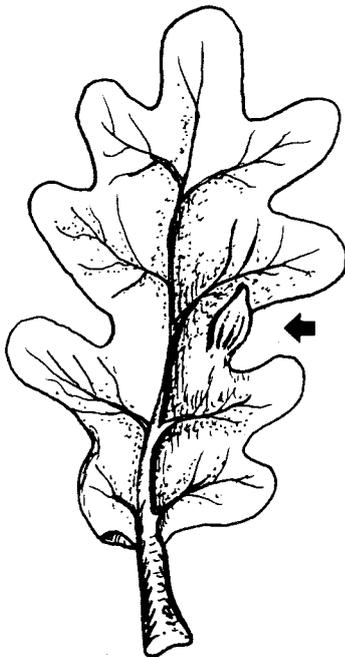


NEWSLETTER 22

February 1999

Rare gall in profusion at Scraftoft!

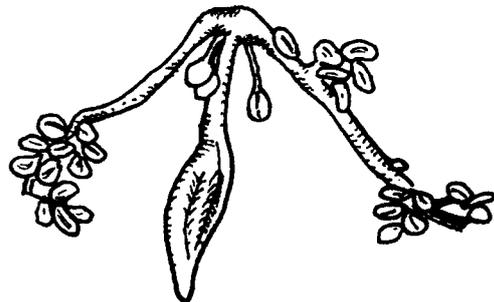
The gall-wasp *Andricus semiatonis* induces an 8-14mm long, stalked club-like gall on the catkins of *Quercus robur* and *Q. petraea*. The gall is initially green but may have reddish markings when older. It is covered with fine short hairs. The gall completes its development in June and falls to the ground. The wasp emerges in the subsequent spring.



This gall-wasp is regarded as local and relatively rare such that reports of its appearance tend to be spasmodic. Yet, in May 1998, a few catkin bearing branches of *Quercus robur* overhanging Covert Lane at Scraftoft, just east of Leicester, were observed to be carrying a large population of this gall. It was estimated that 30-40% of the catkins on these branches

carried galls. The wasp is also reputed to infect leaves but no leaf galls were found at the Scraftoft site.

The siting of these galls was unexpected since the tree involved has been under regular observation for over a decade without a single gall of this type being seen before. Nor had this gall been observed on other trees within the area.



Only the unisexual (asexual) generation of *A. semiatonis* is known. The presence of so many galls, however, has provided an opportunity to check whether or not all of the emergents are agamic females and to test whether or not these induce an alternative (as yet unidentified) gall.

Chris Leach
(Hon. Sec. British Plant Gall Society)

Next copy date: July 15th 1999

BEETLES IN UNDERGROUND PITFALL TRAPS

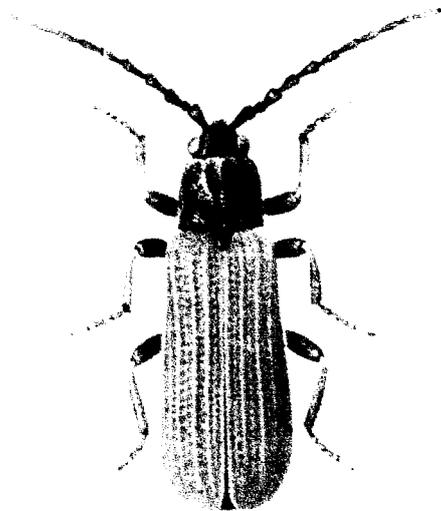
In 1998, a friend lent me two of the subterranean pitfall traps that he has designed. This type of trap has been successful in catching a number of previously under-recorded species both in gardens (Owen, 1997; Booth & Owen, 1998) and in sites containing old trees (Owen, 1997).

Methods

Details of the design and operation of these traps can be found in Owen (1995). Essentially they consist of a pitfall trap at the bottom of a capped wire mesh tube which can be sunk into the ground. Best results are reportedly gained by placing the trap in contact with the root system of an old tree. Accordingly, I set the traps next to two coppice stools in Launde Big Wood, one ash and one wych elm. By chance, the trap by the wych elm stool was located actually inside a hollow, well rotted root. Owen's protocol was followed except that the traps were primed with rather pungent home-made plum wine of considerable vintage rather than cheap sherry. Each trap was operated from 26th May to 6th June and from 1st September to 18th October 1998.

