

in Virginia, these are merely precursors of those of the Upper Cretaceous, and are not sufficient to redeem the earlier Cretaceous from being a period of pines and cycads.

On the whole, this early Mesozoic flora, so far as known to us, has a monotonous and mean appearance. It no doubt formed vast forests of tall pines, perhaps resembling the giant Sequoias of California; but they must for the most part have been dark and dismal woods, probably tenanted by few forms of life, for the great reptiles of this age must have preferred the open and sunny coasts, and many of them dwelt in the waters. Still we must not be too sure of this. The berries and nuts of the numerous yews and cycads were capable of affording much food. We know that in this age there were many great herbivorous reptiles, like *Iguanodon* and *Hadrosaurus*, some of them fitted by their structure to feed upon the leaves and fruits of trees. There were also several kinds of small herbivorous mammals, and much insect life, and it is likely that few of the inhabitants of the Mesozoic woods have been preserved as fossils. We may yet have much to learn of the inhabitants of these forests of ferns, cycads, and pines. We must not forget in this connection that in the present day there are large islands, like New Zealand, destitute of mammalia, and having a flora comparable with that of the Mesozoic in the northern hemisphere, though more varied. We have also the remarkable example of Australia, with a much richer flora than that of the early Mesozoic, yet inhabited only by non-placental mammals, like those of the Mesozoic.

The principal legacy that the Mesozoic woods have handed down to our time is in some beds of coal, locally important, but of far less extent than those of the Carboniferous period. Still, in America, the Richmond coal-field in Virginia is of this age, and so are the anthracite beds of the Queen Charlotte Islands, on the west coast of Canada, and the coal of Brora in Sutherlandshire. Valu-