SITE SYNOPSIS

SITE NAME: CURRAGH (KILDARE)

SITE CODE: 000392

The Curragh is an extensive open plain which lies about 3km south west of Newbridge in Co. Kildare. It is bisected by the M7/N7 motorway and a railway line. The Curragh Camp and Curragh Racecourse are located within the plain. The site extends for some 10km in a north-west/south-east direction and is approximately 5km at its widest. The town and most of the racecourse are not included in the site.

The solid geology of the area consists of limestone bedrocks. Overlying this are quaternary deposits. Glacial and glaciofluvial (glacial meltwater) deposits are generally very thick in the Curragh, usually 20-70m. This over-burden forms part of what is known as the Mid-Kildare or Curragh Aquifer. In addition to groundwater flow from the aquifer, the principal surface discharges includes the River Liffey, the Tully Stream, the wetlands east of Monasterevin and the Milltown Feeder which supplies both Pollardstown Fen and the Grand Canal.

Lowland acid grassland is the dominant habitat at the site. There is, however, variation in the grassland which is due in part to the soil variation and to the grazing regime. The grasslands on level ground are continually grazed throughout the year. Leaching takes place, which further depletes the nutrient levels. Typically-occurring species include an abundance of Common Bent (*Agrostis capillaris*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Sheep's-fescue (*Festuca ovina*) and Field Wood-rush (*Luzula campestris s.l.*). Spring-sedge (*Carex caryophyllea*) occurs throughout. In some areas, notably to the north and south of the town and in the north-west, Marsh Thistle (*Cirsium palustre*) is abundant. Mat-grass (*Nardus stricta*), usually associated with over-grazed upland acidic grassland, occurs in the wet areas west of the racecourse but also at the south of the site near the gallops. Throughout the unfertilised grasslands, surface acidification is reflected in the abundance of such mosses as *Rhytidiadelphus squarrosus* and *Pseudoscleropodium purum*. The Red Data Book species, Blue Fleabane (*Erigeron acer*) has been found within the site.

Small areas of wet heath are found throughout the site, but especially west of the racecourse. These have been found to be associated with a perched water table. Species found throughout most of the patches, include Purple Moor-grass (*Molinia caerulea*), which is dominant, small amounts of Heather (*Calluna vulgaris*), Mat-grass (*Nardus stricta*), Heath Rush (*Juncus squarrosus*), Soft Rush (*J. effusus*) and lichen species (*Cladonia* and *Peltigera* spp.). Several species of sedge (*Carex* spp.) also occur – *Carex panicea, C. nigra, C. binervis, C. hostiana, C. pilulifera, C. echinata*, and locally there are stands of Common Cottongrass (*Eriophorum angustifolium*). Mosses found here include *Sphagnum capillifolium, Polytrichum commune, Aulacomnium palustre, Hypnum jutlandicum, Rhytidiadelphus squarrosus, Hylocomium splendens, Pleurozium schreberi, Pseudoscleropodium purum, Thuidium tamariscinum* and *Dicranum scoparium*. This is a particularly rare community at lowland levels in the east of the country. Associated with the wet heath, but also occurring elsewhere, are semi-permanent pools supporting oligotrophic vegetation, including such species as Water-purslane (*Lythrum portula*), Intermediate Water-starwort (*Callitriche cf. hamulata*), Bulbous Rush (*Juncus bulbosus*) and several species of *Sphagnum* moss, including *S. auriculatum* var. *inundatum*, *S.*

auriculatum var. *auriculatum* and *S. recurvum*. The presence of these is particularly unusual in a lowland situation.

