

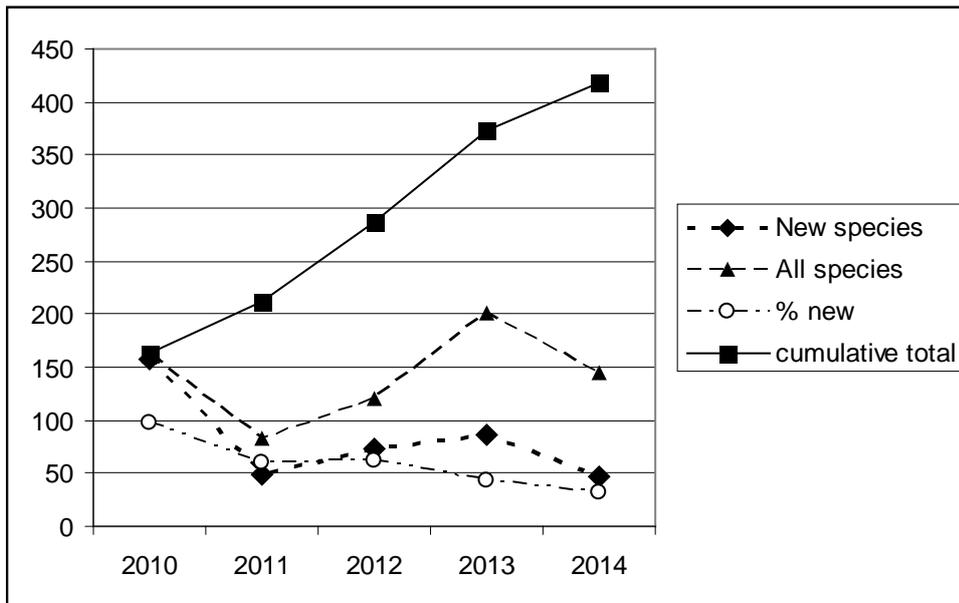
Report on beetles (Coleoptera) collected from the Dartington Hall Estate, 2014 by Dr Martin Luff

1. Introduction

I recorded numbers of species on 10 separate dates from April through to mid-November. A bad back prevented me from doing much field work from July until September, but I was able to resume collecting from October onwards. In mid June I was joined for a couple of days by Tony Allen the editor of the national 'Coleopterist' journal and one of our recording visits was to the Dartington Estate. I was also provided with the contents of the nest boxes from Dartington Hills and Berrymans Marsh at the end of October, thanks to Mike Newby and his volunteer helpers.

2. Results

A total of 144 beetle species from 35 families were recorded. Of these, 46 species were not recorded in my earlier lists (Luff, 2010-14). The overall number of species that I have recorded from the Estate is now 419, which is more than 10% of the entire British beetle fauna. The percentage of species new to the Estate list is gradually falling (see graph below) as the law of diminishing returns sets in, but still stands at nearly one third of all the beetles found.



The bird nest boxes yielded only nine species, fewer than last year. Three of these are new to the Estate, and the contents of the boxes seem to vary considerably from year to year. It was pleasing to record the continued presence in the nest boxes of the Nationally Notable A rove beetle *Quedius aetolicus*, first recorded from the Estate and new to south west England in 2011 (Luff, 2011b). I attended the first volunteer walkabout led by Mike Newby on 31st October, during which I collected a small sample of the thick moss growing on the Deer Park Wall within the woods near the river. This was amazingly productive, yielding 61 specimens of 20 species, including five that I had not previously recorded from the Estate (and including one new to me). More moss was collected in November, adding a further seven new species to the list. I have continued to sample the moss on the wall in early 2015, and intend to make this a particular longer-term study in more detail. Details of beetle species of local or even national importance are itemised below.

3. Notable species

Nine of the 'new in 2014' species are either listed as Nationally Notable or rarer in the JNCC Review of Scarce and Threatened Coleoptera (Hyman & Parsons, 1992, 1994), or are new to or notable in Devon. Details of these, in taxonomic order, are given below



Family: Histeridae

Paromalus flavicornis (Herbst, 1792). Notable in Devon.

Several specimens of this small black, predatory pill beetle occurred on 12th June under the bark of the standing dead ash trunk at the bottom of Road Meadow. It is not listed on G.H. Ashe's index of Devon beetles (dating from the 1960's), but there are three recent Devon localities for the species on the national Biodiversity (NBN) website, so its range may be spreading.

Family: Leiodidae

Parabathyscia wollastoni (Janson, 1857). 2nd record from Devon.

A minute, blind beetle usually recorded underground on rotting seed potatoes. There are no previous published Devon records and the only other local record known to me is from a buried rotten potato in my Totnes garden. Two specimens were found in the moss from the Deer Park Wall on 31st October. This would seem to be the only known occurrence of this species well above soil level!



Family: Scydmaenidae

Cephennium gallicum Ganglbauer, 1899. Notable in Devon.

Another very small species, found in litter and decomposing vegetation. There are only a handful of previous records from Devon. One was found in leaf litter in North Wood on 29th April.

Scydmaenus rufus Muller & Kunze, 1822. RDB2, Vulnerable. New to Devon.

