

THE ANTECEDENTS: PRE-HISTORY

Several hundred feet below the jumbled welter of gravel beds, sand banks and boulders which underlie the land surface now known as Shoreham, there is a stratum of bedrock dating back some 50,000,000 years to a time known in geological parlance as the Cretaceous Period. This bed of rock is of an age equal to that of the White Cliffs of Dover. When it was being formed, dinosaurs still roamed the face of the earth, and while the Cretaceous is identified as the last phase of the Age of Reptiles, primitive mammals had evolved to a point where they were well on their way toward supplanting reptiles as the principal life form.

Our Cretaceous bedrock takes the form of a somewhat rusty-colored shale. Due to its inaccessibility, it probably has never been observed by the human eye in Shoreham. Near the Glen Cove beaches, however, it comes to the surface sparingly and discloses, astonishingly, a spectrum of fossil records which prove beyond doubt that at one time, the forerunners of exotic tropical trees such as camphor, cinnamon, eucalyptus and sequoia once flourished here, side by side with the ancestors of the common trees of the eastern hardwood forest we know so well today.

The presence of this ancient rock layer, and the relics of ancient life it contains, point out two intriguing aspects of our pre-history: firstly, this formation, now so deep below our land surface as to actually lie below sea level, was at one time above water and consequently able to support terrestrial life: secondly, the species of flora contained in the fossil records tend to prove that our climate was once tropical. It can be said with confidence that the level of the ocean has not always been the same as it is today. During the great Ice Ages, vast amounts of water were locked up in the polar ice caps and in-

evitably lowered the levels of the oceans. Furthermore, rocks tend to rise and fall in response to geologic forces; witness the presence of fossil sea shells in the rocks on the rim of the Grand Canyon, a mile or so above today's sea level.

Thus this ancient bedrock, at one time above water and sustaining a biosystem of life forms recognizable today, may be said to be the primordial and original foundation of Shoreham.

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