CRS NEWSLETTER

Beetle recording in Leicestershire and Rutland Newsletter no 5



If 2019 will be remembered for anything, it will probably be the amount of rain we had from September onwards. None of us wish for extremes of this type, but we can take advantage of some of them. The amount of local flooding that took place, in some ways offered too much flood debris to try and keep up with. The main areas that get hit regularly are the River Soar floodplain, the River Wreake and areas just south of the River Trent. These are the "honeypot" areas where Derek had previously spent a considerable amount of time and effort. With the sheer amount of standing water and water logged fields throughout VC55 late autumn and early winter gave us a chance to work different areas. Everyone needs to have ago at sieving flood debris, no matter what time of the year, summer included. Whether it's sieving debris along water courses that has been washed up and trapped against obstructions such as hedges, fence/gate posts or fallen trees, or solitary standing tussocks in flooded fields. All you need is a cheap garden sieve (approx. £4) and something like a white (or the paler colour the better) tray or washing up bowl (again approx. £4) plus plenty of specimen pots! The two main families involved are the Carabids and the Staphs, but it can be surprising how many Weevils and Chrysomelids can be found amongst the samples. Recording wise if there is a drawback, it's the fact that you cannot be totally sure where any of the specimens have originated from. They could have been washed miles downstream, even from another county, especially near any county boundaries such as near the Trent or even the Welland. I guess this is a similar situation that moth recorders have when using light traps, you never really know where the specimens are from, maybe they have flown some considerable distance or they may be very local. All you can do in this situation is state the location they have been taken/caught. Either way, sieving beetles from flood debris and recording moths at light traps provides an amazing opportunity to see species that, can often be at best difficult to find by other means. It goes without saying that great care regarding safety should be taken if working anywhere near water. Try and get at the smaller/finer material, usually under the top layer of coarser twigs and sticks, the finer bits of grass and leaves are usually more productive. There is of course another slight drawback when sieving flood debris, and that's the number of beetles you are likely to find. You will definitely need to be prepared to spend a considerable time at the microscope working through keys to get the best out of a day's collecting. If you are prepared to do that, your personal beetle list or site list will not only significantly increase, but you also increase your chance of finding the odd rarity. Regarding sieving flood debris, it's tempting to continually concentrate on the "honeypot" sites that are more or less guaranteed to produce good results, but it is usually just as rewarding when the more under recorded areas are tried. Very little work has been done in Rutland, especially where the River Welland is reasonably easy to get down to, Seaton and Lyddington Meadows would be a good start, but there are several side roads and footpaths that would be worth trying, a project for the next deluge. There must be an abundance of footpaths that get flooded all around the counties with ditches, small streams and naturally marshy sites or ponds etc. that overflow and flood out into surrounding fields, leaving isolated grass tussocks as refuge sites for escaping beetles. The greater the variety of sites we can sample the more we learn about the species involved, and the more dots we can put on maps.



Coleoptera finds for 2019 and early 2020 have been reasonably documented on the Leicestershire and Rutland Coleoptera Recording Scheme Facebook site, so I will not repeat too many in this newsletter.

A phone call in mid-January offered the chance to go and investigate an outbreak of grain weevils. Amongst hundreds of tons of grain were literally millions of small beetles, the most visibly abundant species were *Oryzaephilus surinamensis* and *Cryptolestes ferrugineus* and just small numbers of *Sitophilus oryzae* plus a single *Typhae stercorea*.

It seemed just as the year was drying out, beginning to pick up and get started, we were hit with the Corvid 19 pandemic which soon took а serious hold consequently, we have been placed in a lockdown situation. Frustratingly for most of us, our movements are restricted to exercising/walking just once a day. Apart from the garden, it depends on whether anyone is lucky enough to have access to an area of reasonable habitat and have enough time to do a bit of beetling, otherwise it meant staying local. An additional plea was put out regarding our "inconspicuous ladybirds" after a small amount of success earlier on with a couple of species, see report below.

Great disappointment came in early March, due to the Corona virus, was the cancellation of our now annual and much anticipated Leicestershire and Rutland Recorders Conference, this year particularly as Moya Burns was due to give a talk on Saproxylic beetles, then it was

soon announced the East of England Coleopterists meeting at Whisby Nature Park was cancelled. Fortunately, the annual 17th Coleopterists Day at Oxford University Museum of Natural History escaped lockdown and was okay to go ahead. Everyone, without fail has commented it was the best yet, totally agree on that.

Prior to the lockdown we had started a recording project at Rutland Water using the Visitor Training Centre as a base. Running in conjunction with Paul Palmers successful "Microscope Club", the first meeting 4th October produced a varied list of 24 species, almost half of which were beetles. Probably the significant finds were the 2 water beetles Berosus affinis and Berosus signaticollis, as they were the 3rd and 4th record respectively of each species for VC55, an omen for a good start. Sadly though, this project was also cut short by the Corona virus restrictions, even so and despite the unhelpful weather conditions a total of 201 beetles were found of 33 species.

