found footprints, apparently of Labyrinthodonts, at Brownrigg, in Plumpton, and near Penrith; and many years ago numerous footprints were described by the late Sir William Jardine, which were found on the surfaces of beds of sandstone in Corncockle Moor and in other parts of Dumfriesshire. All of these footprints clearly indicate that the animals were occasionally accustomed to walk on bare damp surfaces, which were afterwards dried by the heat of the sun, before the flooded waters overspread them with new layers of sediment in a manner such as now takes place during variations of the seasons in many modern salt lakes. Pseudomorphs of crystals of salt in the Permian beds of the Vale of Eden, and deposits of gypsum and peroxide of iron, help to this conclusion, together with the occurrence of sun-cracks or rain-pittings impressed on the beds. The Pseudomorphous crystals of salt tell of the evaporation of pools by solar heat, for neither crystals of chloride of sodium (salt), nor deposits of sulphate of lime (gypsum), could have been formed amid common mechanical sediments at the bottom of an open ocean. Only concentration of salts, by solar evaporation of inland waters, could have produced this result.

Eight genera and 21 species of fishes have been found, chiefly in the marl slate. They are *Acrolepis* 1, *Cœlacanthus* 2, *Dorypterus* 1, *Gyracanthus* 1, *Gyropristis* 1, *Palœoniscus* 11, *Platysomus* 2, and *Pygopterus* 2. Generically they have strong affinities with those of the Carboniferous age, some of which were undoubtedly truly marine, while others certainly penetrated shallow lagoons bordered by peaty flats. There is nothing extraordinary in the occurrence of seafish in an inland salt lake.