

THE COAL RESOURCES OF THE WORLD

The classification and correlation of the Karroo system commonly accepted is shown in the accompanying table:

RHODESIA	TRANSVAAL	CAPE COLONY
Tuli, Sabi and Batoka Basalts.....	Bushveld Volcanic Series.....	Lavas
Forest (and Samkoto) Sandstones.....	Bushveld Sandstone Series.....	Sedimentary Beds. } Stormberg Series.
Escarpment Grits.....		} Beaufort Series.
Upper Matobola Beds.....		
Lower Matobola Beds, (coal-bearing series)...	High Veld Coal-Measures.....	Ecca Series.
Basal Beds and Conglomerates.....	Dwyka Conglomerate.	Dwyka Conglomerate.

The stratigraphical and palæontological evidence obtained by Mr. Molyneux,^{1, 6.} in the coal-fields of the Zambesi basin, leaves little room for doubt that the coal-bearing series, called by him the Lower Matobola beds, are of Ecca age. A few, thin, impure coals are known in the Upper Matobola beds.

The discovery of reptilian remains from the sandstones on the banks of the Limpopo proves the Stormberg age of the Bushveld and Samkoto sandstones.⁷ In the Tuli¹ and Sabi⁸ coal-fields the Samkoto or Forest sandstones rest directly on the coal-bearing beds. A similar sequence is found in the Komati Poort coal-field in the Transvaal. Here, according to Mr. Kynaston², the palæontological evidence favours the correlation of the coal-bearing series with part of the Beaufort series and the Molteno beds of the Stormberg series. It is doubtful, therefore, whether the coals of Tuli and Sabi are not of Beaufort or even Stormberg age.

But whatever doubts there may be regarding the exact horizon of some of the coals, the coal-bearing beds all over Rhodesia are found at the base of the formation. Owing, however, to an extensive overlap of the higher beds, the coal-bearing series is confined to the lower-lying ground in Southern Rhodesia, and does not extend on to the high land between the Limpopo and Zambesi basins. The coal-bearing series is thus partly hidden by the newer members of the Karroo system, but to what extent it is impossible to say. In Northern Rhodesia the Karroo formation occurs in basins partly produced by folding, partly let down by faulting.⁵ The limits of the coal series are thus better defined by natural structure.

Wankie is the only field from which coal is raised at present, but a certain amount of exploratory work has been done in all the other fields. In the majority this preliminary work has been carried to the point of proving the existence of one or more seams of workable quality over a certain area by the sinking of shafts and bore-holes. The estimate of the coal resources is based on the results of this work, and for the data I am indebted to several individuals and companies, particularly Mr. A. J. C. Molyneux, F.G.S.; Mr. A. R. Thompson, and the Goldfields Rhodesian Development Company, Limited. In several fields