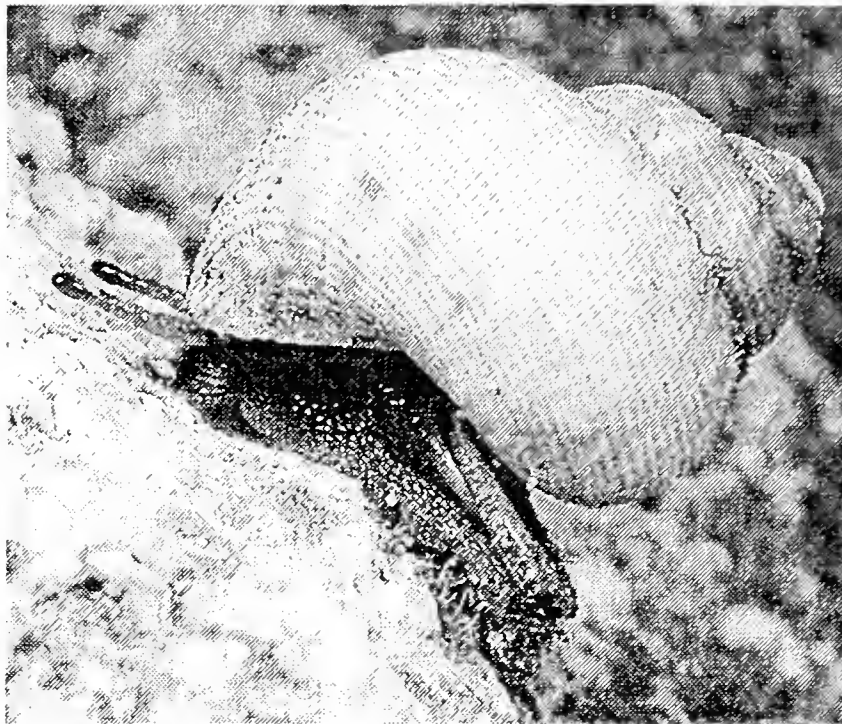
During 1995 the resurvey of non-marine molluscs continued at Baston Fen nature reserve and about 75% of the species on the reserve list for the period 1967 - 1990 have been recorded in the last three years. The valve snail *Valvata macrostoma*, a small aquatic species with a flattened shell typical of calcareous marshland and ditches, was searched for in all previously known locations but without success. This Vulnerable (Red Data Book category 2)(Bratton, 1991) species has not been recorded from the reserve since 1985.

The status of some of the larger aquatic species seems to be improving in the dykes and fine specimens of the ramshorn *Planorbis corneum* and great pond snail *Lymnaea stagnalis* were found. Unfortunately the diversity of the small pea mussels in the Counter Drain has declined since the mid 1970s, when the molluscan fauna was quite rich.

I am grateful to Lionel Grooby for bringing to my attention a record of *Hydrobia neglecta*, a brackish water species of spire snail. Apparently this species was located at Killingholme Pits in 1986 and again in 1990. It is similar to the more common *Hydrobia ventrosa* and can only be separated by the pigmentation of the head. The only other record for the county is from Wyberton Marsh where it was recorded in 1973.

Another species of note that was recorded during 1995 was of another brackish water snail *Assiminea grayana*, a specimen being found in a drain near the River Welland at Fosdyke Bridge by Richard Chadd of the National Rivers Authority. This find fills a gap in the series of coastal 10km squares adjacent to the Wash.

The Union's field meeting at Haugham Wood on 15th October presented an opportunity to search for *Pomatias elegans*, our only British land snail with an operculum. This species was known to Dr Martin Lister in 1678 from an area known as Grisel Bottom on the west side of Burwell and Haugham Woods. Early twentieth century records place Grisel Bottom in Burwell parish but more recent maps show it in Haugham. From the records it is known that this site had an area of friable chalky soil, which is the specific habitat for the species. Although some twenty species of mollusc were found, the target species was not located, either as living or old shells.



Pomatias elegans - there are Lincolnshire records back to 1678 photo R S Key

Possibly one of the more interesting finds was that all specimens of the black slug *Arion ater* were of the dark chocolate brown form, no black specimens being seen.

BRATTON, J.H. (1991) British Red Data Books: 3. Invertebrates other than insects. Joint Nature Conservation Committee. Peterborough.

