

Sleat 5: Glen Arroch



Glen Arroch connects Kylesheha, named after a Celtic mythological hero, on the Sound of Sleat, with Broadford. The valley cuts across the Late Proterozoic ('Torrionian') Beinn na Seamraig Formation of the Sleat Group within the Kishorn Thrust Sheet, which contains excellent examples of soft-sediment deformation structures within sandstone beds.

Aspects covered: Soft-sediment deformation structures, possibly seismically-induced, within Late Proterozoic ('Torrionian') sandstones of the Beinn na Seamraig Formation of the Sleat Group.

Route: [Bealach Udal](#) in [Glen Arroch](#) to exposures on the north side of the glen.

Distance: 1 kilometre (< 1 mile).

Time: 2 hours.

General comments: A short excursion that could be appended to other nearby excursions when limited time (or energy) is available. Access the [Kylesheha road](#) near to [Lusa](#), east of [Broadford](#), and go SE for c. 7km (4.5 miles) to [Bealach Udal](#), where there is an obvious mast on the south side of the road. The best exposures of the sandstones are on the north side of the road, within c.200m of the road. Parking is available. The track to the mast should not be blocked.

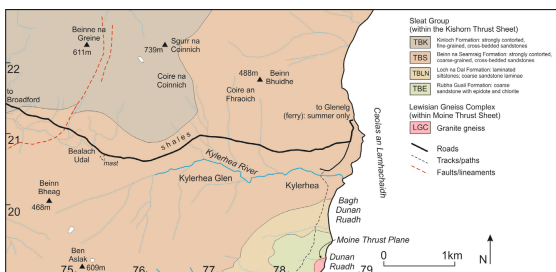


Figure Sleat 5.1: Simplified geological map of Glen Arroch.

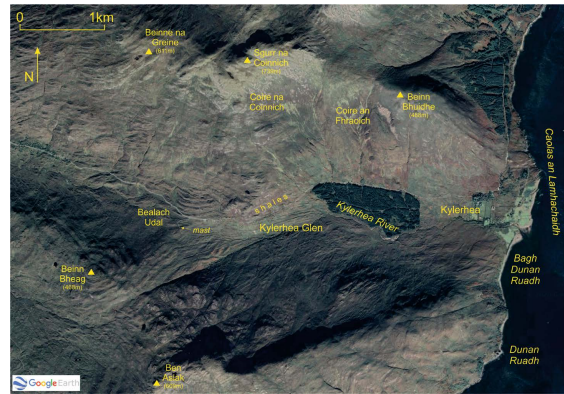


Figure Sleat 5.2: Annotated Google Earth® of image Glen Arroch.

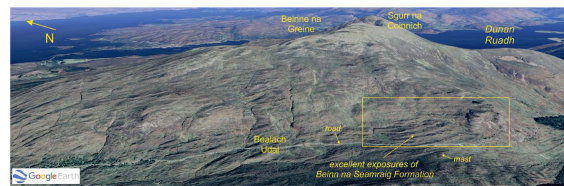
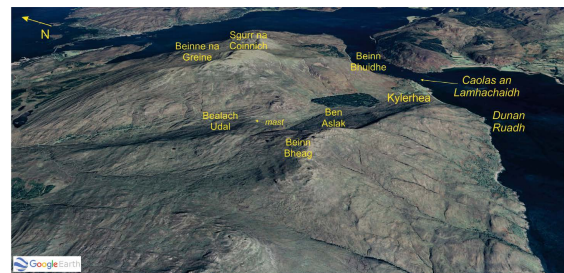


Figure Sleat 5.3: Annotated oblique Google Earth® image of Glen Arroch.



Figure Sleat 5.4: Roadside view, towards the NE, of the main exposures (middle ground) of Beinn na Seamraig Formation strata with excellent examples of soft-sediment deformation.

Examples of these strata are illustrated below.