Results

Thirty species were recorded (see table).



Platycis minuta (above) is a nationally scarce species with bright red wing cases. It is associated with rotten logs and stumps. There are two recent records from Leicestershire, both from Leighfield Forest – Launde Big Wood (Steve Costa, 1984) and Skeffington Wood (John Bullock, 1990).

Species trapped	Status	Trap in	
		Ash	Wych
<i>Abax parallelepipedus</i>			1
<i>Pterostichus madidus</i>			1
<i>Megasternum obscurum</i>		6	21
<i>Ptenidium intermedium</i>		1	
<i>Ptenidium laevigatum</i>			6
<i>Pteryx suturalis</i>	*		1
<i>Choleva spadicea</i>			1
<i>Catops nigricans</i>		3	5
<i>Micropeplus staphylinoides</i>		1	6
<i>Proteinus brachypterus</i>			7
<i>Hapalareae pygmaea</i>	L*		2
<i>Omalium rivulare</i>			1
<i>Coprophilus striatulus</i>	L	10	2
<i>Anotylus sculpturatus</i>			
<i>Othius myrmecophilus</i>			1
<i>Staphylinus melanarius</i>			1
<i>Quedius picipes</i>			1
<i>Tachinus signatus</i>		2	2
<i>Autalia longicornis</i>			
<i>Atheta sodalis</i>			2
<i>Atheta aquatica</i>		1	2
<i>Atheta ravilla</i>			
<i>Platycis minuta</i>	N*	13	1
<i>Epurea fuscicollis</i>	N*	3	1
<i>Soronia grisea</i>	.	3	7
<i>Soronia punctatissima</i>	L*	3	
<i>Rhizophagus parallelocollis</i>	L*	19	
<i>Rhizophagus perforatus</i>	.		
<i>Corticaria gibbosa</i>			1
Total number of specimens		65	73
Total number of species		12	22

[N = Nationally scarce; L = Locally scarce;
* = associated with dead wood]

Species recorded from underground traps in Launde Big Wood 1998

Epuraea fuscicollis was the only other nationally scarce species recorded and has not previously been recorded in Leicestershire. It was the second most abundant species in the traps and was also recorded in good numbers at Headley Warren, Surrey by Owen (1997). In the literature this species has been associated with sap runs emanating from *Cossus* (Goat moth) wounds, but it also seems to be linked to underground root systems.

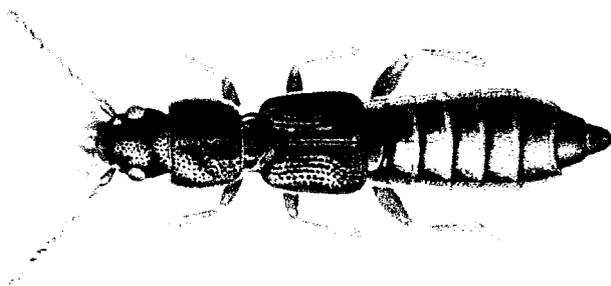
Hapalaraea pygmaea, *Coprophilus striatulus*, *Soronia punctatissima* and *Rhizophagus parallelocolis* are all rarely recorded in Leicestershire.

Eight of the species found are closely associated with the decay of dead wood, including most of the species which are nationally or locally scarce.

