



South Wales RIGS Group Site Record RIGS Description

SECTION A

| General | South Wales |
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| Site Name: St Mary Hill, Pencoed | File Number: Site_VOG_579 |
| RIGS Number: 661 | Surveyed by: Elaine Burt |
| Grid Reference: SS 9627 7915 | Date of Visit: 27 th October 2010 |
| RIGS Category: Scientific, educational | Date Registered: Owner: Unknown Planning Authority: Vale of Glamorgan Council |
| Earth Science Category: Stratigraphy, Sedimentology | |
| Site Nature: Hilltop crags | Documentation prepared by: Elaine Burt |
| Unitary Authority: Vale of Glamorgan Council; | Documentation last revised: 1 st February 2011 |
| OS 1:50,000 Sheet: 170 | Photographic Record: Attached |
| OS 1:25,000 Explorer Sheet: 151 | |
| BGS 1:50,000 Sheet: E261/2 | |
| <p>RIGS Statement of Interest:</p> <p>This site contains a large number of crags belonging to the arenaceous part of the Penarth Group Marginal Facies. They display a number of sedimentological features of this unit.</p> <p>The site would be good for educational purposes as it has good public access via footpaths and is a safe environment to study in.</p> | |

Geological setting/context:

The hilltop at St Mary Hill displays a number of crags of Triassic age belonging to the marginal facies of the Penarth Group.

In this area, from St Mary Hill to Pyle, the marginal facies is dominated by a thick sequence of sandstones, which are largely equivalent to the Westbury Formation of other areas. This marginal facies is unique to South Wales.

The crags at St Mary Hill comprise mainly well-sorted, quartz-rich, pale yellow-brown medium-grained, massive sandstones (arenites). Bed thicknesses range from medium to thick. Parallel lamination and cross bedding is visible in some units. Locally, the sandstones are coarse-grained or conglomeratic, containing well rounded quartz pebbles in erosive basal lags. Thin partings of shaly mudstone are present in some unit tops, and normal grading can be identified in some beds, although the sequence shows a general coarsening upwards.

The general dip of the units is approximately 20° North.

The arenaceous sandstones of the marginal facies are interpreted as shallow marine and shoreface sediments, possibly originally derived from the Carboniferous Coal Measures to the North and subsequently re-worked (Francis, 1959; Wilson et. al. 1990).

At St Mary Hill, the coarse sediments are thought to be indicative of a progradational sequence (Wilson, et. al. 1990).

References:

FRANCIS, E H. 1959. The Rhaetic of Bridgend. Proceedings of the Geologists Association, Vol. 70, 158-170.

WILSON, D, DAVIES, J R, FLETCHER, C J N. and SMITH, M. 1990. Geology of the South Wales Coalfield, Part VI, the country around Bridgend. Memoir of the British Geological Survey, Sheet 261 and 262 (England and Wales).

SECTION B

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| PRACTICAL CONSIDERATIONS: Please score Accessibility and Safety Red Amber or Green | | | |
| Accessibility: | | | X |
| Comment: Easy access on foot from well maintained public footpaths. Roadside parking nearby. | | | |
| Safety: | | | X |
| Comment: Low crags in field setting. No known hazards. | | | |
| Conservation status: There are no known conservation designations of this RIGS | | | |

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| OWNERSHIP/PLANNING CONTROL: Owner/tenant: Unknown (local farm?) Planning Authority: Vale of Glamorgan Planning status/constraints/opportunities: There are no known planning constraints or opportunities |
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| CONDITION, USE & MANAGEMENT: Present use: The area is maintained as pasture land Site condition: The site is in good condition and not overgrown Potential threats: No threats foreseen Site Management: No management needed at present. |
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| SITE DEVELOPMENT: Potential use (general): Potential use (educational): The site is a good site for teaching purposes or for groups to visit because of its easy access from well maintained public footpaths and also the safe teaching and learning environment. This is an unusual inland exposure of the Penarth Group. |
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Photographic Record







