Namurian, Carboniferous, Midland Valley of Scotland


Namurian

Generalised vertical section of the Namurian in the Midland Valley. P915530.

Distribution of Namurian strata in the Midland Valley. P915531.

The Namurian strata present in the Midland Valley are divided on lithological criteria into the Limestone Coal Group, the Upper Limestone Group and the Passage Group, which together make up the Millstone Grit Series (P915530).

The strata consist of shallow water, mainly terrigenous sediments deposited in cycles in a subsiding fluvio-deltaic environment. The Limestone Coal Group is characterised by the presence of numerous coals and the relative scarcity of marine strata compared with the underlying Lower Limestone
Group. The Upper Limestone Group contains major marine cycles with thick limestones developed in some areas but much of the group is composed of non-marine strata including some coals. The Passage Group, formerly the Scottish Millstone Grit, consists mainly of sandstones and clay-rocks, some of the latter containing rootlets. Marine bands occur in the lower part of the sequence with the richer faunas in the lowest bands. Coals are present but are mostly thin and impersistent. Unconformities are evident at two levels at least, indicating differential uplift and erosion.

In England the Namurian is classified into stages based on the vertical distribution of goniatite species. The lowest two of these stages, the Pendleian (E1) and the Arnsbergian (E2) are well developed in Central Scotland but the later ones are poorly represented or have not been recognised. The distribution of Namurian strata is shown on P915531.

Bibliography (for all Carboniferous)


Ramsbottom, W. H. C. 1977. Major cycles of transgression and regression (Mesothems) in the


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