At the east of the site, in the vicinity of the gravel and till mounds at Rabbit Hill, at Donnelly's Hollow and in the extreme east of the Military Ranges, the grassland of the slopes is very nutrient-poor and the soil layer is extremely shallow. Species diversity is quite high. The area known as Donnelly's Hollow appears to be situated in a disused gravel pit. A diverse range of species occurs on the steep slopes and includes Wild Thyme (*Thymus praecox*), Yarrow (*Achillea millefolium*), Fairy Flax (*Linum catharticum*), Mouse-ear Hawkweed (*Hieracium pilosella*), Selfheal (*Prunella vulgaris*), Autumn Hawkbit (*Leontodon autumnalis*), clover (*Trifolium* spp.), Ribwort Plantain (*Plantago lanceolata*) and a wide range of mosses including *Thuidium tamariscinum, Ctenidium molluscum, Brachythecium rutabulum, Hypnum cupressiforme, Ditrichum flexicaule, Climacium dendroides* and *Homalothecium lutescens.*

Dry Heath of the *Ulex* formation covers approximately 10-20% of the site and is associated mainly with the undulating hills within the site. West of the motorway and on the approximately 800ha of racecourse property there are bands of dry heath which support Heather (*Calluna vulgaris*), Heath Spotted-orchid (*Dactylorhiza maculata*), Common Twayblade (*Listera ovata*) and butterfly orchids (*Platanthera* spp.). Other species found include Tufted Hair-grass (*Deschampsia cespitosa*), Heath Bedstraw (*Galium saxatile*), Heath-grass (*Danthonia decumbens*), Tormentil (*Potentilla erecta*) and Sheep's-fescue (*Festuca ovina*).

There is succession to scrub taking place especially at the perimeter. Hawthorn (*Crataegus monogyna*) and Bramble (*Rubus fruticosus* agg.) are present with very occasional Sycamore (*Acer pseudoplatanus*), Elder (*Sambucus nigra*), willow (*Salix* spp.) and Ash (*Fraxinus excelsior*) saplings.

The site is most unusual in an Irish, European and even global context, in that it is an extensive open plain area of lowland acid grassland, succeeding to dry heath in places. It has been grazed but unfertilised for hundreds, perhaps even thousands of years. Because of the management regime on the open grassland, nationally important populations of rare fungi are found. Their presence best highlights the continuity of the area as a grazed, unfertilised grassland for centuries, as these fungi cannot tolerate soil disturbance or fertilising. They are only found in ancient grasslands.

The fungi present include Agaric species belonging to the genera *Hygrocybe, Entoloma* and *Dermoloma,* plus the so-called Fairy Clubs (Clavariaceae) and the Earthtongues (Geoglossaceae). Some twenty species of *Hygrocybe* have been recorded from the site, making the site of at least national importance. *Hygrocybe* grasslands appear to have disappeared from much of Europe as a result of intensive farming practices. Any mechanical disturbance such as ploughing or the addition of phosphates or nitrates would be extremely damaging to the fungal flora of the site.

The Curragh is also of ornithological importance. It supports populations of wintering Golden Plover, a species that is listed on Annex I of the E.U. Birds Directive - flocks of 3000 birds have been recorded regularly since the winter of 1994/95. Lapwing, in flocks of approximately 200 birds, also occur regularly on the site. The ungrazed grasslands of the Turf Club are used by nesting Meadow Pipit and Skylark. Irish Hare, a Red Data Book species, was plentiful on The Curragh in the 17th and 18th centuries – it still uses the site.

Landuse at the Curragh consists of sheep grazing on the open plains commonage. Supplementary feeding and driving of vehicles on the open grasslands is associated with this activity. Horse exercising and training is carried out on the many gallops within the site as well as on the open grasslands. The presence of gallops results in a continuous concentration of fertiliser to the plains. During the wet weather severe poaching by horses occurs. There is also the associated development of roads and tracks close to the gallops leading to fragmentation and loss of plains. There is a military range at the south-east of the site where target practice is regularly carried out. Military manoeuvres are carried out on Rabbit Hill and this has also resulted in damage. There has been planting of coniferous and non-native deciduous species along many of the roads of the Curragh and there are occasional afforested patches on the open plains. Other activities include walking, running and general family outings. There are unmarked sports pitches north of the town. The town, school outside the town, sewage treatment plant, sheep-dipping station at the edge of the site, part of the Turf Club property, two golf courses and three pitch and putt courses have been excluded from the site.

The Curragh possesses a unique and somewhat intangible landscape quality, albeit somewhat compromised by various developments such as the military camp, racecourse complex, railway, motorway and power lines. Despite these the site is of considerable natural heritage significance, for the diversity of habitats, plants, fungi and animals that it supports.

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