CRS NEWSLETTER

Beetle recording in Leicestershire and Rutland Newsletter no 6





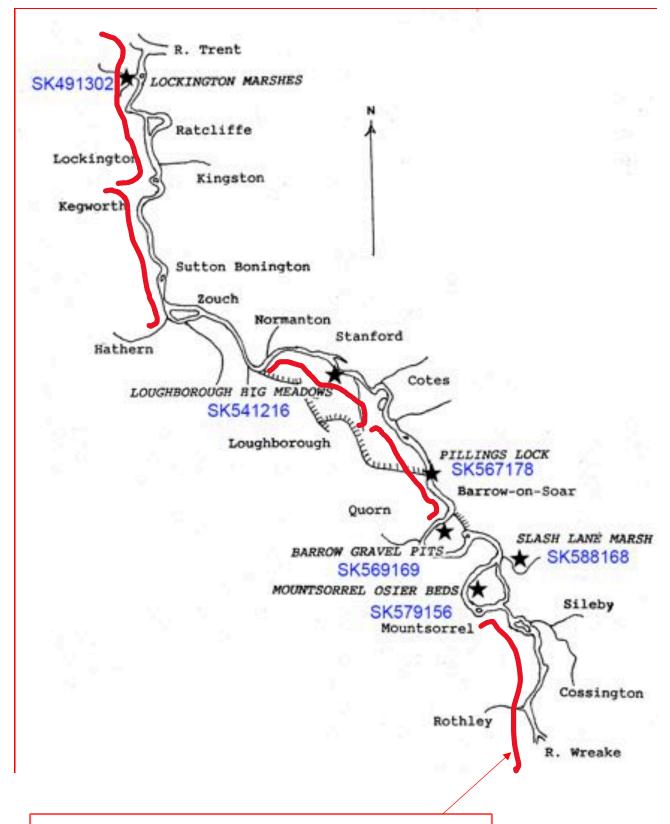
Two very different views of the lower Soar valley floodplain, from beautiful buttercup filled fields to the severely the flooded. In Derek's opening paragraph in the Leicestershire Entomological Society Occasional Publication "The Wetland and Riparian Coleoptera of the Soar Valley, 1 Carabidae 1990" he states

"An increase in arable cultivation, coupled with a development of intensive agricultural techniques, has been a major influence on rural wildlife habitats in Leicestershire over the last three decades. Because of frequent flooding and other drainage problems, agricultural improvements have been less evident in the major river valleys in Leicestershire. Consequently, a significant proportion of important remaining wildlife habitats might be expected to occur within these valleys. This is especially true for wetlands. However, large scale river engineering schemes in both the Soar and the Wreake valleys threaten to affect many of these sites. Two important Soar valley marsh sites have already been recently destroyed by other developments".

As the title says, Derek concentrated on the Carabids, 87 species were found with 48 considered to be wetland and/or riparian species, including 2 species that had not been recorded since 1980. One of the intentions for last year was to visit the whole length of the study area, but due to the best part of a year's worth of Covid restrictions, opportunities have been limited. Even so the outstanding record of the Carabid *Bembidion octomaculatum* was made at Lockington on 17 July 2020 by Anthony Lacey, new to VC55 and therefore not recorded on Derek's list. Not a Carabid but a Staph, also from Lockington, a single *Sepedophilus pedicularis* was sieved from a grass tussock late January. With just one previous record from Cavendish Bridge 1993, which is not that far from Lockington. Other noteworthy species have been recorded from along the whole length of the floodplain on the few occasions it was possible to visit, support the value of this area. The lower Soar valley study area stretches from the confluence of the River Wreake and River Soar near Cossington Lock and winds for approximately 18 miles up to the confluence of the River Soar and River Trent near Trent Lock.



