

the base of the granite hills of Dartmoor on one side, and the slopes of Greensand on the other. Of this there can be little doubt, that the fine clays, often light-coloured, which form so much of the series, were derived from the disintegration of the felspar of the granite of Dartmoor, and the sands, where pure, were probably partly made from the quartz of that granite, and partly from the waste of the neighbouring Upper Greensand hills, then no doubt more extensive and higher than now.

The climate of the period is unmistakably indicated by the plants, of which fifty species have been described by Heer, from these Lower Miocene beds. Some of these are ferns, including *Lastræa stiriacæ*, and *L. Bunburii*, *Pecopteris lignitum* and *P. Hookeri*, and of the Order Coniferæ we have the branches, fruits, and seeds of the lofty *Sequoia Couttsiæ*, a genus that abounded in the Miocene epoch, and probably formed the most common tree in the woods that surrounded this lake. The nearest living analogue of this tree is the *Sequoia gigantea* of California, the Wellingtonia of our parks and gardens. Various grasses have been found, and fragments of a Palm-tree, *Palmacites Dæmonorops*, probably resembling the living Rotang-palm, and leaves of Oaks, *Quercus Lyellii*, of which, says Heer, 'similar species are still living in Mexico.' Three species of Figs and two of Grapes have been described, together with Laurels, Cinnamons, Birches, Willows, Waterlilies, &c., all of extinct species according to Heer, and eleven of which are common to the Miocene flora of Switzerland, both 'manifesting a sub-tropical climate.'

'If,' says Professor Heer, 'from the relics of the Bovey plants, we attempt to represent the vegetation of