Figure Sleat 5.5: Interbedded laminated siltstones and sandstones, and massive (unbedded) sandstones. Ripple structure is common in the laminated beds. Examples of insipient ball-and-pillow structure, for example at the base of the massive sandstone at the top of the pole, due to soft sediment deformation. Pole c. 1m long.



Figure Sleat 5.6: Rippled siltstones and sandstones, and a massive sandstone at base of sequence. Pole c. 1m long.



Figure Sleat 5.7: Rippled sandstones and siltstones. Hammer c. 30cm long.

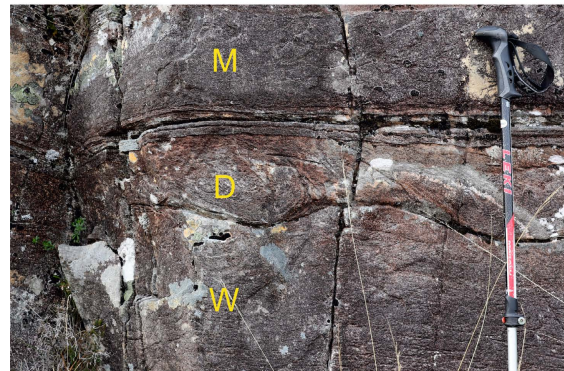
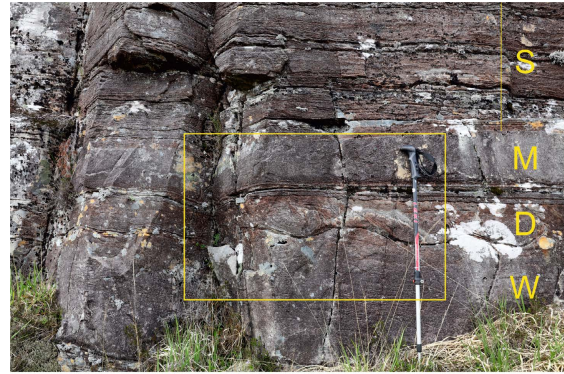


Figure Sleat 5.8: Sequence of sandstones and siltstones with an example of localised soft-sediment deformation. Lower image shows detail of area outlined in upper image. W, weakly laminated sandstone; D, distortion of lamination in upper part of sandstone due to soft-sediment deformation; M, massive (unstratified) sandstone; S, stratified sequence with well-defined units. Pole c. 1m long.

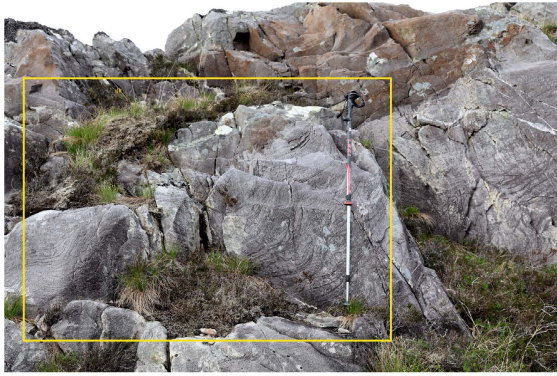


Figure Sleat 5.9: Significantly distorted sandstones due to soft-sediment deformation. Lower image shows detail of area outlined in upper image. Pole c. 1m long.



Figure Sleat 5.11: Significantly distorted sandstones due to soft-sediment deformation. Lower image shows detail of area outlined in upper image. Pole c. 1m long.



Figure Sleat 5.10: Significantly distorted sandstones due to soft-sediment deformation. Lower image shows detail of area outlined in upper image. Pole c. 1m long.



Figure Sleat 5.12: Significantly distorted sandstones due to soft-sediment deformation. The disruption and fragmentation the brown-weathering mudstones highlights the nature and extent of the deformation. Pole c. 1m long.

This part of the Beinn na Seamraig Formation contains many examples of the features outlined, above.

Return to the road.

End of excursion.