The immediate habitat around Lockington consists of mainly rough grazing fields bordering the River Soar as it joins the River Trent just below Trent Lock, interspersed with temporary water filled ditches and pools, marshy areas, hedgerows and small wooded areas. This is also an area that gets flooded regular and severely, coupled with extensive road improvements and considerable building development, getting access to undertake any work here is not getting any easier. The map below shows the whole length with added grid references to the main areas that Derek worked. Hopefully, providing the lockdown constraints ease a little, we can carry on with field work here.



The red lines show reasonably easy access areas. There are various pull-ins at most sites so parking will mainly be along the road.

The 9 new species for VC55 are:

Bembidion octomaculata Goeze 1777

Details discussed above.

Panagaeus cruxmajor Linnaeus 1758.

A remarkable find by Barbara Cooper, when she noticed a red and black beetle walking amongst the debris at the side of her garden pond in Long Clawson. Fortunately, Barbara managed a couple of quick tantalising shots, before it disappeared, a truly stunning beetle and maybe there is evidence of it spreading. In the last few years, it has been found along the Trent in Notts and also in Lincs, can this be a future possibility for Lockington..... let's hope so.





Perigona nigriceps Dejean 1831

Incredibly, this is the third new Carabid for VC55 in about the same number of months, fished out of a sample of beetles that had been caught in a subterranean pitfall trap early August. The trap had been set in a four-foot-deep pile of wood chippings on Shenton Estates, which has also continued to supply an impressive number of species. Quite a uniform pale beetle, could be mistaken for a teneral specimen, with huge forward pointing jaws and large bulging eyes.





Meligethes planiusculus Heer 1841

The best (only?) way to make any progress with any of the Meligethes species is to find the host plant and tap the whole plant into a white tray, take them home and dissect. Targeting Viper's Bugloss at Ketton Quarry returned several individuals of **M. planiusculus** late August, the host plant has a restricted distribution in VC55, but there are scattered patches, which will be worth searching.





The male tegmen is distinctive enough to clinch a reliable identification

Tetratoma desmarestii Latreille 1807

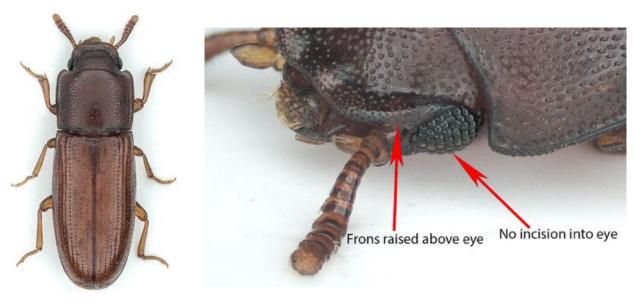
This saproxylic species was found in Bradgate Park late October by Dave Nicholls a feeder on fungoid rotten wood and is stated to be very local in England. Although Rev. A. Mathews has a record for this in the mid 1800's, it's not reliably sure his record is actually from VC55. Therefore, I really think this should be classed as the first reliable record.





Palorus subdepressus Wollaston 1864

Light traps used for recording moths are rarely used for attracting beetles, but there are many species that are regularly light trap visitors. Mark Skevington was fortunate to have a couple of individuals of this species visit his Synergetic trap in his Whetstone garden mid-August. Stated as "synanthropic introductions" and usually found in mouldy cereal products, but is now being found on or near fungi on broadleaved trees.



Podagrica fuscicornis Linnaeus 1767

This striking Chrysomelid was found at Tixover, on small patch of Mallow growing beside the wall surrounding the church. It is stated this species can also be found on Hollyhock, so could even turn up in someone's garden, a long shot, but certainly worth looking for.



Exapion fuscirostre Reich Fabricius 1775

This fairly small 3mm dark reddish-brown weevil with a whitish longitudinal line of scales on each elytra, was swept off Broom at Fosse Meadows by Graham Calow mid May (Det Richard Wright). Broom is an interesting host plant as there are several noteworthy species associated with it. There used to be a large swathe of Broom at Lount Nature Reserve, but is in very poor condition and has become almost totally overgrown. Any patches of Broom really should be searched or beaten thoroughly.