MAMMALS, REPTILES & AMPHIBIANS

Norah Goom

While the number of members submitting records for 1995 was slightly lower than in the previous year, with the use of recording sheets we have obtained much useful and more detailed information. It is hoped that the sheets will make it easier for everyone to record as they go through the year, so that we have even more for 1996.

Hedgehog is still a common and frequently reported species from late April onwards. Actual breeding records are scarce but one cemetery superintendent helpfully keeps a pile of clippings for hedgehogs to overwinter. The bodies of common shrew, being presumably unpalatable to cats, are often discarded by them and are easily recognisable. Very small shrews do present a problem, as it is necessary to investigate the teeth, and one dead specimen presented for identification, turned out to have no teeth in its mouth at all. The larger Water shrew is easier to identify but no records were received for 1995. Mole is widespread but unpopular in gardens and evidence of dead bodies suggests that they were particularly vulnerable during the dry summer of 1995,

Of the 6 species of bat recorded, predictably pipstrelle was the most frequent, but Brandt's and Daubenton's were also found. Of 2 barbastelle reported from the Lincoln area one was found dead, the other moribund - a sad end for only the 2nd record for the county.

Batwatchers were particularly active in South Holland, recording a number of roosts. A group of young bats emerging from the airing cupboard at a nursing home caused some consternation. They were placed on a wall so they could return to their nursery in the loft.

Some members have expressed surprise at being asked to record even the common rabbit. It is, however, always necessary to establish base-lines for the populations of all species in order to be able to monitor gains or losses, and the county is not yet fully covered. The hare has had better coverage owing to its engaging habit of sparring in the open during daylight hours. The maximum recorded in one field in 1995 was 19. Unfortunately both hares and rabbits are frequent road casualties.

Water vole has been reported only twice during the year, but from widely separated localities, and Short-tailed field vole is also under-recorded. One was reported nesting in the hay in a stable (a perilous situation to choose?). Some may get trapped and identified as mice, in urban areas always at risk of lethal traps or of being "recorded by cats" as they do occur in gardens. Any house mouse caught needs careful examination for the larger amount of yellow on the chest (extending to form a collar between the forelegs) in case the specimen is the rarer yellow-necked mouse which was not reported in 1995. Harvest mouse was reported only twice, and the arrival of the dormouse is still awaited - any corpse from hazel, beech or sweet chestnut wood should be rescued, as the teeth are diagnostic.

Grey squirrel appeared to be either more numerous or bolder. Brown rats are surprisingly rarely seen, but a rare black rat was said to have been seen on Boston Docks in April.

A species which appears to be more frequently seen is the fox, especially in built-up areas. It is sad that badgers are more often reported as road casualties, but there were at least 5 live sightings during the year. LNU is treating the locations as confidential. Two dead cubs were reported by a game keeper as "too young to be above ground naturally" in an area where the hunt had complained of foxes bolting down the sett. Stoat and weasel numbers appear to have kept up as more members are able to separate the species on sight.

Fallow deer were commonly reported in the south of the county. If red deer records originally were ascribed to escapes from parkland herds, it will now be necessary to consider complications arising from hybrid stock in the various deer farms now existing in the county. Records of the shy roe deer are minimal but muntjac have been reported several times, including once with young.

Reptiles and Amphibians. There are records of adder, grass snake, common lizard and slow worm in twos and threes. Toad records outnumber those for frogs but a very interesting note from Maurice Johnson speaks of "two frogs seen swimming around actively beneath the ice in the goldfish pond in Reepham on 11th December AFTER severe frost iced over garden ponds 1 inch thick." ! By contrast, earlier in the year amphibians had to cope with drought. The Fire Brigade came to the rescue at the request of Forest Enterprise, pumping bowsers of water into a pond reduced to a puddle. This rescued developing great crested newts still relying on their gills in the rapidly deoxygenating water.

My thanks to all who have sent in records: The Binding family, K. Bradshaw, B.J.Cunnington, J. Fleming, A. Godfrey, Z. Harris, K. Heath, M. Johnson, R. Johnson, F. Lammiman, A.S.Lazenby, J.Ostler, J.Redshaw, K.D.Robertson, K. Rowland & M. Tyszka. I look forward to receiving many more in 1996.

