

Spireslack Locality 18: 'Area B1'—sedimentary architecture

NGR: [274991, 629637]–[275347, 629657] [NS 74991 29637]–[NS 75347 29657]

Key category of interest		Rarity	Quality
1. Sedimentary rocks	4		5
2. Stratigraphy	4		5
3. Structural geology	2		4

Access: Good, easily accessible from main car park.

Current safety: Loose blocks on cliff face preclude hands on access. Uneven footing in viewing area.

Measures to enhance site: Flattening of ground in front of face, assess stability of cliff face, platform access for hands on access to the rocks.

Key categories in order of interest (1 = primary interest); Rarity, 5 = only example in Spireslack, 1 = many examples in Spireslack; Quality 5 = exceptional preservation in Spireslack, easy access/viewing potential 1 = average preservation in Spireslack, difficult access/viewing potential

Photograph overview with polygon boundary

(Overview of Locality 18). Site boundary includes key rock exposures, immediate access to site and viewpoints to the site. View looking toward the north from the old car park levelled area at the south of the Spireslack SCM.

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Site description

Geology

The worked face at 'Area B1', designated from the SCM plans, provides an easily accessible, lateral view of a fluvial sedimentary succession within the Limestone Coal Formation at the southern end of Spireslack. The cliff reveals the internal architecture of a number of channelized sandstones, including cross-bedding, stacked bars, point bars and chute channels — features typical of a fluvial river system, common within this part of the Carboniferous succession. The scarp exposures in the main void of Spireslack also contain fluvial sandstones, but their internal architecture is not exposed as it is here, being fractured (due to underground coal extraction) or covered in rock spall following mining. This locality provides an important section through a typical fluvial succession in the Carboniferous, the likes of which are typically only seen on more inaccessible coastal cliffs or river sections. This locality thus provides an opportunity for teaching and research. The site is best viewed as a whole sequence so as to allow an appreciation for the lateral continuity of units which can then be used as a context in which to place the detail of finer sedimentary features (e.g. cross-bedding and their relation to channels in the sandstone — important for palaeocurrent analysis).

Access and enhancement suggestions

Level area in front of the face and clean up section of loose material and dust to highlight sedimentary features.

Site photographs

(Spireslack_18 P1): Stacked sandstone bodies within Area B1 at Spireslack. These thick tabular massive bodies of sandstone represent stacked bars formed as part of a channel complex. Closer inspection reveals cross- bedding within

these stacked bars which can be used for palaeocurrent analysis. To improve access, spoil heap in front section should be levelled and the section cleared of loose material. © BGS, NERC.

3.3.1 Scheduled Monuments within Spireslack SCM

The Glenbuck Ironworks is protected as a Scheduled Ancient Monument, situated in the south of the Spireslack SCM. The designation is shown in (Figure 7), and covers the area of bell-pit mines to the south of the main access road (where ironstone was historically mined), and the old ironworks furnace to the north of the road. The ironworks were the earliest phase of mining activity at Glenbuck, and were exploited from 1795 to 1813. The furnace itself is mostly buried beneath mine waste and rubbish but its retaining wall is still visible. The bell-pits are still visible, and have not been covered by more recent mining operations.

(Figure 7) Location map of the Glenbuck Ironworks Scheduled Ancient Monument site. © BGS, NERC

(Figure 8) Bell-pits at southern edge of Spireslack SCM. View looking toward the south-west. These disused bell-pits were historically associated with ironstone and limestone mining. © BGS, NERC

(Figure 9) The ruins of the Glenbuck Ironworks Furnace are visible at the base of the tree in the centre left of the photo. The furnace has been buried by later generations of mine waste. Photo copyright Mike Browne.