The Lockington and Hemmington area has always been high on Derek's list of favourite places to visit, but had become difficult to access due to major road developments. However, Long Lane on the outskirts of Kegworth, offers a way into the area and will be explored further. There is quite a lot of construction work going on along the lane at present but hope it does not cause any more access problems.

Prior to the onset of this continual rain I had arranged with Steve and Ros Smith at Shenton Estates to install a series of pitfall traps at the edge of one of their large fields. We had previously noticed quite a few Carabids running around on bare patches of ground on sunny days and agreed some pitfall traps ought to produce a few interesting species. The traps were set and were catching beetles, but they were also getting flooded out, so the project was abandoned for the time being.





Pitfall trap at Shenton Estate before and after the torrential rain, even with a rain guard.



Recent records of "cryptic" ladybirds in VC55

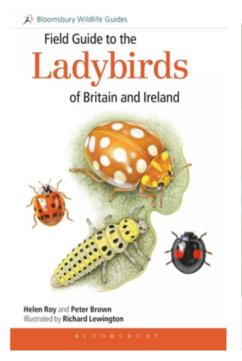
Up to now, the start of 2020 has been something of a cryptic ladybird year with sightings coming in thick and fast including 3 new species for VC55.

The so-called "inconspicuous" group of ladybirds include about 20, small to very small ladybirds, that are rarely found unless a special effort is made to look for them, so it's not surprising that there are few records for them in the database. The exceptions are *Coccidula rufa* with 422 records, *C. scutellata* with 32 records and *Rhyzobius litura* with 144 records, correct up to mid 2020. *C. rufa* and *R. litura* can easily be found with very little effort by peeling back the dead outer stem sheaths of Typha reed mace, *C. scutellata* can be found by the same method, but genuinely seems to be much scarcer. All three species can also be found by sweeping waterside vegetation and by grubbing around in marshy areas.

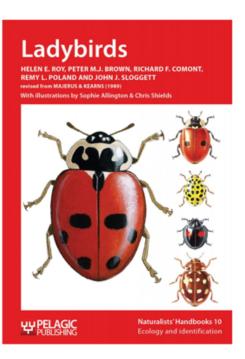
The first obstacle is actually knowing whether you have found one, as they are very small, the largest being 4mm, and most 3mm and under. So, unless you have got your eye in it's easy to either overlook or just not bother with such small fry. As seen in the table below only 3 species break into double figures the rest are all in single figure records. To give yourself the best chance of finding any of the scarcer species there are two methods that are recommended to try first. They are, beating Ivy whether it's on a wall, fence or the trunk of a tree, beating various conifers, also beating Holly and the varying Cypress species and Juniper, the second is by sweeping in the preferred habitats of the individual species. To get to know their habitats, the Bloomsbury 2018 publication, Field Guide to the Ladybirds of Great Britain and Ireland, by Roy, Brown and Lewington is the must have guide, this covers just about all you need to help find these elusive beetles.

We have 18 species recorded in VC55, the table below shows the number of records for each species and also the species that have not "yet" been recorded in VC55. Some of these may never be recorded due to specific habitat and location requirements, such as *Nephus bisignatus* known only from the south coast and not recorded since before 1940's. *Rhyzobius forestieri* on the other hand, after first being found in London 2014, since then it has been recorded in Kent, Essex and Cambridgeshire, so never say never.

Recommended books: -







With the help of the checklist and photographs below, it is hoped that searching for these small beetles can be encouraged to continue at least throughout 2020. Even with the restrictions on travel, there must still be plenty of sites with suitable habitat to search for them. *Rhyzobius chrysomeloides*, *Clitostethus arcuatus* and *Nephus quadrimaculatus* have all been found in gardens by beating Ivy and or Holly. Two records of *Scymnus interruptus* come from Broughton Astley and Braunstone, unfortunately no photos yet. This is another new species for VC55 it must be around in other areas. The Braunstone record was found by beating Holly, many gardens will have this as well as Ivy, it's only a matter of time before we have more records.

Checklist of inconspicuous ladybirds with VC55 records, red X = not recorded

COCCIDULA	rufa		422
	scutellata		32
RHYZOBIUS	chrysomeloides		6
	forestieri		X
	litura		144
	Iophanthae		1
HYPERASPIS	pseudopustulata		2
CLITOSTETHUS	arcuatus	NEW FOR VC55	3
NEPHUS	bisignatus		X
	limonii		X
	quadrimaculatus	NEW FOR VC55	3
	redtenbacheri		14
SCYMNUS	haemorrhoidalis		11
	limbatus		X
	auritus		9
	suturalis		9
	femoralis		7
	frontalis		16
	interruptus	NEW FOR VC55	2
	jakowlewi		X
	nigrinus		3
	rubromaculatus		X
	schmidti		1
STETHORUS	pusillus		2



Coccidula rufa

Peeling back the dead outer sheaths of Typha.

Sweep-netting in and around marshy habitats.



Rhyzobius lophanthae

Beating Leylandii, Cypress trees and juniper.