TRANSACTIONS OF THE LINCOLNSHIRE NATURAL UNION

OFFICERS OF THE UNION IN 1995

President	Dr Roger S Key, BSc, PhD, FRES
President Elect	Mr David R Bromwich
Hon General Secretary	Ms Sara Bright Hartsholme Country Park, Skellingthorpe Road, Lincoln.
Hon Treasurer	Mrs Annette Binding
Hon Membership Secretary	Mr Allan Binding 6 Willow Court, Washingborough Lincoln, LN4 1AS
Hon Publicity Secretary	Mr Roger Goy
Hon Sales secretary	Mrs Annette Binding (address above)
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Hon Records Secretary	Mr Rex Johnson DipEd, MEd, FRES
Rep Lincs Community Council	Mr Ken Rowland
Rep National Rivers Authority, LCC Countryside Panel & Swanholme Lakes Advisory Group	Mrs Jane Ostler BEd, MIBiol, ChBiol
Section Officers	
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	Secretary Mr David Robinson MSc
Botany	President Dr Grace Waterhouse
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Cryptogamic	Mycology Mr Jack Houghton
	Bryology/Lichenology Prof. Mark Seaward MSc, PhD, DSc, FIBiol
Zoology	President Mr Maurice Johnson
	Birds Mr Jim Rance
	Mammals Miss Norah Goom
	Molluscs Mrs Vi Wilkin (N), Mr John Redshaw (S)
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	Odonata Mr John Redshaw
	Lepidoptera Moths Mr Rex Johnson DipEd, MEd, FRES
	Butterflies Mr Allan Binding
	Coleoptera Dr Roger Key BSc, PhD, FRES
	Diptera Mr Andrew Godfrey BSc, MSc, FRES
	Miss Jillian Binding
	Optics Mr Ken Rowland
Transactions	Editor Mrs Jane Ostler
	Design/Coordinator Dr Roger Key
Hon Auditor	Mr John Levine

SECRETARY'S REPORT FOR 1995

Sara Bright

During the past year the Executive Committee met five times. The issues under discussion have been very wide-ranging. Some of the agenda items included biological recording, promotion of membership of the LNU, our future prospects and legacies. Reports were presented to the Executive Committee by Roger Key, Phil Porter and Annette Binding, outlining the various challenges which currently face the Union. The points and ideas within the reports certainly generated interesting discussion and, I am sure, will continue to do so. The Committee is always pleased to receive ideas from members concerning the way the Union is being run. We are here to serve you!

In order to deal effectively with new ideas and issues arising in the future, two sub-committees have been set up: Publications and Promotion & Publicity. These will report back to the Executive Committee, which will probably now meet only four times a year. Ken Rowland and Norah Goom completed their term of office on the Committee in March 1996; thanks are due to both for their contribution and hard work given to the Union.

Sadly, Mr Jack Houghton and his wife Margaret died during the winter. They were members for many years and, as our long-standing Mycology Section Officer, Jack was extremely dedicated and well respected. They will be greatly missed.

Please do not hesitate to write to me if you have any ideas for the Executive Committee to consider.

FIELD MEETINGS in 1995

Phil Porter

Metheringham Delph

TF1364. Sat 22nd April.

A creditable 15 people turned up for this meeting in appalling weather, although the rain and cold had accounted for all but 9 when the meeting was abandoned after an hour and a half. Aquatic finds included a number of interesting water beetles, damselfly and mayfly nymphs, and the ladybird *Coccidula rufa* was discovered on land. Many spiders of two species were discovered in the reedbed, the large brown *Clubiona*



Lincolnshire Naturalists brave the elements at Metheringham Delph

photo R S Key

phragmitis and the small linyphiid *Hypomma bituberculatum*. 19 bird species were noted including great crested grebe. The delph banks were liberally sprinkled with mole hills and a water vole run was discovered.

Tunman Wood SK8963. led by Alan Binding. Sun 21st May.

This field meeting took place by kind permission of Redland Aggregates. Having parked in the stockyard, the participants were greeted by woodland birdsong as the party progressed through Stocking Wood and Tunman Wood. The figwort weevil *Cionus scrophulariae* was abundant on its foodplant, the scarce metallic blue weevil *Rhynchites cavifrons* was found among grasses and a specimen of the fine cardinal beetle *Pyrochroa serraticornis* was seen along with the forest bug and birch shield bug, as well as ten species of hoverfly, including *Platycheirus tarsalis*. 20 species of fungi were logged including the St. George's mushroom and *Bertia moriformis*.