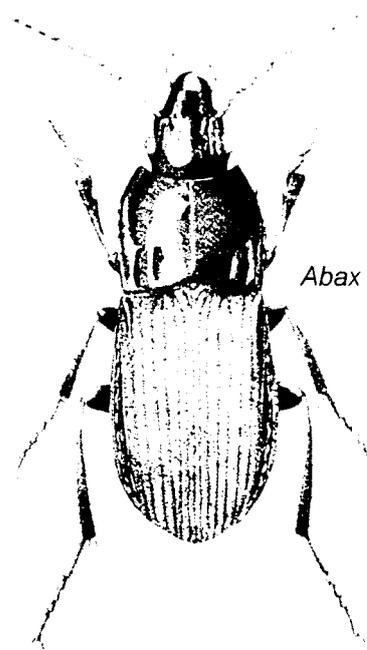
Although roughly the same number of specimens were obtained from each trap, a much larger number of species was found in the wych elm trap i.e. a higher species diversity. The list of species recorded in this trap is dominated by normal forest floor beetles and it may be that the hollow, rotten root, in which the trap was set, served as a kind of pathway or extension of the forest floor environment. By contrast, the ash stool trap appears to have recorded beetles in a more exclusive subterranean dead-wood environment.

Discussion

The number and rarity statuses of the species recorded at Launde is not as impressive as those recorded in Surrey. However, the Leicestershire results cannot be properly compared with those from Surrey as fewer traps were used and for a shorter period. It is clear that the use of underground traps has potential for catching previously under-recorded dead-wood species in Leicestershire and that this may throw new light on the value of coppiced woodland for dead-wood beetles.



Coprophilus striatulus



Abax parallelipedus

Coppice is not normally considered to be of great value for dead-wood beetles, because of the low volume of dead wood above ground. However, some coppice stools in Leighfield Forest are believed to be the oldest trees in Leicestershire, older even than the ancient pollards in mediaeval parks. The adverse effects of coppicing on dead wood above ground may not be so severe on dead wood in the root system.

Acknowledgments

I thank John Owen for lending me the traps and providing advice on their operation. I thank the Leicestershire and Rutland Wildlife Trust for permission to carry out this study at Launde Big Wood.

Derek Lott

References

- Booth, RG & Owen, JA (1998). *Anommatus dieckei* Reitter in south-east England. *Ent Gaz*, **49**, 71-4.
- Owen, JA (1995). A pitfall trap for repetitive sampling of hypogean arthropod faunas. *Ent Rec J Var*, **107**, 225-8.
- Owen, JA (1997). Observations on *Raymondionymus marqueti* (Aube) in north Surrey. *Entomologist*, **116**, 122-9.
- Owen, JA (1997). Some uncommon beetles from Headley Warren, Surrey. *Ent Rec J Var*, **109**, 301-7.

GALL-CAUSING MOMPHA SP (MOMPHIDAE) IN LEICESTERSHIRE - CAN YOU HELP?

[Chris Leach, of the British Plant Gall Society and long-term LES member, makes a plea for records of galls or their moth-causers in the county or elsewhere. Something to keep an eye open for when the weather is not conducive to trapping the insects!]

Mines and galls on Willowherbs

Of the 17 British species belonging to the moth genus *Mompha*, 15 feed on Willowherbs (Onagraceae), a family of plants that is rarely used by Lepidoptera. Most are leaf-miners but five are widely regarded as gall-inducers. Records of these five species are fairly rare, but all five species have been reported from Leicestershire sites during the past five years. However, further records would be appreciated particularly so that they may be photographed. Below is a brief description of these galls. Any finds should be reported to the author (contact address below). [B&F numbers]

889a *Mompha bradleyi* (Riedl) (see p7)

On Great Willowherb (*Epilobium hirsutum*). Galls are small swellings (5-7mm long, 3mm thick) on stems just below the inflorescence. Usually present from early August through to October.

889 *Mompha divisella* Merrich-Schaffer

On Broad-leaved (*Epilobium montanum*), Spear-leaved (*E lanceolatum*) and Marsh Willowherb (*E palustre*). Galls, normally produced at the nodes of the stems, are rounded or oval and about 6-8mm in diameter. The gall is seen as a localised thickening of the stem and the stem may be much more branched above the gall.

893 *Mompha epilobiela* (Denis & Schiffemuller)

It is debatable whether or not this species is a genuine gall-causer. It seems to often invade Great Willowherb (*E hirsutum*) with no gall being produced. However, there are reports that larvae may be produced in seed capsules and such infected seed capsules are swollen. Also they may infect flowers which become swollen and fail to open properly. Apparently this is quite a common moth so examples of its 'galls'

should not be difficult to find.

