

**THE INVERTEBRATE FAUNA FROM BATCH 1 [299] {11} C257 CROSSRAIL  
CENTRAL – BROADGATE TICKET HALL EVALUATION, LONDON EC2, CITY OF  
LONDON (XSM10)**

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# THE INVERTEBRATE FAUNA FROM BATCH 1 [299] {11} C257 CROSSRAIL CENTRAL – BROADGATE TICKET HALL EVALUATION, LONDON EC2, CITY OF LONDON (XSM10)

## 1. Introduction and methodology

Wet-sieving and flotation of bulk samples from XSM10 yielded seven samples; [231] {7}, [237] {2}, [239] {3}, [244] {9}, [283] {10}, [299] {11} and [314] {14} showing diverse terrestrial and freshwater invertebrate faunas. Visual inspection, using a binocular microscope, indicated that sample [299] {11} provided the largest assemblage, several thousand mollusc shells, mainly of freshwater species, with the other samples including smaller numbers of some or all of the same species. For sample [299] {11}, preliminary identifications were made in an attempt to establish faunal composition and to determine the potential for further identification to species level to provide useful ecological information. Preliminary identification followed Cameron & Redfern 1976; and Macan 1977. This short report summarises the molluscan fauna for this sample in terms of the number of identifiable species present, although identification to species or genus level was only done when the remains were particularly visually distinctive. Table 1 shows all identifiable species for each sample.

## 2. The fauna

Sample [299] {11} produced a diverse invertebrate fauna composed of terrestrial and freshwater molluscs.

Terrestrial molluscs provided less than 1% of the shell count. Glass snail *Oxychilus sp* is a terrestrial mollusc abundant and widespread in moist, sheltered habitats throughout southern Britain (Kerney 1990, 143-6). Whorl snail *Vertigo sp*, probably marsh whorl snail *Vertigo vertigo*, is a lowland wetland species mainly avoiding places with marked fluctuations in water level (Kerney 1990, 92). Amber snails in the family Succineidae are widespread wetland species found in damp, sheltered conditions throughout lowland Britain; they are virtually amphibious and able to tolerate long periods of submersion (Kerney 1990, 75-9).

Freshwater species provided the bulk, at least 99%, of the shell count, of the mollusc fauna. They derived mainly from at least eight species of ram's-horn snails Planorbidae and three species of pond snails Lymnaeidae. The pond snails mainly included dwarf pond snail *Lymnaea truncatula* with smaller numbers of two other species, probably common/wandering pond snail *Lymnaea peregra* and marsh pond snail *Lymnaea palustris*. Dwarf pond snail inhabits marshy grassland and shallow ephemeral ponds (Kerney 1990, 51); common/wandering pond snail is ubiquitous in freshwater habitats of all kinds (Kerney 1990, 56); marsh pond snail is a mainly lowland species living in stagnant or slowly moving water including those liable to summer drying (Kerney 1990, 53).

In addition, moss bladder snail *Aplexa hypnorum* was also identified; this is a small species typical of swampy pools and ditches and able to survive periodic desiccation (Kerney 1999, 48).

Both the Planorbidae and Lymnaeidae show considerable *inter*-specific differences in terms of their ecological requirements.

Preliminary examination produced no ostracod valves.

*Table 1: Wet-sieved/floated Invertebrates from XSM10 [299] {11}/preliminary identifications*

## 3. Potential for further work

Identification of all mollusc species in samples [231] {7}, [237] {2}, [239] {3}, [244] {9}, [283] {10}, [299] {11} and [314] {14} will allow interpretation of ecological conditions indicated by each sample, particularly in terms of vegetation, water flow, water quality and liability to seasonal desiccation, and will clearly highlight any ecological differences between the sample groups. Identification will follow Cameron & Redfern 1976; and Macan 1977. Ecological interpretation will follow Davies 2008; and Kerney 1990.

#### **4. Bibliography**

Cameron, R A D, & Redfern, M, 1976 British land snails  
*Linnean Society of London synopses of the British fauna no.6*

Davies, P, 2008 *Snails: archaeology and landscape change*  
Oxford. Oxbow Books

Kerney, M, 1999 *Atlas of the land and freshwater molluscs of Britain and Ireland*  
Colchester. Harley Books

Macan, T T, 1977 A key to the British fresh- and brackish-water gastropods  
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#### **5. Table**

*Table 1: Wet-sieved/floated Invertebrates from XSM10 [299] {11}/preliminary identifications*