Scymnus suturalis

Beating pines



Coccidula scutellata

Sweeping in reedbeds, grassland besides water courses and hand searching.



Clitostethus arcuatus

Found in coniferous and deciduous woodland, but favours Ivy (1st record for VC55 Sapcote 2020



Scymnus frontalis

Beating pines



Rhyzobius chrysomeloides

Beating various conifers, particularly pine.



Nephus quadrimaculatus

Beating Ivy (1st record for VC55 Knighton 2020)



Habitat where Scymnus interruptus was found in Braunstone

Photograph David Gould



Rhyzobius litura

Sweeping grassland and Nettle beds



Scymnus haemorrhoidalis

Sweeping in wetland habitats



Habitat where *Nephus quadrimaculatus* was found in Sapcote Photograph Graham Calow

Fieldwork to think about: -

As well as searching for the cryptic ladybirds, there are a couple of other areas to target. Targeting Ribwort Plantain has been mentioned, also Yarrow holds several species and *Tricosirocalus barnevellei* seems to be quite a scarce species nationally. It was recorded from Quorn and Rutland in 2016, now recently found at Brown's Hill Quarry in March 2020, bringing the total number of records to 8, adding more records for this species would be particularly good.



Photograph David Gould

Soft brush and a sandwich box or something similar, is all that's needed to brush the foliage or tap plants when targeting species. Small and lite enough to fit in a small backpack.



Trichosirocalus barnevellei

Quite a contrasting brown and white weevil, brush or tap Yarrow plants over the sandwich box.

It's important to keep all the data, including which food/host plant any specimens are taken off, as this can be crucial when identifying later. Also, if it's possible to include any photographs with the records, that would be really useful.

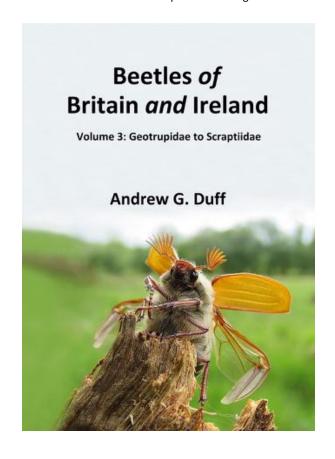
Late September last year *Agelastica alni* was found on Alders planted around the margins of Albert Village Lake, constituting the first confirmed record for VC55. Follow up visits found it to be reasonably established all around the lake, additional records came from a fishing lake in Moira later in October. These two sites are fairly close to each other, both in North West Leicestershire, so we need to look for it further afield, to give us some sort of an idea of its distribution. This is probably a fairly recent addition to the VC55 list. There have been numerous records for this species already this year from various counties, so we should be on the look-out whilst on our permitted walks. Preferred host plant is Alder, but can be found on other tree species Birch and Hazel seem to be the second-best choice. Due to other similar shiny blue leaf beetles a little care needs to be taken,

but it's quite an easy species to identify once seen. As can be seen from photos below, it's more of a dark blackish/blue as opposed to the brighter metallic blues of most of the other blue Chrysomelids.



Middle of 2019 around May, a plea to check out put out Ribwort Plantain for *Mecinus pyraster, Mecinus pascuorum* and *Trichosirocalus troglodytes* was put out on the Recording Scheme Facebook site was targeted and proved very successful, adding numerous extra sites for these weevils. Towards the end of April 2020, all three species have already been recorded at a couple of new sites. These species will be on Ribwort Plantain for as long as it is flowering, more records are needed. M. pyraster is plain blackish parallel sided, M. pascuorum is shorter with more rounded sides, the reddish elytral patch is very variable and can sometimes be difficult to see. T. troglodytes is a typical Cuetorrhynch and should be easily recognised with a brown and creamy white chequered appearance. By specifically tapping Ribwort Plantain into a container you should soon get familiar with these three species.





The appearance of **Volume 3** of the handbook was announced early 2020 with a possible publication date of July 2020.

This volume will cover a large number of families which exhibit a wide range of morphologies and ways of life, including the familiar dor beetles, stag beetles, dung beetles and chafers, jewel beetles, click beetles, glowworms, soldier beetles, chequered beetles, ladybirds, darkling beetles, false blister beetles, oil beetles and cardinal beetles.

79 colour plates with 473 photographs, covering 1088 species in 69 families, when eventually published it will make this the largest out of the three volumes to date.

An annotated Checklist to the Beetles of VC55



Trypodendron domestica Linneaus 1758 (photograph GL Finch)

A 3rd revised and updated version of the Checklist has been "almost" completed, there are just a small number of species that require a little more work yet. However, I think it ought to be made available as soon as possible, otherwise it won't be ready until well into 2021

We are extremely fortunate that the Scarabaeidae have been reviewed by Darren Mann, who has also added a few comments, so these should be as good as they are likely to get, many thanks to Darren for his invaluable help.

This edition includes 5400 records from the start of 2018 to the end of 2019. I will post a pdf on the Facebook recording Scheme site and also make it available for NatureSpot to replace the previous version.