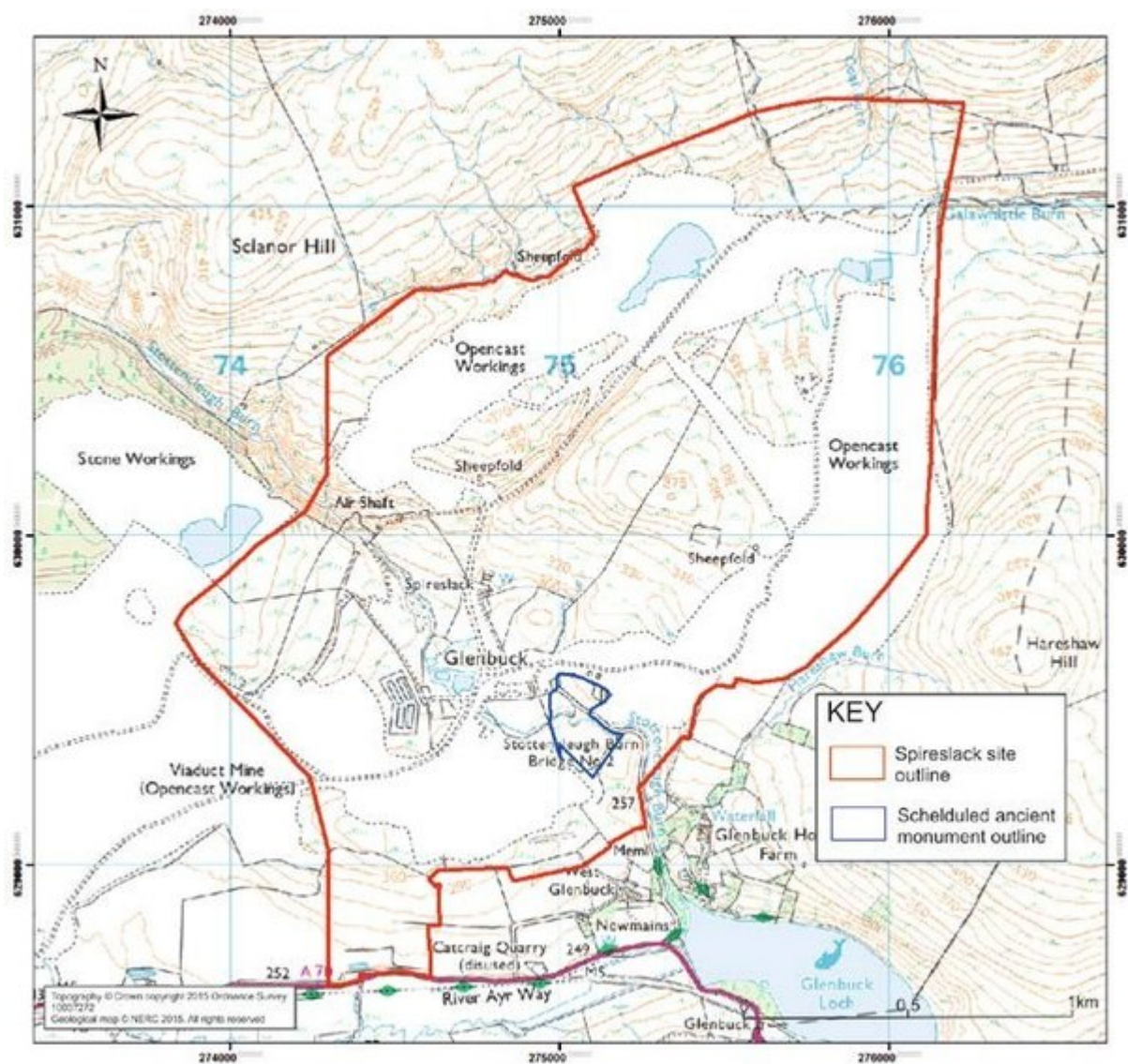
[References](#)



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(Spireslack_18 P1) Stacked sandstone bodies within Area B1 at Spireslack. These thick tabular massive bodies of sandstone represent stacked bars formed as part of a channel complex. Closer inspection reveals cross- bedding within these stacked bars which can be used for palaeocurrent analysis. To improve access, spoil heap in front section should be levelled and the section cleared of loose material. © BGS, NERC.



(Figure 7) Location map of the Glenbuck Ironworks Scheduled Ancient Monument site. © BGS, NERC



(Figure 8) Bell-pits at southern edge of Spireslack SCM. View looking toward the south-west. These disused bell-pits were historically associated with ironstone and limestone mining. © BGS, NERC



(Figure 9) The ruins of the Glenbuck Ironworks Furnace are visible at the base of the tree in the centre left of the photo. The furnace has been buried by later generations of mine waste. Photo copyright Mike Browne.