Swanholme Lakes SK9468 led by Graeme Clayton Wed 31st May.

The hot weather of 1995 was established when this meeting took place and the light soils were very dry with many annuals already scorched. John Hollis of the Hartsholme ranger team explained the control and management of pine and rhododendron on the acid heath areas and the problems caused by the New Zealand water stonecrop *Crassula helmsii*, which has spread through introductions from garden ponds to the extent that it now dominates some shorelines and water margins to the exclusion of other plants. Even greater reedmace has retreated before it! The small acid pools protected from the general public produced grass snake and red-eyed damselfly, while the margins of the larger lakes held pillwort and shoreweed. The dry soils had heath groundsel and two species of hair grass, *Aira sp.*.

Skippingdales & Atkinson's Warren SE8712. led by Roger Key Sunday 25th June.

This relict blown sand and ruderal habitat sizzled during the hot dry summer weather as only heathland can. 22 people attended including 8 from the Yorkshire Naturalists' Union, despite a certain amount of difficulty experienced by some in finding the location. The list of flora totalled 140, including lady's bedstraw, field mouse-ear, vipers bugloss, ploughman's spikenard and hybrid red x white campion. The slag heaps held eastern rocket and tall rocket. Ivy-leafed Water Crowfoot was a notable aquatic find. Small heath butterflies were especially prominent. Despite the difficult conditions, 27 species of fungi, mostly smuts and rusts, were found., for example *Puccinia brachypodii* var *arrhenatheri* on false oat-grass. The larvae of the green oak tortrix *Tortrix viridana* were incredibly abundant and the best beetle of the day was the leaf-beetle *Chrysolina marginata* which feeds on toadflax. The day was enlivened by an invasion from as many as 200 cross-country runners! Warblers and green woodpeckers were notably numerous.

Southrey Wood TF1368. Sat 8th July led by Rex Johnson.

This was a joint meeting with the British Entomological and Natural History Society and with Butterfly Conservation. The afternoon meeting was followed by moth trapping, when a range of Lincolnshire lime woods were sampled, including Ivy Wood, Great West Wood and Chambers Wood in an operation coordinated by Dr Paul Waring. The white admiral was seen in good numbers and hornets *Vespa crabro* also turned up to the alarm of some. The large hoverfly *Sericomya silentis* was a notable find. Butterfly Conservation have been responsible for some excellent blocks of coppice with a varied flora in Southrey Wood, and slender St. John's-wort was found. During the evening a bat detector was used with some success and 2 species were separated. The moth trapping turned up several species

dependent on lime but the most unexpected was the pauper pug which was a new county record and turned up in several traps. Many microlepidoptera were taken and a range of beetles also came to light.

Little Warren Verges and Morkery Wood TF0114 & SK9519. 22nd July. Led by Jane Ostler.

Fifteen people attended the morning session at Little Warren Verges where a good range of common butterflies and day-flying moths were seen including wall, comma, silver Y, dusky sallow and yellow shell. There were very many ladybirds most of which were newly emerged and yellowish. A potato weevil *Psylliodes affinis* was found on deadly nightshade, one of the notable plants of these verges. tall broomrape, gromwell and basil thyme were also noted, and a common lizard was discovered under a sheet of discarded polythene. Both oak and speckled bush crickets were observed.

Later at Morkery Wood (Plate 16), the party swelled to about 30 and was joined by Linda Worrall and Alan Blake of Rutland Natural History Society, who introduced something of the history of the wood which had evidently been harshly treated in the past. The small quarry near the entrance yielded wood vetch, nettle leafed bellflower, both species of centaury and a spotted form of hawkweed. Brimstone and painted lady were added to the butterfly list for the day. Within the woodland rides, the sites for violet helleborine, yellow star of Bethlehem, herb paris and toothwort were visited. The rides were quite damp and meadowsweet was abundant. There were many signs of the presence of foxes and two badger sets while muntjac deer appeared on a couple of occasions. 15 species of plant galls, mostly from oak were identified and the rusts and fungi included dryad's saddle. The longhorn beetle *Saperda populnea* was a feature of the beetle fauna. Huge numbers of colonial spiderlings swarmed in the rides. A feature of the hoverflies was the large number of *Xylota segnis* and *Xylota sylvarum* to be found.