891 *Mompha sturnipennella* Treitschke (was *nodicolella* Fuchs)

On Rosebay Willowherb (*Epilobium* (= *Chamaenerion*) *augustifolium*) this moth induces a swollen stem gall from June onwards. The galls are usually reddened and may persist in old stems. The galls are usually produced in the stem within the flowering region. In the 1920's this was regarded as a rare species and was reported to be confined to Kent. However, it has now been recorded from sites as far north as Yorkshire.

892 *Mompha subbistrigella* (Haw.)

On Broad-leaved Willowherb (*Epilobium montanum*). Causes seed capsules to become shortened and thickened. Occasionally the capsule may become distorted and twisted and may fail to open. Care is needed in seeking these as they are inconspicuous. Best to look for them from July onwards in the lowest capsules.

Chris Leach
(Hon Sec British Plant Gall Society)

[Tel: 0116-257-7713 (day); 0116-271-4297 (evening); Email: bioted@dmu.ac.uk]

[Any records of galls caused by *Mompha* species should be sent to Chris but please let the LES know as well – also any records of the leaf-mining species would be appreciated!]

GALL MEETING

LES members and friends are invited to join the Great Glen Natural History Society and British Plant Gall Society for a field meeting to be held at Evington Arboretum on Sunday 19th September 1999. The meeting will start at 10.30 a.m. and will be led by BPGS's Secretary Chris Leach. Meet in the car park off Shady Lane which connects Gartree Road with Evington. Further details from 0116-271-4297 (evenings) or send a message to bioted@dmu.ac.uk

LETTER

I still retain my interest in Leicestershire entomology though rarely visit the county now.. Looking over Newsletter 20, I enjoyed Adrian Russell's notes on butterflies – rang a few memories. I took the Duke of Burgundy at King Lud's Entrenchments in about 1952-3 and I believe Herbert Buckler took (or recorded) it at Owston Wood.

Owston was (before my time) a noted locality for the Silver-washed Fritillary and I was interested in a reference to this butterfly at Humberstone recorded by Dr Jennifer Owen (*Daily Mail* 15. vii.98 p5). I never saw it in Leicestershire but had occasional sightings at Brampton Wood near Desborough just over the border from Market Harborough. The White Admiral was also there in good numbers and I saw one flying out of Dingley Wood over the border into Leicestershire – then back to Northamptonshire!

Tom Robertson

CRANEFLIES IN VC55

There are those people who love to dig about in delicious, soggy wet vegetable detritus! But for the rest of us, if you want to evaluate a bit of quagmire, you can't beat a cranefly. These often delicate, long-legged flies (Tipulomorpha) are made up of the four families Tipulidae, Cylindrotomidae, Pediciidae and Limoniidae. Their larvae lurk around the humus and then, conveniently for us, metamorphose and fly into your sweep net!

Different habitats, different species

If you are sweeping on an acid flush in Leicestershire then *Prionocera turcica* may be your reward. Rough pasture may yield *Vestiplex scripta* and the common *Tipula oleracea*. On more calcareous sites to the east of VC55 then *Thaumastoptera calceata* and *Gnophomyia viridipennis* may be found.

Wet woodland sites give the largest number of species since they contain the biggest variety of high quality food (from a cranefly's point of view). Different types of leaves and twigs/branches in various states of decay all provide

food for different sorts of cranefly larvae. In May, *Tipula vittata*, conspicuous with its pale yellow and grey patterned wings may be seen on tall foliage. *Limonia nubeculosa* is another very common smaller woodland cranefly. It has grey mottled wings and is the only cranefly with three dark bands on each femur. Spring-fed woodland sites in Leicestershire also support two nationally notable species: *Limonia trivittata* and *Rhipidia uniseriata*. Many craneflies occur only over a short season and in the autumn *Savtshenka staegeri* and *Rhypholophus varia* emerge.

