

	Great Britain, 1885, Etheridge	American, 1894, R. P. Whitfield
Corals	76	27
Echinoderms	201	65
Brachiopods	106	28
Lamellibranchs	476	1329
Gastropods	298	839
Ammonoids	206	224
Nautiloids	20	12
Belemnites	14	19
Crustaceans	110	17

The contrast is equally great with the marine fauna of the Parisian and Mediterranean basins in Europe. It will be noted that the American species are from all North America. The species are, it is true, but imperfectly studied; yet the contrast, if all were known, would be strong. Great Britain leads in species of clear seas, and those of moderately deep water — Corals, Echinoderms, and Brachiopods; and if the comparison were confined to the Atlantic border of North America, immensely so in Ammonoids and Nautiloids. The number of both groups from this border is only 24, and that of Echinoderms less than 15.

But in number of species of Reptiles America is far ahead of Britain and Europe; and probably because its broad Western Interior had a vast extent of shallow sea-borders and emerging lands, and thus afforded them especially favorable conditions for existence.

CLIMATE.

During the Cretaceous period, a warm climate still prevailed over the earth even to the poles, but with some cooling during the closing part of the period; and in North America with a great Central Interior Sea, to the end of the period, the climate was moist. The Cycads and associated species of plants in the lower Cretaceous beds of Greenland indicate, according to Heer, a mean temperate of 21° C. to 22° C., or about 70° F. to 72° F. This temperature is that of Cuba. The facts prove that a somewhat similar temperature prevailed at the same time over Spitzbergen and in Alaska, where the same flora existed; even along the Atlantic border at least as far north as Long Island; in the region of the Kootanie beds in Montana and the neighboring part of British America; and over more western North America to Alaska. The Gulf Stream of the Atlantic may account in part for the extension of so high a temperature to Greenland; and a like stream over the Pacific, for that to Alaska.

The plants of the Vancouver coal-beds, and those of the Patoot beds in Greenland, which Dawson refers to the age of the Montana series, he compares with those of Georgia at the present time, where the mean temperature, he states, is about 65° F. The Dakota plants of Kansas and elsewhere, with those of the Mill Creek group, Canada, and the Atané of Greenland,