Crowle Moors SE7514. Sat 16th September - led by Ken Green, the LTNC Warden.

One of the most striking features of this LTNC reserve is the vast quantity of greater yellow rattle growing on one of the old railway ballast banks crossing the peat diggings. The plant only occurs in very small numbers at a few other sites in Britain. With a reduction in water table, the peatlands have been invaded by birch and the Trust uses its flock of Hebridean sheep to browse the regrowth after clear felling. After three years the stumps are killed by this and heather returns to the moors. The history of the diggings was explained by Mr Green and he also pointed out the remnant patches of bog rosemary and cranberry which survive with a better chance of spreading now that the management has been effective. We searched in vain for sundew however. The bog bush cricket made a brief appearance but evaded capture. Luckily this is a distinctive species. The coleopterists leapt on the body of a mole which was pulsing with the activity of carrion beetles inside, while a marsh harrier met with more general appreciation. A southern hawkler was seen to catch a common darter in flight and settle to consume it, revealing that the predator had only three wings!

Haugham & Burwell Woods TF3682 Sun 15th October - led by Ken Rowland

Owing to the illness of Jack Houghton, Ken Rowland kindly stepped in to lead this meeting. The fungus foray was extremely successful with 150 species identified including *Pluteus depauperatus*. The cramp-ball weevil *Platyrhinus resinosus* turned up among several species, but only one butterfly, a red admiral, was seen. There was also a sighting of the little woodland harvestman *Nemastoma bimaculatum*. Snail records go back to the 17th Century and 2 species of door snails were recorded on this occasion. 98 species of plants

were identified including yellow pimpernel, woodruff, sanicle, crosswort, hairy St. John's wort and giant bellflower. The present owners' regime for wildlife and wood production has encouraged goshawk, buzzard and hobby in the last five years.

INDOOR MEETINGS

21st Jan Sat	Miscellany	Shield Bugs Pollen Micro-moths	Allan Binding Ken Rowland Rex Johnson
19th Feb Sat	Annual Recorders' Meeting		
18th March Sat	Washingborough, Natural History of a Parish - AGM and Presidential Address		Mr Allan Binding
21st Oct Sat	Conserving Wildlife in Urban Relict Countryside		Ian Rotherham
25th Nov Sat	Moth Migration into Britain		David Brown
16th Dec Sat	Christmas Miscellany	Wildlife of Swanholme Lakes Otters House Martins slides & quiz	Graeme Clayton Mark Crick Phil Porter Jim Rance



† OBITUARY - JACK AND MARGARET HOUGHTON

by Ken Rowland.

It is with much regret that I have to record the deaths of Jack and Margaret Houghton. Margaret died on the 20th November after a long debilitating illness and Jack died on the 21st of December after a short illness and operation plus the added effect of losing his lifetime partner.

They were both great friends of my wife Barbara and myself, we had visited them only three days before Margaret died to see them before Jack went into hospital for an operation.



They were very long standing members of the Lincolnshire Naturalists' Union having joined in 1955. Both were very active persons in their lifetime Jack after leaving the Police force to join the Weights and Measures Dept until his retirement, while Margaret continued with her career as a School Laboratory Technician until her retirement. In spite of all this activity Jack found time to become the Mycological Recorder for Lincolnshire in 1965 a position to which he gave his full attention having somewhere in the region of 37500 Lincs fungi records, on index cards and latterly on his computer, a daunting and laborious task, but one that he did with great diligence. His interest in Mycology started in the early to mid fifties, alongside his interest in Photography. He was an excellent photographer witnessed by his slides seen on many occasions.

His presidential year was 1970 and his address *A Beginners' Guide to Myxomycetes* was produced as a separate publication and is now a standard reference used by members.

