

Scarabs of the Pipeline, 20 September 2008

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2008 was a year when I was especially busy on surveys in the Birmingham area and as a consequence, had neglected my duties to the Study Group (again!). A decline in activity eventually gave a window of opportunity for me to join members at John and Denise Bingham's fungus foray at Cleobury Woods.

With the deer rut almost upon us, I hoped we might see signs of some as the day unfolded. A fungus foray involves wide dispersal of mycologists and their acolytes through the target area and whilst this strongly reduces the chance of seeing actual animals, it greatly increases the chance of finding something of considerable value - dung! The day therefore turned out to be doubly valuable because we gleaned much of great interest from John and Denise with regard to fungi discovered and the mycologists were also able to shout 'dung' from their various locations which enabled me to examine some thirty different deposits during the day.

This particular search was for beetles associated with deer dung. I had decided that there would be little time to do detailed work because study of fungi had priority, so I would target larger beetles in this habitat. Another consideration in the search was that deer dung was unlikely to be tainted by veterinary products. The day had started in a promising way because familiar blue black 'dumble dor' beetles were abroad in numbers. Those examined turned out to be *Geotrupes stercorosus* - a smaller but extremely common insect, with larvae in a variety of different sorts of dung. All were found in a variety of places, none being associated with actual dung of any sort on this occasion.

The deer droppings for the most part contained few insects - *Cercyon* species were frequent but were not collected. In fact only one accumulation turned out to be profitable and its partially fragmented state was



an immediate clue that larger beetles had been busy. Earth and dung fragments at the mouth of underground excavations revealed not one but two species that had been on the day's agenda. Both were from the subfamily Scarabaeinae - true relatives of the famous Egyptian 'scarab' beetles, but dissimilar in that neither rolls dung about in balls on the surface.

The first find was *Onthophagus similes*. Smaller at some 7mm in length, this rather lovely insect with chequered fawn and black wing cases and greenish bronze reflections was a female. She burrows down and then sideways to make a series of short side chambers, each provisioned with dung and an egg. This species is not an uncommon insect to Worcestershire beetle hunters. John Meiklejohn and I found one at nearby Lembrook some years ago.

The other species is distinctly scarcer than it used to be - in fact it is likely that most members of the subfamily have suffered a serious decline in numbers in the past 50 years - of the 9 British species, only three are now likely to be found by the diligent hunter. It may well be that changes in veterinary practice have had a serious effect by rendering the dung of much domestic stock a poisonous trap for newly hatched larvae. That may be why we were fortunate to see *Onthophagus coenobita* because deer droppings are largely unaffected by human agency and the forest probably remains some sort of 'scarab sanctuary'. The beetle itself has rich brown wing cases with fewer dark dapplings and is larger. The male captured has a spectacular cephalic horn (see photograph) arising as an extension to the



rear of the head and is beset with dull bronze green reflections. It is peculiar amongst British scarabs in that it makes a vertical burrow only and then fills it with dung balls, each with an egg, rather like marbles in a smartie tube! Both species have a slight but distinctive sinuation of the pronotal margin just behind the anterior angles (see *O.similis* photograph). To my knowledge the beetles discovered use a variety of different animal dung as a larval substrate.

The day had been successful on both counts. We had encountered a diverse set of fungi thanks to the erudite leadership of John and Denise and I had obtained some evidence to back up the theory that places like the forest may well soon be the only refuge for certain specialized beetles that were once probably common on most of Britain's pastures.

REFERENCE

Jessop, L. 1986. Dung Beetles and Chafers (Coleoptera :Scarabaeoidea) Royal Entomological Society of London. Handbooks for the identification of British insects (new edition). Vol. 5 part 11. 53 pp.

A FOOTNOTE

The expedition on this day saw a very wide variety of wildlife. Included were some plant galls. The Tassel Gall (*Livia junctorum*) was spotted by the party as we moved through a damp area directly over the subterranean pipeline as the clearing rose towards the golf course.

Caused by a jumping plant louse (Homoptera :Psylloidea), these galls on *Juncus* sp. can be up to 8 cm in length, very conspicuous and with bright red tints. The picture shows the gall inset over the exact spot where it was found.

The scarabs mentioned earlier were found to the left side of the clearing. I am indebted to Malcolm Smart for supplying the photograph.

REFERENCE

Redfern, M. Shirley, P. & Bloxham, M. G. 2002. British Plant Galls: Identification of Galls on Plants and Fungi. Field Studies Council. 531 pp.



Cleobury Woods

Malcolm Smart