

have evidence in the Madeira group, not of modification, but of unchanged survival of Tertiary species long since extinct in Europe. May we not infer that the same was the case in the Azores? These results are certainly very striking when we consider how long the Azores must have existed as islands, how very rarely animals, and especially pairs of animals, must have reached them, and how complete has been the isolation of these animals and how peculiar the conditions to which they have been subjected in their island retreat.

Other oceanic islands present great varieties of conditions, but leading to similar conclusions. Some, as the Bermudas, seem to have been settled in very modern times with animals and plants nearly all identical with those of neighboring countries. Others, like St. Helena, are occupied apparently with old settlers, which may have come to them in early Tertiary or even in Secondary periods, which have long since become extinct on the continents, and whose nearest analogues are now widely scattered over the world. Islands are therefore places of survival of old species—special preserves for forms of life lost to the continents. One of the most curious of these, according to Wallace, is Celebes, which seems to be a surviving fragment of Miocene Asia, which, tho so near to that continent, has been sufficiently isolated to preserve its old population during all the vast lapse of time between the middle Tertiary and the present period. This is a fact which gives to the oceanic islands the greatest geological interest, and induces us to look in their actual faunæ and floræ for the representatives of species known on the mainland only as fossils. It is thus that we look to the marsupials of Australia as the nearest analogues of those of the Jurassic of Europe, and that we find in the strange barramunda of its rivers the only survivor of a group of fishes once widely distributed, but which has long since perished elsewhere.

Perhaps one of the most interesting examples of this is furnished by the Galapagos Islands, an example the more remarkable that no one who has read in Darwin's fascinating "Journal" the description of these islands, can have failed to perceive that the peculiarities of this strange archipelago must have been prominent among the facts which first planted in his mind the germ of that theory of the origin of species which has since grown