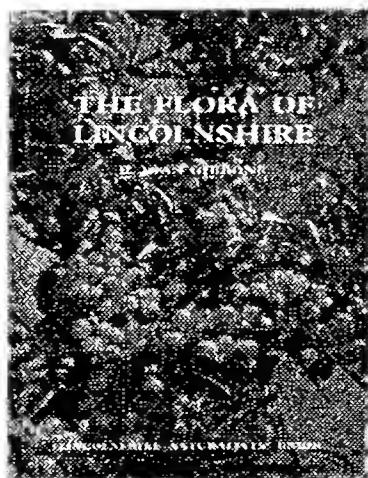
He was also a long standing member of the "British Mycological Society" (to which he introduced me in 1973), participating in most of their Annual Forays up to a year or two ago. His interest in the Myxomycetes (slime moulds) very often left him turning over bits of old wood when other people were looking for larger things.

Over the years he was only too willing to attempt to impart some of his vast knowledge to anyone interested, and for this point I myself have been very grateful.

I am sure that his daughter and two sons would like us to carry on with his work to the best of our ability into the future so that we can gain a better knowledge and insight into the "Fungus Flora of Lincolnshire".

Publications on the Natural History of Lincolnshire

by the Lincolnshire Naturalists' Union



The Flora of Lincolnshire

by E J Gibbons

£12.00

Separate chapters cover the geology and landforms, weather and climate, major habitats of Lincolnshire and the history of botanical recording and botanists in the county. The bulk of the book is given over to accounts of the distribution of the species. There are separate sections on aliens and subfossil records from peat.

351 pages, 11 maps & figures. 15 b&w plates. Perfect bound soft-back with full colour covers.

1975

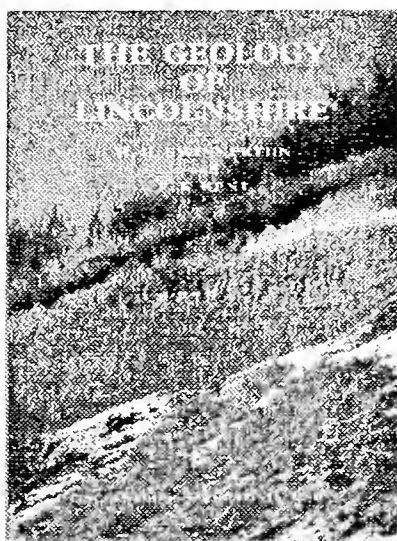
Supplement to The Flora of Lincolnshire

by E J Gibbons & I Weston

£3.00

Supplement to the above with additional information on 14th and 15th century botanical recording in Lincolnshire. Supplementary information extending our knowledge of the county flora gathered between 1978 and 1984.

75 pages. 1 map. Perfect bound in soft, full colour covers.
1985



The Geology of Lincolnshire

by H H Swinnerton & P E Kent

£5.90

The geology of the county, including landforms, solid and drift geology, typical fossils, glacial and post-glacial history. Separate chapters on Lincolnshire geologists, geological conservation and economic geology. Most of the book is made up of a description of the distribution, stratigraphy and palaeontology of the different geological periods represented in the county's rocks.

130 pages, 21 line figures, 15 b&w plates. Perfect bound soft-back with colour covers.
2nd Edition 1981

Lincolnshire Soils

by A Straw

£1.00

Guide to the classification of soil types in the county, their origin and distribution and factors affecting them, together with man's influence on recent changes in soil characteristics. Essential background to any study of the county's natural history.

12 pages, stapled, monochrome cover. Soil Map.

1969

LINCOLNSHIRE
SOILS



A STRAW
ET AL.

Lincolnshire Naturalists' Union
The
Lincolnshire Naturalists' Union

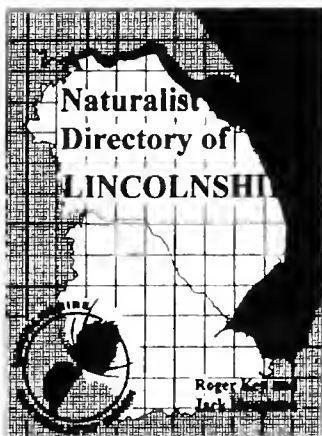
The Butterflies and Larger Moths of Lincolnshire and South Humberside

by J Duddington & R Johnson

£7.90

Definitive guide to the county's larger Lepidoptera, with sections on Lincolnshire geology, flora, habitats and conservation. Species accounts with records of 969 species, covering the butterflies and all "macro" moths. Includes 1983 addenda.

