## Warwickshire Geological Conservation Group

Warwickshire Local Geological Site			
Site No: 67	Stipers Hill Plantation		
Geological	Hopwas Breccia Formation		
Formations	(Permo-Triassic)		
Criteria Form	p 2		
Description	p 3 & 4		
Photographs	p 4 & 5		
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: Stipers Hill Plantat	ion	Also known as:							
District: North Warwickshire		County: Warwickshir	re						
Grid reference: SK2706 0275 (road) to 2715 0249 (plantation		LoGS Number: 67		ESCC Class: EO/ER					
Brief Description: Exposures of basal Triassic Hopwas breccia									
This site qualifies as a Local Geological Site for the following criteria:									
A Good Example of Hopwas breccia									
Educational Fieldwork									
1. Educational Potential	✓	2. Physical access	~	3. Safety		✓			
Scientific Study				•					
1. Diversity of interest	✓	2. Rarity of interest	~	<ol><li>Size of featur</li></ol>	e				
4. Typicalness of feature	✓	5. Geological/physiographic linkage to: Roundberry Quarry (1)			1				
Historical Value									
1. Celebrity link		2. Pioneering research		3. Historical lin Horace Brown	ık:	0			
Aesthetic Value In The Landscape									
Local importance in the landscape		2. Promotion of Earth science							
Signed			Date first selected 13th March 2002			2002			
la Texas			Reviewed by LoGS panel Oct. 2009						
		Further survey required							
I M Fenwick, Chairman,	LoGS Confirmed				✓				
Warwickshire Geological Conservation Group									
Endorsed by									
Warwickshire Museum Natural England									
J Radley, Keeper of Geology JA Irving, Conservation Adviser									
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)									

# WARWICKSHIRE GEOLOGICAL CONSERVATION GROUP LOCAL GEOLOGICAL SITE (LoGS)

Site	67	Stipers Hill Plantation				
Parish		Polesworth				
District		North Warwickshire				
County		Warwickshire				
National Grid Reference		Road Cut.: SK27069 02764				
		Plantation: SK2715 0249				
Ordnance Survey Sheets		140				
1:50000		SK 20 SW				
1:10000						



### Location

The site extends from the south bank of Stipers Hill Plantation to the northern boundary of the Warton road / Stipers Hill. It encompasses the whole of the hill, the topographic ridge forming the field boundary and the road cutting. The site is approximately 1km east of Polesworth.

#### **Summary of Interest**

The site comprises a strip of high ground at Stipers Hill, between the River Anker and the Polesworth – Warton road (Stipers Hill). The site is bounded to the north, west and south by exposures of the basal Permo-Triassic Hopwas Breccia dipping steeply to the south-east in proximity to the Polesworth Fault on the eastern boundary of the Coventry Horst. The Hopwas Breccia comprises poorly sorted sandy conglomerates with angular clasts. The northernmost of these sections (the Stipers Hill road cutting) featured in Horace Brown's important (1889) paper on Hopwas Breccia petrology and is thus of some historical significance. The clasts comprise quartzite (84%), Carboniferous limestone (9%), igneous rocks (4%) and grey, slate (2.6%) according to BGS Memoir( Bridge et al., 1998) and so indicates some local provenance.



Stipers Hill Plantation exposure Grid ref SK2715 0249

The land between the breccia outcrops is occupied by intermittently exposed pebbly red sands. This is mapped by BGS as Triassic Chester Formation (formally Polesworth Formation) but glacial gravels are also locally developed which are derived from the Chester Formation. Further exposures of the breccia are found on the southern bluff of the plantation.

#### References

Bridge, D. McC., Carney, J.N., Lawley, R.S. and Rushton, A.W.A. 1998. Geology of the country around Coventry and Nuneaton. Mem. British Geol. Survey, Sheet 169 (England and Wales), HMSO.

Brown, H.T. 1889. The Permian Rocks of Leicestershire. Qt. Jl. Geol. Soc. Lond., 45, 1-40.



Footpath steps on north side of Stipers Hill road composed of Hopwas Breccia



Hopwas breccia can be seen just in front of the steps by scraping away the thin soil and vegetation cover SK27069 02764



Hopwas Breccia. Red brown colour due to iron staining, very Hard, poorly sorted, subrounded pebbles, layering and foresets indicate water lain. Strong calcareous cement.



Magnification \*30 showing quartz rich tight packed mix of poorly sorted grains with a calcite cement

