

COUNTY: DEVON

SITE NAME: LYDFORD GORGE

DISTRICT: WEST DEVON

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981, as amended.

Local Planning Authority: DEVON COUNTY COUNCIL, Dartmoor National Park Authority

National Grid Reference: SX 503838

Area: 37.0 (ha.) 91.4 (ac.)

Ordnance Survey Sheet 1:50,000: 191

1:10,000: SX 58 SW

Date Notified (Under 1949 Act): 1952

Date of Last Revision: 1976

Date Notified (Under 1981 Act): 1986

Date of Last Revision: –

Other Information:

The majority of the site lies within the Dartmoor National Park.

Part owned and managed by the National Trust.

Site area reduced since original notification.

Description and Reasons for Notification:

Lydford Gorge combines features associated with gorge formation and 'river capture' with fine examples of ancient oak-hazel woodland developed on the steep slopes. The site is also important for its bryophytes and supports several uncommon moss species.

The Gorge, formed by the River Lyd and lying on the Carboniferous Culm measures of the north-western edge of Dartmoor, has a depth of some 35m and is almost 2km in length. It provides excellent exposures of dark slates of Devonian age. Recent detailed geological study has revealed the presence of two major flat lying dislocations (thrusts) now known as the Manor Hotel Thrust and Lydford Thrust. Compression of the earth's crust during the Hercynian mountain building episode (orogeny) formed these major dislocations, along with adjoining rock successions were stacked one above another. This recent work has revealed a much more complex picture of the geological make-up of this area, owing to the presence of these thrusts, than was formerly recognised and the outcrops in the Lydford Gorge are especially important in providing the only known exposures of the Lydford Thrust. The thrust separates two major rock units known as the Liddaton Slates and the Lydford Formation. The site also includes the definitive exposures of the Manor Hotel Beds which contain important fossil remains, critical to the accurate dating of these beds. This site is of considerable importance in interpreting the rock succession and structure of an area of complex geology.

Geomorphologically, the site displays a fine range of features associated with rejuvenation, including the gorge itself, an impressive waterfall and the fluted imprints of ancient potholes many metres above present river level.

The steep valley sides bear thin soils and are clothed by ancient woodland dominated by Pedunculate Oak *Quercus robur*, together with occasional Ash *Fraxinus excelsior* and with an understorey which is comprised mainly of Hazel *Corylus avellana* and Holly *Ilex aquifolium*. The woodland canopy is generally open and an extremely diverse ground flora has developed. This includes Wood Anemone *Anemone nemorosa*, Woodruff *Galium odoratum*, Bluebell *Hyacinthoides non-scripta* and, on the more acid slopes, Great Woodrush *Luzula sylvatica* and Bilberry *Vaccinium myrtillus*. Wet flushes on the lower slopes are

characterised by Opposite-leaved Golden Saxifrage *Chrysosplenium oppositifolium*, while where the gorge is at its deepest near Lydford Bridge, the precipitous slopes support a varied fern flora. Wood Melick *Melica uniflora*, Ransoms *Allium ursinum* and other base-demanding species occur on the ledges and beside the river. The splash zones and the upper slopes of the gorge support a luxuriant bryophyte community which includes the uncommon *Mnium stellare*, *Trichocolea tomentella* and *Isothecium holtii*. Sheets of the uncommon lichen *Sticta dufourii* also occur on damp rocks.

The site supports a breeding bird community characteristic of Devon valley oakwoods including Raven *Corvus corax*, Buzzard *Buteo buteo* and Wood Warbler *Phylloscopus sibilatrix*. Grey Wagtail *Motacilla flava* and Dipper *Cinclus cinclus* breed beside the river, which is also frequented by Otters *Lutra lutra*.