299 pages. 17 pages of drawings & maps. Perfect bound soft-back with full colour cover. 1983



A Naturalist's Directory of Lincolnshire

by R S Key & H J Houghton

£5.90

A comprehensive listing of 7449 place names, including 1km grid reference, Vice County and Ordnance Survey Landranger sheet number. An introductory section covers historic divisions of the county and map coverage of the county. A must for biological recording in the county.

158 pages. 3 maps. Comb bound with laminated cover. 2nd Edition

1994

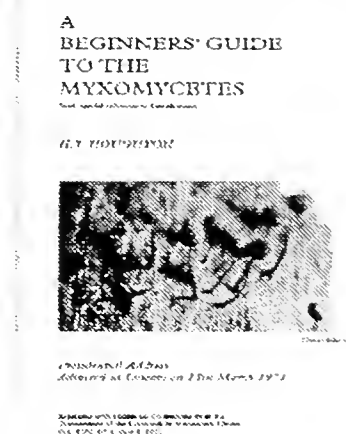
Beginner's Guide to the Myxomycetes (with special reference to Lincolnshire)

by H J Houghton

£2.00

Myxomycetes (slime moulds) are a fascinating but little studied group closely allied to the fungi. This guide covers the life-cycle & habitats of slime-moulds and has a section on collecting and recording. There is a checklist and history of recording of the county's species and black & white photographs and descriptions of 25 of them. 20 Pages. 2 pages of line drawings and 25 photos.

1971



A BRYOPHYTE CHECK-LIST FOR LINCOLNSHIRE



M. R. D. SEAWARD

A Bryophyte Check-list for Lincolnshire

£2

Lichen Flora of Lincolnshire

£1.50

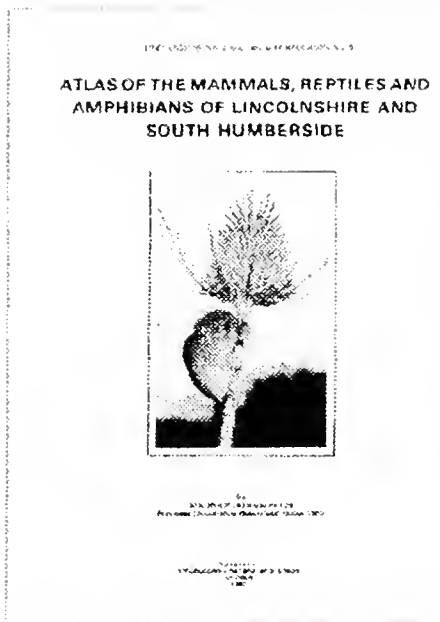
by M R D Seaward

Comprehensive checklists with divisional records of all species of bryophyte and lichen, with bibliography.

Bryophytes 16 pages 1983

Lichens 18 pages 1971

Both stapled with monochrome covers



Atlas of the Mammals, Reptiles and Amphibians of Lincolnshire & South Humberside

by M Johnson

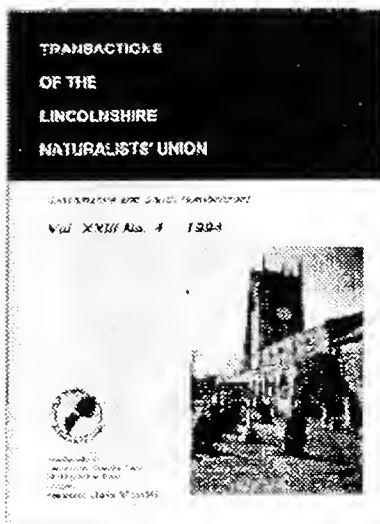
£1.00

Photographically illustrated atlas of the 53 species of mammal, reptile and amphibian known from the county, with species accounts and tetrad or ten km square maps for most species. Separate section on recording techniques.

47 pages. 38 half-tone photos, 28 maps. Stapled. Colour cover 1982

Other Publications

Where to look for butterflies and moths in Lincolnshire	£0.60
Where to look for mammals in Lincolnshire	£0.60
Making a butterfly garden	£0.60
50 Common Plants	£0.60



Transactions of the Lincolnshire Naturalists' Union

Forerunner of The "Lincolnshire Naturalist", "Transactions" is the annual journal of the Lincolnshire Naturalists' Union. Each issue holds recorders' reports for most groups of wildlife, as well as articles on the natural history of the county. Back numbers from most years are available.

