SITE SYNOPSIS

SITE CODE: RYE WATER VALLEY/CARTON

SITE CODE: 001398

This site is located between Leixlip and Maynooth. It extends along the Rye Water, a tributary of the R. Liffey.

The Rye Water in Carton Estate is dammed at intervals, creating a series of lakes. Reed Grass (*Glyceria maxima*) is frequent around the lakes, along with Yellow Flag (*Iris pseudacorus*), Reed Canary-grass (*Phalaris arundinacea*), Bulrush (*Typha latifolia*), Water Forget-me-not (*Myosotis scorpioides*), Marsh Marigold (*Caltha palustris*) and Starwort (*Callitriche* spp.). Along the remainder of the site the river has recently been dredged and much of the Reed fringe removed.

To the north-west of Carton Bridge a small clump of Willows (*Salix* spp.), with Dogwood (*Cornus* sp.) some Alder (*Alnus glutinosa*), Ash (*Fraxinus excelsior*) and Elder (*Sambucus nigra*) occurs. The ground flora found here includes Golden Saxifrage (*Chrysosplenium oppostifolium*), Meadowsweet (*Filipendula ulmaria*), Common Valerian (*Valeriana officinalis*), Wavy Bitter-cress (*Cardamine flexuosa*) and Bittersweet (*Solanum dulcamara*).

The woods on Carton Estate are mostly old demesne woods with both deciduous and coniferous species. Conifers, including some Yew (*Taxus baccata*) are dominant, with Beech (*Fagus sylvatica*), Oak (Quercus sp.), Sycamore (*Acer pseudoplatanus*), Ash and Hazel (*Corylus avellana*) also occurring. The ground flora is dominated by Ivy (*Hedera helix*) with such species as Hedge Woundwort (*Stachys sylvatica*), Wood Speedwell (*Veronica montana*), Woodruff (*Galium odoratum*), Wood Avens (*Geum urbanum*), Common Dog- violet (*Viola riviniana*), Wild Angelica (*Angelica sylvestris*), Ramsons (*Allium ursinum*), Ground-ivy (*Glechoma hederacea*) and Ivy Broomrape (*Orobanche hederae*) also occurring.

Hairy St. John's-wort (*Hypericum hirsutum*), a species legally protected under the Flora Protection Order (1987), occurs in Carton Estate; there is an old record from the estate for the similarly protected, Hairy Violet (*Viola hirta*), but this has not been recorded from here in recent years. Another species listed in the Red Data Book, Green Figwort (*Scrophularia umbrosa*), occurs on the site in several locations by the Rye Water. The woods at Carton Demesne are the site of a rare Myxomycete fungus, *Diderma deplanatum*.

Within the woods, Blackcap, Woodcock and Long-eared Owl have been recorded. Little Grebe, Coot, Moorhen, Tufted Duck, Teal and Kingfisher, the latter a species listed on Annex I of the EU Birds Directive, occur on and about the lake.

The marsh, mineral spring and seepage area found at Louisa Bridge supports a good diversity of plant species, including Stoneworts, Arrowgrass (*Triglochin palustris*), Purple Moor-grass (*Molinea caerulea*), Sedges (*Carex* spp.), Common Butterwort

(Pinguicula vulgaris), Marsh Lousewort (Pedicularis palustris), Grass-of-parnassus (Parnassia palustris) and Cuckooflower (Cardamine pratensis). The mineral spring found at the site is of a type considered to be rare in Europe and is a habitat listed on Annex I of the EU Habitats Directive. The Red Data Book species Blue Fleabane (Erigeron acer) is found growing on a wall at Louisa Bridge. The Rye Water is a spawning ground for Trout and Salmon, and the rare, White-clawed Crayfish (Austropotamobius pallipes) has been recorded at Leixlip. The latter two species are listed on Annex II of the EU Habitats Directive. The semi-aquatic snails Vertigo angustior and V. moulinsiana occur in marsh vegetation near Louisa Bridge; both are rare in Ireland and Europe and are listed on Annex II of the EU Habitats Directive. The scarce Dragonfly, Orthetrum coerulescens, has been recorded at Louisa Bridge.

The main importance of the site lies in the presence of several rare and threatened plant and animal species, and of a rare habitat, thermal, mineral, petrifting spring. The woods found on Carton Estate and their birdlife are of additional interest.