Tychius junceus Reich 1797

This small weevil at just over 2mm, was found in a vacuum sample at Ketton Quarry early September usually found on Clovers and Medicks. Many of the smaller weevil species are found on various Clovers, Medicks and species of Vetch, all are low ground hugging plants and although sweeping will often capture them, vacuum sampling seems to make this task somewhat easier.





Suggested fieldwork for 2021

There are a whole range of species that are easier to find and record providing you know their host or food plant. The majority of these fall into two broad groups, Chrysomelidae, the leaf and seed beetles and Curculionidae, the weevils, with both groups being extremely diverse. Over the last few years, I have targeted just a few, particularly those whose host plants are easy to identify. A successful request to look closely at Ribwort Plantain was put out around mid 2019 on the Leicestershire and Rutland Coleoptera Recording Scheme Facebook site, and between us we almost doubled the existing records for the weevils *Mecinus pascuorum*, *Mecinus pyraster* and *Trichosirocalus troglodytes*. So maybe we can repeat the success by selecting a small number of easy to recognise host plants and search for their respective inhabitants. Before making a start, it ought to be mentioned that life can be made easier for the field worker by being prepared in advance with a couple of pieces of essential equipment, none of which are expensive or difficult to get. The idea is to locate the host plant and tap gently over a white sheet or tray, where the insects will be easily picked out. However not everyone will have either, so a simple substitute could be a shallow sandwich box, about 3 inches deep and a stick to tap the flowers with, both should be easy and light enough to carry in a small day sac.

Prasocuris marginella Linnaeus 1758

Quite a distinctive Chrysomelid beetle being overall a shiny dark blackish blue/green with the pronotal and elytral sides bordered with orange, about 4mm. Found on buttercups, but I have had more success by targeting Marsh Marigold, but that maybe because it's easier to get a tray under the main plant, an alternative would be to sweep buttercups. Can be found feeding on the flowers and the leaves. It's not a rare species with 85 records, but not many recent records.



Agelastica alni Linnaeus 1758

This large 6mm to 7mm dark blackish blue Chrysomelid was first recorded for VC55 in 2018, then a string of records came in 2019 and 2020, almost exclusively from the Moira and Albert Village Lake area. The main host plant seems to be Alder, but has been found on Hazel, Silver Birch, Black Poplar and Willow. Larvae and adults can be found together on the same plant, often peppering the leaves with fine holes. the leaves. A rapidly spreading species, so really ought to be found throughout VC55.



Epitrix atropae Foudras 1860

Small, dark and shiny Chrysomelid with pale patches on the elytra, which can be variable and indistinct on some specimens. Found on Deadly Nightshade where the leaves are often peppered with tiny holes, giving away its presence. Deadly Nightshade is not a common plant in VC55, but should be investigated wherever found. At less than 2mm, they are tiny, but plants are usually infested making it easy to locate. Ketton, Bloody Oaks and Clipsham Quarries provide all 12 records so it is quite a restricted species, but there must be odd patches of this plant scattered throughout VC55 and all will be worth attention.



Malvapion malvae Fabricius 1775

Another small blackish weevil about 2mm with most of the elytra a dullish orange and overall, quite pubescent. Found mainly on Common Mallow, but can also be found on various *Malvaceae*, including garden varieties. There are only 13 records for this species, so a concentrated effort could significantly increase the known distribution. A couple of years ago I found a single very straggly plant growing at the base of a wall on a public footpath in Ratcliffe on the Wreake, which held several individuals.



Nanophyes marmoratus Linnaeus 1758

Again, a small dark weevil at 1mm to 2mm with pale patches on the elytra and obvious white pubescence. As with many species the colour and pattern can vary from individual to individual, note the geniculate "elbowed" antennae. Found on Purple Loosestrife in most wetland habitats. With a total of only 11 records the same applies here to the previous species, it just needs looking for.



