

Scar Limestone Member

From Earthwise

[Jump to navigation](#) [Jump to search](#)



Contents

- [1 Scar Limestone Member \(SCL\), Carboniferous, Northern England Province](#)
 - [1.1 Name](#)
 - [1.2 Lithology](#)
 - [1.3 Stratotype](#)
 - [1.4 Lower and upper boundaries](#)
 - [1.5 Thickness](#)
 - [1.6 Distribution and regional correlation](#)
 - [1.7 Age](#)
- [2 References](#)

Scar Limestone Member ([SCL](#)), Carboniferous, Northern England Province

Scar Limestone Member is part of the [Alston Formation](#)

Name

Named after the limestone exposures along the Pennine escarpment. See Arthurton and Wadge (1981)^[1]; Dunham (1990)^[2]; Burgess and Holliday (1979)^[3]; Trotter and Hollingworth (1932)^[4]; Eastwood et al. (1968)^[5]; Johnson and Nudds (1996)^[6]; Johnson et al. (1980)^[7]; Johnson and Dunham (1963)^[8].

Lithology

Limestone, pale to mid grey, wavy-bedded, crinoidal with fissile uppermost part and shaly partings; stylolitic. It is generally fossiliferous with bands of *Siphonodendron junceum*. Comparatively unfossiliferous in the south, though a bed rich in brachiopods is present at the base in the southern part of the Brough district (Burgess and Holliday 1979^[3]). Nodules of chert are commonly found in this limestone (Trotter and Hollingworth, 1932^[4]; Dunham, 1990^[2]). In the Longcleugh No. 1 Borehole (Johnson et al., 1980^[7]), Allenheads No. 1 Borehole (BGS Registration Number NY84NE/4) (NY 8604 4539) and Rookhope Borehole (BGS Registration Number NY94SW/1) (NY 9375 4278) the upper part of the member includes an interbedded unit of black pyritic fossiliferous mudstone with sporadic small ironstone nodules.

Stratotype

The type section is in a disused quarry north-east of Croglin, Cumbria (NY 5834 4815 to 752 274) the Scar Limestone is 14.6 m thick with the lower 9.8 m of massive grey limestone, separated from rather darker beds with thin mudstone partings above, by 0.6 m of calcareous mudstone (see Arthurton and Wadge, 1981, p. 42). A reference section is the Rookhope Borehole (see above), in

which the Scar Limestone, including a 1.62 m thick mudstone interbed, occurs from 137.95 to 147.26 m depth (see Johnson and Nudds, 1996, p. 191^[6]).

Lower and upper boundaries

The lower boundary is taken at the sharp base of limestone overlying measures within the Alston Formation; directly underlain locally by dark mudstone, seatearth sandstone or by a coal seam.

The upper boundary of the member is taken at the base of overlying strata within the Alston Formation typically comprising cyclical sedimentary rocks with thickly bedded, commonly bioclastic, limestones

Thickness

Between 4 and 14.6 m.

Distribution and regional correlation

The member falls within the Alston Formation of the Alston and Lake District blocks in Cumbria, Northumberland and Durham, and lies stratigraphically between the Tynebottom (below) and the Five Yard (above) limestone members (Figure 11, Column 1; Figure 14, Column 2; Figure 15, Column.1). The limestone is well exposed along the Pennine escarpment, in Teesdale and Weardale. It is well known from subsurface workings, boreholes and shafts within the Alston Block. It is present in deep boreholes including Longcleugh No 1 Borehole in the West Allen Valley (Johnson et al., 1980^[7]), and the Rookhope and the Allenheads No. 1 boreholes (see above).

Age

Brigantian. Goniatites of the *Lusitanoceras granosus* P2a Subzone are found in mudstone just above the limestone at Bowlees in Teesdale.

References

1. ↑ Arthurton, R S, and Wadge, A J.1981.Geology of the country around Penrith.*Memoir of the Geological Survey of Great Britain*, Sheet 24 (England and Wales)
2. ↑ ^{2.0} ^{2.1} Dunham, K C.1990.Geology of The Northern Pennine Orefield: Volume 1, Tyne to Stainmore (2nd edition).*Economic Memoir of the British Geological Survey*, Sheets 19 and 25, parts 13, 24, 26, 31 and 32 (England and Wales)
3. ↑ ^{3.0} ^{3.1} Burgess, I C, and Holliday, D W.1979.Geology of the country around Brough-under-Stainmore.*Memoir of the Geological Survey of Great Britain*, Sheet 31, parts 25 and 30 (England and Wales)
4. ↑ ^{4.0} ^{4.1} Trotter, F M, and Hollingworth, S E.1932.The geology of the Brampton district.*Memoir of the Geological Survey of Great Britain*, Sheet 18 (England and Wales)
5. ↑ Eastwood, T, Hollingworth, S E, Rose, W C C, and Trotter, F M.1968.Geology of the country around Cockermouth and Caldbeck.*Memoir of the Geological Survey of Great Britain*, Sheet 23 (England and Wales)
6. ↑ ^{6.0} ^{6.1} Johnson, G A L, and Nudds, J R. 1996.Carboniferous biostratigraphy of the Rookhope Borehole, County Durham.*Transactions of the Royal Society of Edinburgh: Earth Sciences*, Vol. 86, 181-226.
7. ↑ ^{7.0} ^{7.1} ^{7.2} Johnson, G A L, Nudds, J R, and Robinson, D.1980.Carboniferous stratigraphy and mineralisation at Ninebanks, West Allendale, Northumberland.*Proceedings of the*

Yorkshire Geological Society, Vol. 43, 1-16

8. [↑] Johnson, G A L, and Dunham, K C.1963.The geology of Moor House.*Monographs of the Nature Conservancy*, No 2.

Retrieved from 'http://earthwise.bgs.ac.uk/index.php?title=Scar_Limestone_Member&oldid=52899'
Category:

- [Carboniferous lithostratigraphical nomenclature](#)

Navigation menu

Personal tools

- Not logged in
- [Talk](#)
- [Contributions](#)
- [Log in](#)
- [Request account](#)

Namespaces

- [Page](#)
- [Discussion](#)

Variants

Views

- [Read](#)
- [Edit](#)
- [View history](#)
- [PDF Export](#)

More

Search

Navigation

- [Main page](#)
- [Recent changes](#)
- [Random page](#)
- [Help about MediaWiki](#)

Tools

- [What links here](#)
- [Related changes](#)
- [Special pages](#)
- [Permanent link](#)
- [Page information](#)
- [Cite this page](#)
- [Browse properties](#)

• This page was last modified on 26 July 2021, at 15:54.

- [Privacy policy](#)
- [About Earthwise](#)
- [Disclaimers](#)

