Sale Fell: Three Interesting Outcrops

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BGS mapping (Sheets 23 and 29) shows a complicated and tight anticline at Sale Fell, which lies to the west of Bassenthwaite Lake. Ordovician age Loweswater Formation marine sedimentary strata are flanked by generally more argillaceous Kirk Stile Formation strata. A walk across the fell reveals many informative outcrops, just three of which are highlighted here.



Locality 1. (NY 1884 2945) Outcrops above Dodd Crag along the southern edge of the fell show heavy quartz veining with tilted and folded Loweswater strata. One area includes a number of striking water escape soft sediment deformation structures such as these. Water from a saturated lower layer has broken through an overlying layer in response to pressure in the sedimentary pile. Steep, uneven ground; approach with care.

Locality 2 (NY 1932 2968) A small intrusion into the Loweswater Formation strata can be found on the north-facing slope near the summit. This bouldery outcrop of igneous rock is minette. Its predominantly orange / pink colour (from orthoclase feldspar) can be seen on a few surfaces that are free of lichen.





Locality 3 (NY 1935 2966) Close to Locality 2, but not visible from it, is a small south-facing quarried exposure in generally steeply dipping Loweswater turbidites. This provides an opportunity to examine some small-scale folds (anticline, right of centre: presumed slump folding) and a thrust structure (diagonally up to left) with an associated splay of fractures.