Grypus equiseti Fabricius 1775

A much larger weevil species about 5mm to 6mm, chunkier and appearing rather pied or mottled, although sometimes can be much paler, also with geniculate antenna on a much longer rostrum. Found on Field Horsetail and Marsh Horsetail growing in wetland habitats. For some reason this species does not get recorded very frequently at all. Intermittent records up to 1992 then nothing until two records in 2014, another 2 records for 2017 and then just one record in 2020, bringing the total up to 24 records altogether.



Mogulones geographicus Goeze 1777

A very pretty and distinctive weevil, blackish with a pattern of fine white criss-crossing lines on the pronotum and elytra. A total of 7 reliable records and all from Ketton Quarry except for one record from Clipsham Quarry. Found exclusively on Viper's Bugloss, which again has quite a thin distribution in VC55. Photographs on NatureSpot suggest there are small patches of the host plant scattered throughout and these ought to be searched for this species.



Mogulones asperifolium Gyllenhal 1813

A small less than 3mm weevil but quite distinctive being blackish with a clear white patch of scales on each elytron. Found on a range of plants such as Comfrey spp. Forget-me-Nots spp. Vipers Bugloss and Hound's-tongue, so we have a few extra possibilities with this species. Even so we do not have that many records, 7 in total. The latest are one record for 2018 and two records for 2020, but then we have to go back to 1994 and 1987. I'm sure with a little effort we could significantly add many more records of this species.



Trichosirocalus barnevillei Grenier 1866

A smallish weevil at about 2mm, overall darkish brown with large white contrasting scales forming stripes and smaller patches on the pronotum and elytra. Found on Yarrow, but apparently a genuinely scarce species. We have 7 reliable records and most are well separated by dates and locations, so this could turn up anywhere.



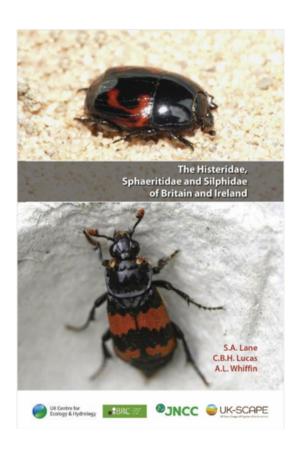
Zacladus geranii Paykull 1800

A smallish about 3mm dark plain weevil having the elytra covered in small but evident tubercles. With 28 records it has a fairly wide distribution in VC55, but it's another species that lends itself to host plant targeting and we could do with more records anyway. Found on the larger flowering Geranium spp. Especially Meadow Cranesbill, which is often found along roadside verges in fairly large swathes.



This is obviously by any means not an exhaustive list and numerous other species can be best sought by targeting the host plant. The selection above are reasonably easy to use for getting your eye in with, and every record will be very welcome and should add plenty of extra dots on the distribution maps. If targeting Ribwort Plantain, you will get a selection of *Mecinus pyraster*, *Mecinus pascuorum* and *Trichosirocalus troglodytes*. These are dealt with in CRS Newsletter no 5.

Also, just because a specimen is found on a particular plant, does not mean it will be the sort after species. Just about any species can be found on any plant, it's just that certain species will most likely be always found on certain plant species, and this gives us a chance to cash in on this opportunity.



Early 2021 saw the publication of The Histeridae, Sphaeritidae and Silphidae of Britain and Ireland. This is a superb publication with a brand-new set of keys to all 75 species. The keys are supplemented with photographs showing the relevant character that is needed to look for. The up to date distribution maps help to give an idea whether a species is likely to be found in our area.

An annotated Checklist to the Beetles of VC55



A $4^{\rm th}$ revised and updated version of the Checklist is now completed with over 3000 records of 584 species. I will post a pdf on the Facebook recording scheme site and also make it available to NatureSpot to replace the previous version.

Podagrica fuscicornis Linneaus 1767 (photograph GL Finch)