Aseda Bulletin

Aquatic Surveying and Environmental Data Analyses

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ASEDA specialises in freshwater ecological surveys for conservation assessment; to monitor impacts; assess damage or recovery, flow requirements, nutrient enrichment or chemical contamination.

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The aquatic macroinvertebrate assemblages of grazing-marsh ditch networks.

Principal project collaborators in this issue:

AVON WILDLIFE TRUST

Over a three-year period an extensive survey of the aquatic macroinvertebrate assemblages within the North Somerset Levels and Moors ditch network is being undertaken. This work is part of Avon Wildlife Trust's North Somerset Wetland Programme. This project aims to better understand the biodiversity of the ditch network (known locally as rhynes) and associated wetlands; to identify vulnerable areas and those in need of restoration.

Typical rhyne within the North Somerset Levels and Moors with rich marginal habitat.

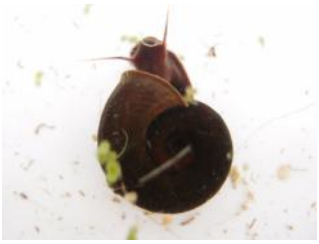
Within the ditch network there is considerable variation in extent and diversity of marginal and in-channel vegetative habitat reflecting ditch management practices.

Partially scrubbed and overgrown rhyne habitat.

The aquatic macroinvertebrate assemblages reflect the variability in both abiotic and biotic habitat quantity and quality.

Species-rich aquatic beetle and mollusc assemblages are typical of grazing marsh habitats.

The Great Diving Beetle *Dytiscus marginalis* observed from one of the rhynes.



The Great Ram's-horn snail *Planorbarius corneus* a common resident of the ditch network.

Several species of conservation concern have been recorded from the ditch network, principally water beetles e.g., the Great Silver Diving Beetle *Hydrophilus piceus* and the King Diving Beetle *Dytiscus dimidiatus*. Both of these species are defined as being Near Threatened; principally due to the loss of traditional grazing fen habitat.

The Great Silver Diving Beetle *Hydrophilus piceus* observed from one of the rhynes.