



Site Name: Moyree River System SAC

Site Code: 000057

The Moyree River is situated in a sheltered valley on the south-eastern fringe of the Burren, Co. Clare. Ballyvaughan Lough lies to the north of Moyree, with Dromore Woods and Lough to the south-west. The slow-moving river meanders through a low-lying valley sheltered on the east by gently sloping limestone outcrops and Ash (*Fraxinus excelsior*)-Hazel (*Corylus avellana*) woodland, and to the west by low, undulating drumlin hills. The soil in the valley may be broadly classed as gley type with alluvial soils, fen peat and marl present also. The river flows in a south-westerly direction and ultimately disappears underground. The depth of the stream is on average 1.5 m (0.3-2 m). The site includes a number of other habitat types, including fen, limestone pavement, caves and alluvial woodland.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[3260] Floating River Vegetation
[7230] Alkaline Fens
[8240] Limestone Pavement*
[8310] Caves
[1303] Lesser Horseshoe Bat (<i>Rhinolophus hipposideros</i>)
[1355] Otter (<i>Lutra lutra</i>)

Where the stream first emerges, a small, relatively eutrophic area of floodplain grassland is developed over alluvial soils. Further downstream the soils are fen peat and marl, and fen vegetation dominated by the Black Bog-rush (*Schoenus nigricans*) occurs within the floodplain of the river. The stream is bordered by floating scraw, and pool areas, and eroding and accumulating banks and meandering stretches occur. Tall Reeds (*Phragmites australis*) fringe the river; the open water supports Yellow Water-lily (*Nuphar lutea*), Bogbean (*Menyanthes trifoliata*) and Common Duckweed (*Lemna minor*).

Low Hazel has developed over much of the limestone pavement area south-east of the river. Bare limestone pavement interspersed with species-rich calcareous grassland occurs regularly to the south. Common species found here include Burnet Rose (*Rosa pimpinellifolia*), Wood Sage (*Teucrium scorodonia*), Blue Moor-grass (*Sesleria albicans*), with occasional Juniper (*Juniperus communis*) scattered throughout.

Rathvergin Wood, at the southern end of the site, is a large area of Ash-Hazel woodland (c. 40 ha). The north-eastern part of this woodland consists of a mosaic of open limestone pavement, under-grazed calcareous grassland, scrub and woodland, with more mature woodland occurring to the south-west. The canopy of the mature woodland is 7-11 m high and dominated by Hazel, with emergent Ash (13 m high). Hawthorn (*Crataegus monogyna*) is frequent in the canopy, and there are abundant saplings of this species, along with Blackthorn (*Prunus spinosa*) and Spindle (*Euonymus europaeus*), in the understorey. Rusty willow (*Salix cinerea* subsp. *oleifolia*) is frequent along the river. The diverse field layer occurs, and notable species include Woodruff (*Galium odoratum*), Wood Melic (*Melica uniflora*), Toothwort (*Lathraea squamaria*), Goldilocks Buttercup (*Ranuncula auricomus*), Adder's-tongue (*Ophioglossum vulgatum*) and Broad-leaved Helleborine (*Epipactis helleborine*). At the southern end of the wood, just before the Moyree River goes underground, a margin of alluvial woodland occurs. In places it consists of a narrow fringe only a few metres wide, but at the southern end the river floods more extensively into the woodland. Additional species here include Buckthorn (*Rhamnus catharticus*) and Guelder-rose (*Viburnum opulus*). The herb layer includes extensive carpets of Wood Anemone (*Anemone nemorosa*) and Lesser Celandine (*Ranunculus ficaria*), with Marsh-marigold (*Caltha palustris*) and Water Horsetail (*Equisetum fluviatile*) in more open sites.

This site is an internationally important summer roosting and hibernation site for Lesser Horseshoe Bat, a species listed in Annex II of the E.U. Habitats Directive. The bats hibernate in a series of natural limestone river caves in the site. The caves are short, low and wet passages that have developed on the water table below limestone ridges. Several other mammal species frequent the Moyree River valley, including Otter and Pine Marten. Both of these species are listed in the Red Data Book as threatened in Europe, and the Otter is listed on Annex II of the E.U. Habitats Directive. The secluded nature of the river valley is ideal for sheltering wildfowl, especially Teal and Mallard. The rare Hen Harrier is a regular visitor to the area.

The site is threatened, to varying degrees, by agricultural intensification, including the effects of water pollution, fertilisation, over-grazing and land reclamation. Afforestation also threatens the integrity of the site. The bats are particularly vulnerable to disturbance and to rock falls which might block the entrances to their roosting/hibernation site. Rathvergin Wood is grazed by horses occurs, but pressure on the vegetation is low.

This site is of international importance owing to the presence of a colony of Lesser Horseshoe Bats in a network of underground caves. The Irish population of 12,000 animals is thought to be the largest national population in Europe. After the Caher River in the north-west Burren, the Moyree River is the best example of a karstic river in the country. The floating scraw vegetation is unusual as this type of habitat is normally destroyed by dredging operations. The river exhibits an excellent example of nutrient gradients associated with silt deposition. Fine examples of typical Burren habitats including limestone pavement, a priority habitat on Annex I of the E.U. Habitats Directive, and its associated calcareous grasslands, are also of major conservation significance.