(A) Glaciation of the Bristol District

This section describes sites selected to illustrate the pattern of the ancient glaciation of coastal Somerset and Avon and the Avon Valley. Till and erratic-rich outwash gravels are preserved in the Kenn lowlands at Kennpier and Yew Tree Farm. Sites such as Court Hill and Nightingale Valley show excellent examples of glaciofluvial deposits and flow tills, and show that the ice sheet downwasted against the Carboniferous Limestone massifs of the Failland Ridge and Clevedon Down. The Bleadon Hill site contains enigmatic deposits which may be glaciofluvial in origin and, if so, documents the incursion of a substantial ice sheet into Sedgemoor. Whereas the basal diamicton at Greylake (Chapter 9) may provide evidence for the maximum extent of glacial deposits in Sedgemoor, Langport Railway Cutting, 6 km to the south, is erratic-free (Chapter 9).

At Court Hill, a col-gully cut in Carboniferous Limestone of the Failland Ridge contains up to 24 m of glacigenic sediments. These comprise unstratified tills, stratified boulder beds, gravels, sands and glaciolacustrine deltaic deposits.

Gravels with a component of quartzite and other erratic lithologies were first recorded at Court Hill by Trimmer (1853). Prestwich (1890) suggested 3. that these gravels might be linked with the Westleton Beds of East Anglia, and argued that they might be a continuation of the drifts on the hills around Bath. In the early 1970s, a cutting for the M5 motorway was excavated through the deposits at Court Hill. The geotechnical investigations and the cutting itself revealed 24 m of sands, gravels and diamictons lying in a channel cut through the

This section also documents sites which provide evidence for the age of the glacial episode, or which have significant potential for providing chronological control. This evidence derives from the fossil content of deposits at these sites. The palaeochannel-fills at Kennpier and Yew Tree Farm, which overlie the glacial deposits, have provided important aminostratigraphic evidence. The evidence at Weston-in-Gordano remains undated, but the complex stratigraphic sequence here, which includes evidence for three marine transgressions, offers the possibility of further geochronometric dating. These sites also offer important temperate-stage palaeobiological evidence, and evidence of former high sea levels. This is augmented by the Stage 7 marine deposits at Kenn Church. Morphostratigraphical evidence for dating the glacial episode is contained in the terrace sequence of the Avon Valley, which is described in the second section of this chapter.

Court Hill

Bath University

Nightingale Valley

Bleadon Hill

Kennpier

Yew Tree Farm

Kenn Church

Weston-in-Gordano

References