Twywell Gullet is one of the few remaining worked out ironstone quarries in Northamptonshire. It consists of a deep, narrow cutting, sloping banks and terraces and a series of old spoil heaps. The whole area has become vegetated over and is now probably the best example of its kind in the county. These areas present a range of habitats, from extensive limestone grassland on the slopes and spoil heaps to a series of ponds and scrub in the bottom of the cutting.

The grassland closely resembles the *Bromus erectus-Brachypodium pinnatum* upright brome-tor grass type, with more ruderal communities on the steeper slopes often dominated by species such as mouse-eared hawkweed *Hieracium pilosella* or wild strawberry *Fragaria vesca*. In places dense patches of wood Small reed *Calamagrostis epigejos* occur. This grassland is generally species-rich and at Twywell a number of locally uncommon plants occur: tall broomrape *Orobanche elatior*, basil thyme *Acinos arvensis*, dwarf thistle *Cirsium acaule*, woolly thistle *Cirsium eriophorum*, carline thistle *Carlina vulgaris*, blue fleabane *Erigeron acer*, hound’s-tongue *Cynoglossum officinale* and bee orchid *Ophrys apifera*. In early summer there are hundreds of common spotted-orchid *Dactylorhiza fuchsii* particularly on the old spoil heaps and the quarry slopes.

Well vegetated ponds with bulrush *Typa latifolia*, blunt-flowered rush *Juncus subnodulosus* and willows *Salix* spp. add to the habitats available for the rich invertebrate fauna. Willows and other trees such as ash *Fraxinus excelsior* are also colonising the deeper parts of the gullet, adding to the general diversity of the area.

The juxtaposition of habitats and variety of conditions attract an important invertebrate fauna. This includes several notable beetles, one of which is nationally rare, a notable soldier fly and dragonfly - the ruddy darter *Sympetrum sanguineum*. Uncommon ground-nesting bees and wasps are well represented as are a number of local butterflies and moths. The butterflies include dingy, Essex and grizzled skipper and green hairstreak which are associated with the floriferous grassland.

Re-presentation of details approved by Council - Re-typed October 1999.