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A SURVEY OF THE AQUATIC MACROINVERTEBRATES OF THE PORT GREENWICH GAS BOARD DITCH

A REPORT TO ALCONBURY ENVIRONMENTAL CONSULTANTS

POND ACTION

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1. SUMMARY AND INTRODUCTION

This report describes the results of an aquatic macroinvertebrate survey of the Port Greenwich Gas Board ditch (TQ 39847863 - TQ 39847883), which is situated on the site of a proposed land development project.

The survey indicates that the nature conservation value of the aquatic macroinvertebrate community of the ditch was low. The potential of the ditch and the adjacent reed bed for aquatic macroinvertebrates under the present management regime is also low.

2. METHODS

Survey work was undertaken on 4 June 1990.

On the day of survey the ditch had no open water though some saturated mud and litter was present. The only free water on the site was in a large drum dumped in the ditch.

The mud and litter was searched briefly on site for macroinvertebrates. Samples of the mud (approximately 6 litres in total) were removed from various parts of the site and returned to the laboratory.

The water in the metal drum was searched with a pond net, macroinvertebrates being identified on site or preserved in 70% industrial methylated spirits for identification at a later date.

In the laboratory the sample of mud was washed and all macroinvertebrates removed and identified.

The groups of macroinvertebrates which were surveyed for are listed in Appendix 4.1. All these groups, when recorded, were identified to species where possible. A list of the keys and guides used in identification of these macroinvertebrate groups is given in section 5.

3. THE AQUATIC MACROINVERTEBRATE COMMUNITY OF THE DITCH

3.1 Description of the macroinvertebrate community of the ditch.

The community of the ditch was extremely species poor, a total of 5 species being recorded (Appendix 4.2). All these species are common. In addition, to these species, many shells of Lymnaea peregra (the wandering snail) were found. The lack of snail shells of any other species indicates that the ditch is likely to have dried out in 1989 as well as this year.

3.2 Conservation value of the aquatic macroinvertebrate community.

With only a small number of common macroinvertebrate species, the value to conservation of the aquatic macroinvertebrate community is low.

3.3 Potential of the site for aquatic macroinvertebrates.

The survey results indicate that the potential of the site for aquatic macroinvertebrates is low.

Further survey work, earlier in the year, when water was present in the ditch, would have led to more species being recorded than were found in the present survey. Seasonal water bodies, especially when long established, may support species of high conservation value. However, the present condition of the site and its history suggest that any extra species found during a spring survey would be common and not require any special conservation measures.

APPENDIX 4.1. GROUPS OF MACROINVERTEBRATES SURVEYED

GROUPS IDENTIFIED TO SPECIES LEVEL

Tricladida (Flatworms) Hirudinea (Leeches) Gastropoda (Snails and limpets) Bivalvia (excluding Pisidium spp.) (Bivalves) Malacostraca (Shrimps and slaters) Ephemeroptera (Mayflies) **Odonata** (Dragonflies and damselflies) Heteroptera (Water bugs) Plecoptera (Stoneflies) Megaloptera (Alderflies) Trichoptera (Caddis-flies) *Coleoptera (Water beetles)

*Adults from the following families of Coleoptera were surveyed: Gyrinidae, Haliplidae, Dytiscidae, Elmidae, Hydraenidae, Hydrophilidae, Noteridae.

APPENDIX 4.2 AQUATIC MACROINVERTEBRATES RECORDED IN THE DITCH

MALACOSTRACA (shrimps and slaters)

Asellus aquaticus Orchestia cavemana (to be confirmed)

HEMIPTERA (bugs)

Notonecta sp. (nymphs)
Gerris sp. (nymphs)

COLEOPTERA (beetles)

Agabus bipustulatus Anacaena limbata Hydroporus palustris Haliplidae (larvae)

DIPTERA (true flies)

Chironomidae (larvae) Culicidae (larvae) Muscidae (larvae)

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