SITE SYNOPSIS

SITE NAME: MURPHY'S BRIDGE ESKER

SITE CODE: 001775

This elongated gravel ridge is a feature of glaciation. It was formed under the ice mass which covered the Irish Midlands during the last Ice Age. The ridge runs in a north-east/south-west direction, and is bisected by the Grand Canal approximately 7km north-east of Tullamore. The site is contiguous with Rahugh Esker.

The land cuts through the esker, just north of Murphy's Bridge. In this area, exposed gravel slopes support patches of dry calcareous grassland vegetation which is remarkably species-rich. Yellow-wort (*Blackstonia perfoliata*), Carline Thistle (*Carlina vulgaris*), Burnet-saxifrage (*Pimpinella saxifraga*), Weld (*Reseda luteola*), Goldenrod (*Solidago virgaurea*), Field Scabious (*Knautia arvensis*) and Crested Hair-grass (*Koeleria macrantha*) are among the plants which occur here. Two aromatic herbs also occur, namely Marjoram (*Origanum vulgare*) and Wild Garden (*Thymus polytrichus*). Irish Whitebeam (*Sorbus hibernica*) bushes are scattered on the open slopes. This species occurs only occasionally throughout the country but mostly in the Midlands.

Elsewhere, the esker supports broadleaved woodland, while in some places this has been cleared for pasture. These habitats require further examination/survey.

The rare and legally protected Red Hemp-nettle (*Galeopsis angustifolia*) (Flora Protection Order, 1999) has recently been recorded in this site. This species grows on eskers in arable fields and in waste places. It has been recorded at only seven sites in four counties in the Republic since 1970. Another rare plant, Blue Fleabane (*Erigeron acer*) grows on this site with Red Hemp-nettle. This plant favours calcium-rich substrates and is found on eskers, dry grassland, sandy pastures and walls. It is listed in the Red Data Book and is considered threatened in Ireland.

The majority of Irish eskers are exploited for their sand and gravel deposits. Quarrying results in the removal or destruction of esker habitats and threatens the survival of the plants which grow there. Application of fertiliser and/or herbicide to improve esker grasslands for agricultural use is a common practice. This activity leads to removal of the semi-natural vegetation and has been deemed a major factor in the decline of a range of plant species now rare in Ireland. Removal of timber leads to the depletion of esker woodlands, while over-grazing by sheep/cattle can prevent tree regeneration and cause damage to grassland vegetation.

Just east of the canal at this stage, the gravel slopes are used for motorbike scrambling. This maintains the open, loose-gravel slopes which seem to be attractive to many plants, although over-use of the slopes could cause damage. This particular area is owned by the Office of Public Works (OPW) and there is the potential for developing a management strategy which is compatible with the conservation of the habitat.

Intact eskers are increasingly rare in Ireland. This site remains a good example of its type and has a range of habitats present. Of particular interest is its rich calcicole flora on exposed gravel slopes, which includes two rare species, one of which is protected by law.

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