This tiny beetle with long legs and prominent knees is only known from six counties in south east England, where it occurs rarely under bark and also in compost heaps. Several were found by Tony Allen and myself with *Paromalus flavicornis* on 12th June under the bark of the dead standing ash tree referred to above. Its occurrence in Devon is a significant extension of its known British range and a further example of the importance of the Dartington dead wood beetle fauna.



Family: Staphylinidae (rove beetles)



Brachygluta haematica (Reichenbach, 1816). Notable in Devon. Several specimens of this tiny red beetle (formerly in the family Pselaphidae) occurred in the Deer Park Wall moss in October and November. The species as previously recognised has recently been split into a complex of three species; their separation depends on small differences in the male secondary sexual characters and is not clear in the British fauna. I have compared the Dartington male specimens with those supposedly of all three species in the national collection in the Natural History Museum. Some of the Dartington specimens are certainly the true *B. haematica*. It is possible that others are the related *B. sinuata* (Aubé, 1833), but this is not yet certain and I may have to send them to the relevant European 'expert' (in Switzerland) for confirmation or otherwise.

Aleochara kamila Likovsky, 1984. New to Devon.

This rove beetle, a predator of fly larvae, is closely related to *A. stichai* Likovsky, which I recorded from the Estate in fungi in 2010 and from the nest boxes in 2013. In 2014 it seems to have replaced the latter species in the nest boxes, occurring in seven boxes and being the second most abundant beetle species in the boxes.



Family: Biphyllidae



Biphyllus lunatus (F., 1787). Notable in Devon.

A small, black hairy beetle with two pale patches of hair on the wing cases. It breeds in the black ash fungus *Daldinia concentrica*; several were found by Tony Allen and myself in fruiting bodies of this fungus on the same ash tree as the *Paromalus* and the *Scydmaenus* on 12th June.

Family: Colydiidae

Bitoma crenata (F., 1775). Notable in Devon.

Several specimens of this distinctive little beetle were found under the bark of the same ash tree on 12th June. It also occurred under the bark of fallen oak branches at the top of Road on 29th June. It is a predator of other invertebrates living under bark. There are no records of the species in G.H.Ashe's beetles, but there are eight Devon localities on the NBN website, so the species appears to have spread recently.



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Family: Apionidae (seed weevils)

Aspidapion radiolus (Marsham, 1802). Notable in Devon.

A small, metallic weevil that breeds in the seeds of Mallows. One was swept from vegetation by the river below Road Meadow by Tony Allen on 12th June. Most of the few Devon records are from the north of the County and it seems to be getting rarer.



4. General Remarks

Although my collecting was restricted during the height of the summer, the species list continues to grow, despite a reduction in the proportion of 'new' species. Further saproxylic species were found, especially on the dead standing ash tree at the bottom of Road Meadow. The prolific beetle assemblage in the Deer Park Wall moss will repay a more prolonged investigation. I hope in 2015 to pay more attention to this, as well as collecting on Berrymans Marsh, including the water beetle fauna of its ponds, which I have completely neglected so far.

5. Acknowledgements

I am indebted to John Channon for permission to collect on the Estate. I also owe sincere thanks as always to the warden Mike Newby as well as his volunteer helpers. The help of my friend Tony Allen in adding several species to the Dartington list was much appreciated.

The colour figures are from <http://www.colpolon.biol.uni.wroc.pl>, by kind permission of Lech Borowiec.

6. References Cited

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7. List of additional beetle species found in 2014

CARABIDAE

Leistus fulvibarbis
 Bembidion deletum
 Amara aenea
 Calodromius spilotus
 Syntomus obscuroguttatus

HYDROPHILIDAE

Cryptopleurum minutum

HISTERIDAE

Paromalus flavicornis

LEIODIDAE

Nargus velox
 Catops nigricans
 Catops tristis
 Parabathyscia wollastoni

SCYDMAENIDAE

Cephennium gallicum
 Scydmaenus rufus

STAPHYLINIDAE

Lesteva punctata
 Megarthrus prosseni
 Bythinus burrellii
 Bryaxis bulbifer
 Brachygluta fossulata
 Brachygluta haematica
 Amischa decipiens
 Amischa nigrofusca
 Alaobia trinotata
 Geostiba circellaris
 Datomicra nigra
 Atheta castanoptera
 Dimetrota cinnamoptera
 Aleochara kamila
 Carpelimus elongatulus
 Carpelimus rivularis
 Philonthus rotundicollis
 Tasgius ater
 Quedius umbrinus

LUCANIDAE

Sinodendron cylindricum

SCARABAEIDAE

Aphodius prodromus
 Agriotes sputator

CANTHARIDAE

Cantharis rufa

CRYPTOPHAGIDAE

Atomaria atricapilla
 Atomaria nitidula

BIPHYLLIDAE

Biphyllus lunatus

COLYDIIDAE

Bitoma crenata

CERAMBYCIDAE

Rhagium mordax

CHRYSOMELIDAE

Crepidodera plutus
 Oomorphus concolor

APIONIDAE

Ceratapion onopordi
 Aspidapion radiolus

CURCULIONIDAE

Strophosoma melanogrammum

March 15th 2015