
Spireslack Locality 11: Section through old mine workings with in-situ pit prop

NGR: [274976 630578]–[274923 630554] [NS 74976 30578]–[NS 74923 30554]

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

Access: Good access to base of exposure.

Current safety: Loose material noted spalling off main scarp, potential loose overhanging blocks above section.

Measures to enhance site: Create dedicated viewing area for platform.

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 11). Site boundary includes key rock exposures, immediate access to site and viewpoints to the site. View looking south onto scarp, at western edge of lower void.

© Getmapping: Licence Number UKP2006/01

Site description

Geology

The key interest of this locality is a section through an earlier generation of coal extraction at Spireslack. The earlier 19th/20th century underground mine workings extracted coal from the Muirkirk Nine Foot coal, a regionally extensive coal seam. At the eastern edge of this locality's extent, adjacent to a minor 1.2 m displacement fault, the coal maintains its original (unmined) thickness of c.3 m. However, where mining commenced, the layer which originally contained the coal thins to a maximum of 1.5 m thick and the space that was originally occupied by coal is filled with packed mine waste (representing a collapsed room or short wall working). The sandstone overlying the mine waste is warped downward and fractured, representing collapse of the overlying strata into the mined void. An in situ, fallen pit prop is preserved within the base of mine waste — these wooden pit props would have held up the roof of the mines whilst coal was being extracted. In addition to the economic and stratigraphic geological interest here, blocks of sandstone, mudstone, coal and ironstone nodules are littered across the floor of the void in front of the scarp providing ample hands on opportunities to study the inaccessible rocks on the scarp.

Access and enhancement suggestions

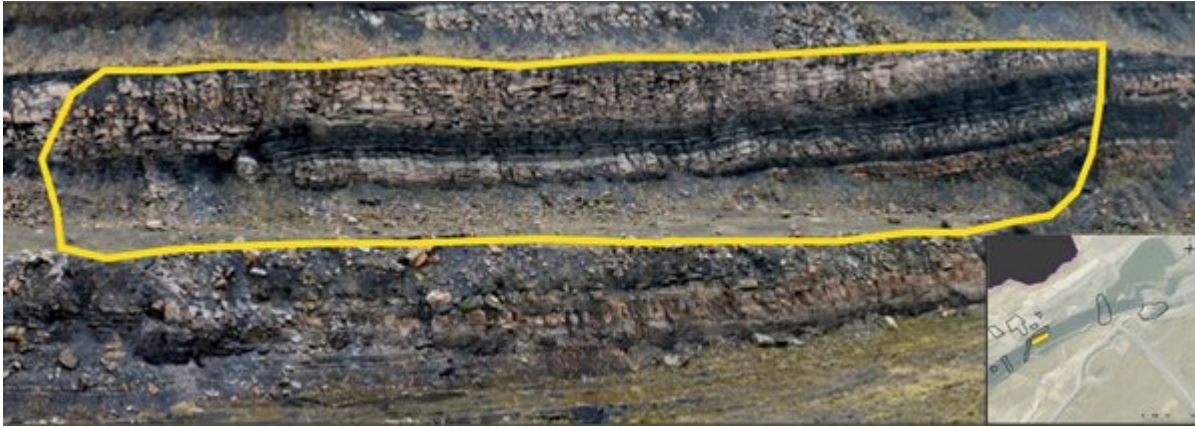
There is good access to view the collapsed mine workings and pit props. Whilst providing a good viewing platform for the mine workings, this also provides a good platform to look to the north to view the tree casts in the McDonald seatearth (described in locality 8).

Site photographs

(Spireslack_11 P1): Section with the Limestone Coal Formation in the scarp at Spireslack. The dark band is the Muirkirk Nine Foot Coal. The left hand side of the image shows the original thickness of this seam, before it narrows and is replaced by packed mine waste. Photograph looking south-west toward main scarp. © BGS, NERC.

(Spireslack_11 P2): Wooden pit prop in situ within the coal workings. The wooden props were used to hold up the roof of the workings as the coal was extracted. The prop, sitting above packed mine waste in the photo, has since collapsed due to the overlying weight of rock (sandstone) above. © BGS, NERC.

References



(Overview of Locality 11). Site boundary includes key rock exposures, immediate access to site and viewpoints to the site. View looking south onto scarp, at western edge of lower void.



(Spireslack_11 P1) Section with the Limestone Coal Formation in the scarp at Spireslack. The dark band is the Muirkirk Nine Foot Coal. The left hand side of the image shows the original thickness of this seam, before it narrows and is replaced by packed mine waste. Photograph looking south-west toward main scarp. © BGS, NERC.



(Spireslack_11 P2) Wooden pit prop in situ within the coal workings. The wooden props were used to hold up the roof of the workings as the coal was extracted. The prop, sitting above packed mine waste in the photo, has since collapsed due to the overlying weight of rock (sandstone) above. © BGS, NERC.