About a third of national list in VC55

Over the past 20 years, knowledge of the craneflies in VC55 has been steadily accumulating due to visits by specialists to a few county sites. For instance, Burleigh Wood and Empingham Marshy Meadow have each yielded around 40 species out of the 330 on the national list. The total number of species for VC55 now stands at about 110 with good or satisfactory data from about 30 sites.

There is still plenty to do before we can claim to have a reliable list of all the county's craneflies. Most light is shed on their specific habitat requirements when we can compare craneflies from contrasting microhabitats. Specimens from site visits can be stored in envelopes and voucher specimens are best protected by carding them. If you need any help with identification please contact me!

John Kramer

CONGRATULATIONS!

Many congratulations to past LES Chair, Maggie Frankum on gaining a distinction in her Diploma in Applied Ecology course at Leicester University. Well done!

Part of the course required a research project which in Maggie's case was a study of the foraging behaviour of the Hairy-footed Bee, *Anthophora plumipes*.

The LES is pleased to reproduce much of Maggie's study in its LESOP series (LESOP 15, February 1999) with the hope that other Society members will undertake such ecological studies on their local patch and let us put them into print!

IN A MATERIALISTIC WORLD?

I enjoyed the quote from LES Newsletter 21 ("New entomological supplier") "...run by two amateur mothers". It is a good job that not all parents charge an hourly rate!

Chris Leach

AN EXCELLENT YEAR!

Despite the poor weather in 1998, my Dad and I had an excellent moth trapping year with some of the uncommoner species turning up.

On 16.viii.98 we found a Crescent moth (*Celaena leucostigma*) on the floor of our garage. The 7.ix.98 brought out two Dotted Rustic (*Rhyacia simulans*). On the 11 and 12.viii.98 the mercury vapour light trap attracted five Plain Wave (*Idea straminata*) and one Scarce Silver-lines (*Bena prasinana*). A Triple-spotted Pug (*Eupithecia trisignaria*) also turned up.

Along with the species mentioned, were also the common moths like Silver Y (*Autographa gamma*) and Dark Arches (*Apamea monoglypha*) plus some old favourites – for example Rosy Rustic (*Hydraecia micacea*) and Eyed Hawk (*Smerinthus ocellata*). So it was quite an outstanding year. I just hope that 1999 will be as good!

Adam Poole

LEAF-CUTTER BEES

[From *Amateur Gardening*]

Q: a leaf-cutter bee landed on my amelanchier and in no time had made off with a half moon of leaf. It returned within minutes to do the same to the next leaf. Gardening friends who were with me, were amazed and delighted, as they had not seen one at work before.

A: It is indeed almost incredible how rapidly the leaf-cutter bee can remove a disc of leaf; no wonder your friends were amazed! However, damage is fairly isolated and rarely causes total



defoliation, so, instead of worrying about controlling the leafcutter bee, why not just watch and marvel!"

[From *BBC Gardeners' World Magazine December 1998*]

"We planted two roses and both flourished though mysterious semi-circular chunks were removed from many of the leaves. Referring to the *RHS Pests and Diseases* by Pippa Greenwood & Andrew Halstead, we learnt that the culprit was most likely a leaf-cutting bee. The recommended control was "watch the plant until the bee returns, then swat it." Is this the beginning of the end for the pesticides empire?"



Well I think I know which word of advice I would prefer!

[Thanks to Maggie Frankum for these titbits]

What is the status of leaf-cutter bees in VC55?

MOMPHA BRADLEYI

Following on from the article on galls caused by *Mompha* species (p4 of this Newsletter) it became apparent that *Mompha bradleyi* was an a newly described species for Britain which may not have come to the attention of LES members.

The first description of the British occurrence of this moth was in a publication of 1994 (Harper, 1994) which reported on the collection of a worn specimen from Herefordshire in 1982! Two more examples were caught in 1983 at the same locality.

Initially the specimens were regarded as being *Mompha divisella*, but no galls could be found on the smaller willowherbs frequented by this moth. In 1991 small green galls were found on *Epilobium hirsutum* and the moths that emerged were identical to those recorded in 1982 and 1983. Again, the moth was described as *M divisella* but having a new foodplant (Harper, 1993).

