

*Birds.*

The remains of birds are extremely uncommon, even among the comparatively recent alluvial lacustrine and cavern deposits, still less frequent among the tertiary strata, and almost unknown among the older strata. This is one of many instances which agree in proving that the occurrence of the exuviæ of land animals and land plants in the stratified rocks, which were formed chiefly in the sea, is the result of causes so local, limited, and rare, as to be, in fact, *accidental*, and therefore no sufficient basis of reasoning as to what was the state of the ancient land at particular geological periods. At the present day we could learn little concerning the vegetables and animals of the land, from the few traces which remain of them in the beds of lakes, rivers, and the sea.

*Mammalia.*

The argument just used may be applied with equal justice to the paucity of remains of land mammalia in the marine strata, of all ages; for even in the tertiary rocks such remains are rare. But it is, perhaps, necessary to find other causes for the scarcity of marine mammalia in all except certain of the tertiary strata and superficial sediments. The opinion formerly favoured was, that during the whole of the primary and secondary periods, at least, the class of mammalia had no existence, and only came into being during the tertiary period. But this conclusion, founded upon the mere want of such remains, was easily seen to be insecure, and at length proved to be erroneous by the decision of Cuvier, that certain small jaw bones, with teeth, found in the oolitic system at Stonesfield near Oxford, belonged to *viviparous quadrupeds*, and approximated to the genus *DIDELPHYS*.

Five specimens of these remarkable jaw bones are