Dippal Burn

[NS 693 318]

(Potential GCR site)

Highlights

The Dippal Burn site has yielded many specimens of loganellid thelodonts and *Birkenia* and may possibly be of Early Wenlock age.

Introduction

This is another well-known locality in the Lesmahagow inlier of Strathclyde with good burnside exposures. The lower end of the section has yielded well-preserved material of the same taxa as are found in Shiel Burn, Slot Burn and Birkenhead Burn.

Description

Dippal Burn exposes fish beds seen elsewhere in the Lesmahagow area sites. The fine-grained siltstones of the Dippal Burn Formation (Waterhead Group) reveal upon slight weathering numbers of fish remains, including almost complete compressions of thelodont and anaspid carcasses. While body outlines may be preserved, details of internal anatomy are seldom revealed. Nevertheless, the lower exposures were the source of material described by Traquair (1898b, 1905a). The fish bed is here 1.4 m thick and overlies a 0.9 m thick light grey medium-grained sandstone which is between 3 and 4.6 m above the top of Birkenhead Sandstone. Other exposures of the fish bed occur at [NS 703 325], [NS 703 328], [NS 711 336] and [NS 717 340].

Fauna

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Thelodonti: Thelodontida: Loganellidae

Shielia taiti (Stetson, 1931)

Loganellia scotica Traquair, 1898

Lanarkia horrida Traquair, 1898

L. spinosa Traquair, 1898

L. spinulosa Traquair, 1898

Anaspida: Birkeniiformes: Birkenidae

Birkenia elegans Traquair, 1898

Anaspida: Birkeniformes: Lasaniidae

Lasanius problematicus Traquair, 1898

Interpretation

Ritchie (MS) has correlated the Dippal Burn fish bed with the main fish bed of the Fish Bed Formation of the Hagshaw Hills inlier at Slot Burn (q.v.). Jennings (1961) determined that the conglomerate, which occurs in the section some way above the fish bed in both areas (the Middlefield Conglomerate in the Lesmahagow section, the Hareshaw Conglomerate in the Hagshaw Hills section), represents a transgression. As a result the Upper Slot Burn Fish Bed horizon is not present in the upper part of the Glenbuck Group in the Hagshaw Hills inlier.

The thelodonts, with the exception of *Lanarkia spinulosa*, have been reported (Traquair, 1898b) as common at Dippal Burn. The anaspids, however, seem to have been less in evidence.

Conclusion

The Dippal Burn site is part of the network of sites that has contributed much material to the study of Silurian thelodonts and anaspids. Its conservation value lies in its potential for further material to be obtained there in the future. The presence of the fossils is best revealed in rock that is in the initial stages of weathering; this may limit the availability of material.

References