

Notified to the Secretary of State on 6 February 1997

County: Devon **Site Name:** Cholwell Brook

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, West Devon Borough Council

National Grid Reference: SX 511813–SX 509808 **Area:** 12.6 (ha) 45.8 (ac)

Ordnance Survey Sheet 1:50,000: 191 **1:10,000:** SX 58 SW

Date Notified (Under 1981 Act): 1997 **Date of Last Revision:** –

Other Information:

New site.

A Geological Conservation Review Site.

Description and Reasons for Notification:

This reach of the Cholwell Brook lies within Dartmoor National Park, approximately 2 km north-east of Mary Tavy on the Tavistock–Okehampton road (A386). The site encompasses a narrow section of stream within a south-west–north-east orientated valley between Gibbet Hill and Kingsett Down. The brook is a tributary of the River Tavy, which it joins approximately 2 km further south between Peter Tavy and Mary Tavy.

This site includes a stream section through deformed, interbedded, turbidite sandstones and shales of the Upper Culm Crackington Formation (Namurian) and shows the thrust contact of this formation with the Lower Culm Brendon Formation beneath. The Crackington Formation is inverted and demonstrates the fold nappe concept applied to this sequence by recent workers. Small scale sedimentological features, cleavage-bedding relationships and fold shapes are well exposed, demonstrating way-up, younging directing, structural facing and vergence. The lower thrust boundary to the formation is marked by about 50 m of tectonic melange consisting of clasts of sandstones, chert, dolerite, limestone and volcanic rocks up to tens of metres in length, set in a soft clay gouge matrix. The fault zone, and the transition into it, is clearly exposed in the stream section.

This thrust is one of the most important tectonostratigraphic boundaries of south-west England, separating the structurally higher Carboniferous sequences from older, more deformed, sequences beneath.