1905-1975	-	£1
1976-1987	-	£2
1988-1991	-	£3
1992-1994	-	£3.50
1995	-	£4

Centenary Edition 1993

£4

A special edition was produced in 1993 to mark the LNU's centenary. It includes an account of natural history of the county in 1893, a record of county natural history collections, a listing of 100 years of Lincolnshire Naturalists' Union presidents and field meetings, a centenary year membership list and accounts of butterfly, moth, beetle, lichen and bryophyte recording in the county.

New Publication on Moths Out Very Soon



The Butterflies & Moths and Lincolnshire Part 2. The Micro-Moths and Review to 1995

by R Johnson

£ Available Soon

Second part of the Butterflies and Moths of Lincolnshire, covering all species of micro-moths as well as updating information on the macro-moths and butterflies. Introductory text and tabulation of all species with vice-county distribution, national status and records.

Approximately 100 pages. Comb-bound with laminated cover. Projected autumn 1996

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Total

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Naturalists' Union. Do not send cash.



"The Lincolnshire Naturalist"



The new-look Transactions

This is the first issue of Transactions to be called "The Lincolnshire Naturalist" and corresponds with a change in the form and style of the journal. It still retains the subtitle "Transactions of the Lincolnshire Naturalists' Union", which remains its official journal title.

These changes are designed to give the journal a wider appeal and to attract more people to take an interest in Lincolnshire's natural history and the Lincolnshire Naturalists' Union. For the first time, we hope to have our journal on sale separately. One very obvious change to the journal has been the use of full colour for the first time. New technology has at last brought this within our reach and this issue has actually cost less to produce than some previous monochrome ones.

We have also changed what has become the traditional order of presentation of the journal, putting Lincolnshire Naturalists' Union business, of interest principally to members, into the latter part of the journal. We have also renamed the Annual Recorder's Reports "Lincolnshire Natural History and encouraged authors to adopt a less formal writing style. We hope that these changes will attract the less specialised naturalist while retaining the scientific content of the journal and its important role in recording Lincolnshire's natural history and the activities of the LNU.

We hope that you like the new-look and that you will find it will become more informative. We also hope that it will attract more naturalists to become interested in our activities and to join us.

Contributing to "The Lincolnshire Naturalist"

We are constantly on the lookout for full length articles or short notes, even a few lines, on any aspect of Lincolnshire's natural history, current or historic. Consider a note in The Lincolnshire Naturalist for any new or significant observations.

Articles should be typed. It would help the editors tremendously (and mistakes are far less likely to ensue!) if they could be sent on a 3½" computer disk with accompanying paper copy, in just about any word processor format (although don't let this put you off sending in an article) and in the format described here. Adding an ASCII text file in addition to the word processed file will ensure that it can be incorporated directly. Most word processors can also output in ASCII.

Drawings, black & white photographs, colour transparencies or negatives (please include a print) can be included. Colour illustration may be rendered to black & white. Please indicate where in the text the illustration is appropriate and give a caption. Illustrations will be returned and edited text resubmitted to the author for approval and proof-reading before publication.

Convention adopted for species names - Latin names should be italicised, not bracketed or underlined and should follow the English name (where applicable) with no separating comma. English names should start with lower case letters unless incorporating other names warranting capitalization (eg Brandt's bat, St John's-wort). References to journals and books should please as below. Please note and use the capitalization and italic convention.

WOODRUFFE-PEACOCK, Rev E.A., 1900. The Lincolnshire Naturalist's at Freiston. *The Naturalist*, **25**: 141-144.

DUDDINGTON, J. & JOHNSON, R. 1983. *The Butterflies and Larger Moths of Lincolnshire and South Humberside*. Lincolnshire Naturalists' Union. Lincoln. 299pp.

The final copy date of **1st May** of the year in which the Transactions are to be issued. Please contact the editors directly if there is difficulty in meeting this deadline.

If in any doubt as to whether your observation merits a note or an article, or you have any other queries please do get in touch with the editor Jane Ostler, 61 Woolsthorpe Road, Colsterworth, Grantham, Lincolnshire NG33 5NX., ☎ 01476 860465, to whom texts should be sent.



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cover photograph
a common longhorn beetle *Rhagium mordax*
photo by Roger Key