

The Insect Fauna, Hereford

FILE 641

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Summary

The 30 taxa of Coleoptera from a small sample of organic silt from the site are dominated by species which live in accumulations of decaying organic material including dung. Amongst the small number of plant feeding beetles are two which feed upon trees and shrubs and a further species which lives on duckweed, a pond plant. Most of the species would find suitable habitats in a rubbish dump composed of animal and vegetable refuse perhaps including stall or stable rubbish.

Faunal Extraction

Insects were recovered from the sample by the use of the paraffin flotation method described in Coope and Osborne (1967). Beetles were identified by direct comparison with the reference collections at the British Museum of Natural History.

Species List

The nomenclature follows Pope's 1977 revision of Kloet and Hincks and the totals given for each insect are based upon the minimum number of any common skeletal element.

COLEOPTERA

CARABIDAE

<u>Trechus obtusus</u> Er. or <u>quadristriatus</u> (Schr.)	1
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HYDROPHILIDAE

<u>Sphaeridium</u> sp.	1
<u>Cercyon unipunctatus</u> (L.)	2
<u>Cercyon</u> spp.	8

HISTERIDAE

<u>Gen. et spp. indet.</u> (larvae)	2
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HYDRAENIDAE

<u>Ochthebius</u> sp.	2
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STAPHYLINIDAE

<u>Carpelimus</u> or <u>Thinobius</u> spp.	22
<u>Anotylus rugosus</u> (F.)	2
<u>A.complanatus</u> (Er.)	1
<u>A.nitidulus</u> (Grav.)	2
<u>A.sculptus</u> (Grav.)	4
<u>Platystethus arenarius</u> (Geoff. in Fourc.)	2
<u>Bledius</u> sp.	2
<u>Stenus</u> spp.	3
<u>Xantholinus linearis</u> (Ol.) or <u>longiventris</u> Heer	2
<u>Philonthus</u> spp.	4
<u>Tachinus</u> sp.	1
<u>Falagria caesa</u> Er.	1
<u>Aleocharinae</u> <u>indet.</u>	25

SCARABAEIDAE

<u>Oxyomus sylvestris</u> (Scop.)	1
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DRYOPIDAE

<u>Dryops</u> sp.	1
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PDTINIDAE

<u>Tipnus unicolor</u> (Pill. and Mitt.)	2
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CRYPTOPHAGIDAE

<u>Cryptophagus</u> sp.	1
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LATHRIDIIDAE

<u>Corticaria punctulata</u> Marsh.	3
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CHYSOMELIDAE

<u>Chaetocnema concinna</u> Marsh.	1
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APIONIDAE

<u>Apion</u> sp.	4
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CURCULIONIDAE

<u>Tanysphyrus lemnae</u> (Payk.)	2
<u>Ceutorhynchus</u> sp.	1

SCOLYTIDAE

<u>Hylesinus olierperda</u> (F.)	1
<u>Phloeophthorus rhododactylus</u> (Marsh.)	1

DIPTERA

<u>Gen. et spp. indet.</u>	51
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HYMENOPTERA

<u>Parasitica indet.</u>	3
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Ecological Requirements of the Fauna

The largest faunal element, comprising Hydrophilidae, Histeridae, Staphylinidae and Scarabaeidae, signifies that decaying organic material, probably including dung, provided the most important habitat in the immediate vicinity. Tottenham (1954) notes that dung is an important habitat for species of Anotylus from the deposit. Oxyomus sylvestris, the single representative of the scarabaeidae family, is not, however, tied to dung and is more usually found in decaying vegetation (Joy 1932). The host plants of the phytophagous species provide an indication of the available vegetation cover. Apion sp. Ceutorhynchus sp. and Chaetocnema concinna live on a variety of low plants, the latter often being found on Polygonum. The Scolytidae, however, are tree and shrub feeders. Ash is the host tree of Hylesinus olierperda, (Duffy 1953) and Phloeophthorus rhododactylus lives on broom and gorse. Tanysphyrus lemnae feeds on duckweed, a plant which forms a mat on the surface of ponds or slowly flowing streams.

Although the significance of such a small fauna must be questioned, the deposit may have accumulated as refuse possibly near an open area.

References

- Coope, G.R. and Osborne, P.J. (1967) Report on the Coleopterous Fauna from the Roman Well at Barnsley Park, Gloucestershire. Trans. Brist. and Gloucs. Arch. Soc., 86, 84 - 87.
- Duffy, A.E.J. (1953) Scolytidae and Platypodidae, Handbooks for the Identification of British Insects. Royal Entomological Society: London.
- Joy, N.H. (1932) A Practical Handbook of British Beetles, Witherby: Edinburgh.
- Tottenham, C.B. (1954) Staphylinidae, Handbooks for the Identification of British Insects. Royal Entomological Society: London.

HEREFORD Medieval

One grain Wheat Triticum sp.

J.R.B.Arthur.

<u>Ranunculus acris</u> L.	Meadow buttercup	8 achenes
<u>R.sp.</u>		4 achenes too eroded for identification
<u>Papaver rhoes</u> L.	Red poppy	31 seeds
<u>P.argemone</u> L.	Long prickly-headed poppy	21 seeds
<u>Agrostemma githago</u> L.	Corn cockle	2 seeds
<u>Stellaria media</u> (L) Mill.	Chickweed	1 seed
<u>S.graminea</u> L.	Lesser stitchwort	4 seeds
<u>Chenopodium album</u> L.	Fat hen	12 seeds
<u>Polygonum aviculare</u> L.	Redshank	5 achenes
<u>P.hydropiper</u> L.	Water pepper	9 achenes
<u>Rumex conglomeratus</u> Murr.	Sharp dock	9 achenes + 2 fruits
<u>R.crispus</u> L.	Curled dock	1 achene
<u>Euphorbia exigua</u> L.	Dwarf spurge	15 seeds
<u>Urtica dioica</u> L.	Stinging nettle	5 achenes
<u>Sambucus nigra</u> L.	Elderberry	1 seed
<u>Epilobium</u> sp.	Willow herb	1 seed
<u>Rubus</u> sp.	Blackberry	4 achenes
<u>Aphanes arvensis</u> Scop.	Parsley pierce	5 achenes
<u>Potentilla sterilis</u> (L)	Gaercke. Barren strawberry	1 achene
<u>Malva neglecta</u> Wallr.	Dwarf mallow	1 seed
<u>Galeopsis tetrahit</u> L.	Hemp nettle	3 nutlets
<u>Prunella vulgaris</u> L.	Self heal	2 nutlets
<u>Lycopus europaeus</u> L.	Gipsywort	1 nutlet
Lamiaceae family		2 unidentifiable nutlets
<u>Betonica officinalis</u> L.	Betony	1 nutlet
<u>Anthemis cotula</u> L.	Stinking mayweed	126 achenes
<u>A.arvensis</u> L.	Corn chamomile	9 achenes
<u>Lapsana communis</u> L.	Nipplewort	4 achenes
<u>Leontodon hispidus</u> L.	Hawkbit	3 achenes
<u>Juncus</u> sp.	Rush	9 seeds
<u>Carex flacca</u> Schreb.	Glaucous heath sedge	3 achenes
<u>C.divulsa</u> Stokes	Grey sedge	3 achenes
<u>C.sylvatica</u> Huds.	Wood sedge	3 achenes

P.J.Paradine

J.R.B. 11/11