

Warwickshire Geological Conservation Group

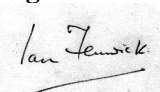
Warwickshire Local Geological Site	
Site No: 14	Stockingford Railway Cutting
Geological Formations	Purley Shale, Abbey Shale, Mancetter Shale and Outwoods Shale Formations (Cambrian) Minor Midlands Intrusive Suite (Ordovician) Bromsgrove Sandstone Formation (Triassic)
Criteria Form	p 2
Description	p 3
Photographs	p 4
Location Map	p 6

Local Geological Sites (LoGS), designated by locally developed criteria, are currently the most important places for geology and geomorphology outside statutorily protected land such as Sites of Special Scientific Interest (SSSI). The designation of LoGS is one way of recognising and protecting important Earth science and landscape features for future generations to enjoy.

WGCG is responsible for the identification of LoGS in Warwickshire and the West Midlands.

Please note that designation of a site as a LoGS does not confer a legal right of access. Unless the site is on a designated public right-of-way, the landowner's permission is required before visiting.

Warwickshire Local Geological Site - Criteria Form

Site name: Stockingford Railway Cutting		Also known as:	
District: Nuneaton & Bedworth		County: Warwickshire	
Grid reference: SP342 921 to SP346 921		LoGS Number: 14	ESCC Class: ER
<p>Brief Description: Railway Cutting on active line between Nuneaton and Birmingham. The four lowest formations of the Stockingford Shale Group, namely the Purley Shale, Abbey Shale, Mancetter Shale and Outwoods Shale formations, occur within the cutting. Fossil brachiopods and trilobites, including type material for the trilobite <i>Irvingella nuneatonensis</i> have been collected from these shales.</p>			
This site qualifies as a Local Geological Site for the following criteria:			
<p>A Good Example of Fossiliferous Purley Shale, Abbey Shale, Mancetter Shale and Outwoods Shale formations of Stockingford Shale Group.</p>			
Educational Fieldwork			
1. Educational Potential		2. Physical access	3. Safety: dependent on negotiations
Scientific Study			
1. Diversity of interest		2. Rarity of interest	✓ 3. Size of feature
4. Typicalness of feature	✓	5. Geological/physiographic linkage to: <i>Illing's Trenches SSSI, Steppy Lane Section (7) & Purley Quarry (41)</i>	
Historical Value			
1. Celebrity link		2. Pioneering research	3. Historical link
Aesthetic Value In The Landscape			
1. Local importance in the landscape		2. Promotion of Earth science	
Signed		Date first selected February 1992	
 I M Fenwick, Chairman, Warwickshire Geological Conservation Group		Reviewed by LoGS panel Oct. 2009	
		Further survey required	
		LoGS Confirmed ✓	
Endorsed by			
Warwickshire Museum		Natural England	
J Radley, Keeper of Geology		J A Irving, Conservation Adviser	
<p>In the event of any development or planning consultation relating to this site or its surrounds please inform: The LoGS Officer WGCG, c/o Keeper of Geology, Warwickshire Museum, Market Place, Warwick CV34 4SA (tel: 01926-418182)</p>			

**WARWICKSHIRE GEOLOGICAL CONSERVATION GROUP
LOCAL GEOLOGICAL SITE (LoGS)**

Site	14	Stockingford Railway Cutting
Parish		
District		Nuneaton & Bedworth
County		Warwickshire
National Grid Reference		SP 342 921 to SP 346 921
Ordnance Survey Sheets 1:50000 1:10000		140 SP 39SW

Location
Railway cutting on active line between Nuneaton & Birmingham. The site can be viewed from Hilary Road Bridge, Stockingford, but the exposures are almost totally overgrown (2009).

Summary of Interest
<p>The four lowest formations of the Stockingford Shale Group, namely the Purley Shale, Abbey Shale, Mancetter Shale and Outwoods Shale Formations, occur within the cutting. Fossil brachiopods and trilobites, including type material for the trilobite <i>Irvingella nuneatonensis</i>, have been collected from these shales.</p> <p>Outwoods Shale Formation: Interbedded grey burrowed, and dark-grey or greenish grey pyritic, mudstone. Beds of siltstone and sandstone increase in upper part. Formed approximately 495 to 505 million years ago in the Cambrian Period. These rocks were formed on a deep ocean floor beyond the influence of land. They often consist of fine material from microscopic pelagic organisms.</p> <p>Mancetter Shale Formation: Grey to dark grey, sporadically greenish, micaceous and pyritic mudstone with common current ripple-bedded sandy wisps. Common beds of grey, fine-grained, disturbed, glauconitic sandstone. Formed approximately 505 to 518 million years ago in the Cambrian Period. These rocks were formed on a deep ocean floor beyond the influence of land. They often consist of fine material from microscopic pelagic organisms.</p> <p>Abbey Shale Formation: Dark grey, greenish or blueish black mudstones with thin beds of limestone and glauconitic sandstone. Locally with phosphate, pyrite and siderite nodules.</p> <p>Purley Shale Formation: Blocky to shaly red or maroon mudstone and siltstone at the base; green and grey fissile mudstones in the middle and red and green interbedded shaly mudstones at the top. Formed approximately 505 to 545 million years ago in the Cambrian Period. These rocks were formed on a deep ocean floor beyond the influence of land. They often consist of fine material from microscopic pelagic organisms.</p> <p>Triassic Bromsgrove Sandstone fills a depression in the Cambrian Purley Shale Formation at the eastern end of the cutting.</p>

Numerous sills and one dyke-like body have been intruded into the shales, the largest of which is approximately 15m thick. These are part of the Midlands Minor Intrusive Suite which comprises numerous thin sills of grey-green spessarite, lamprophyre and thicker composite sills of hornblende diorite, commonly melanocratic at the base, intruded into strata ranging from Precambrian to Ordovician age.

Access is difficult due to the active railway line & therefore educational use is currently highly restricted. However, due to the fact that type material has been collected from the site its research value is still considerable.