A Dutch report in 1993 indicated that *Mompha*



bradleyi could be reared from galls on *E hirsutum* (Great Willowherb) and it was not long before the Herefordshire specimens were confirmed as *M bradleyi*.

It would appear that the adults are on the wing in September, hibernate and reappear in spring with most in May-June. The small green fusiform galls contain larvae in August and appear on the smaller lateral side-shoots usually below the flowers or developing seed capsules and positioned in the nodes. The larvae pupate in the gall during August and the adult emerges through a small operculum in the side of the gall. Since the initial discovery in Herefordshire, the galls have been found in several Midland counties, and SE and Central Southern England

My thanks go to Chris Leach and Jane McPhail for providing background information.

Ray Morris



[Photographs from Harper, 1994]

(References:

Harper, MW (1993). *Mompha divisella* Herrich-Schäffer (Lepidoptera: Momphidae): a new pabulum. *Ent Gaz*, **44**, 14.

Harper, MW (1994). *Mompha bradleyi* Reidl (Lepidoptera: Momphidae) new to Britain with some initial observations on its life history. *Ent Gaz*, **45**, 151-6.]

Moth trapping dates

If you are running traps this year and are willing to let others join in, please let Jane McPhail (0116-267-1950 x22) know so that a list can be available when anybody rings up!

SUMMER PROGRAMME 1999

For all field meetings meet at the designated grid reference. However, in the event of inclement weather please contact the leader to ensure that the event is still on.

- 15 May 1999** **Grace Dieu Wood** (SK435174) - old woodland with stream and acid flushes. Difficult parking on Turoloough Road between Thringstone and Blackbrook Reservoir. 10.30 a.m.
Leader: John Mousley 0166-267-1950 x22 (day); 01509-231828 (home)
- 16 May 1999** **Burbage Common Open Day** – The LES has a stall – come and help us spread the gospel – details from Ray Morris (01455-842145)
- 23 May 1999** **Holly Hayes Open Day** – again a chance for the LES to recruit new members – contact Jane McPhail (0116-267-1950 x22) for information
- 4 June 1999** **Bouskell Park (SP569975)** - Blaby countryside park in Oadby – old meadows and hedgerows; for moths and bats (Leicestershire Bat Group). Meet at car park at 7p.m.
Leaders: Jane McPhail 0116-267-1950 x22 (day) & Ray Morris 01455-842145
- 12 June 1999** **Willesley** (SP722984) - new woodland planting with older lake and wood. Meet at minor road south west of Willesley. 10.30a.m.
Leaders: Jane McPhail 0116-267-1950 x22 (day) and Ray Morris 01455-842145
- 27 June 1999** **Noseley** (SP722984) - old woodland, trees, grassland and lakes. Meet at minor road east of Three Gates B6047. 10.30a.m.
Leader: John Mousley 0166-267-1950 x22 (day); 01509-231828 (home)
- 17 July 1999** **Eye Brook Reservoir** (SP852963) - marginal reed swamp vegetation. Meet minor road south-west of Stoke Dry 10.30a.m.
Leader: John Mousley 0166-267-1950 x22 (day); 01509-231828 (home)
- 8 August 1999** **Grantham Canal** (SK776351) - well vegetated canal with reeds. Meet minor road north-west of Barketstone-le-Vale.
Leader: Stephen Grover 0116-267-1950 x28 (day)
- 3 September 1999** **Fosse Meadows** (SP488914) - Blaby countryside park of old pastures and hedges, new arboretum. Meet at car park at dusk for moths and bats (joint Leicestershire Bat Group).
Leaders: Jane McPhail 0116-267-1950 x22 (day) & Ray Morris 01455-842145

Contact Jane McPhail (0116-267-1950 x22) for the latest information on moth trappings in 1999.

The Leicestershire Entomological Society is grateful to the
Environmental Resources Centre, Leicestershire County Council
for provision of facilities and encouragement of its activities.
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