can not be seen even as a tiny speck without a microscopic magnification of at least 400 diameters. Most coccoliths are less than 20 microns in diameter. (A micron is one one-thousandth of a millimeter.) Each plant has the ability to swim about by means of tiny "flagella" which whip back-and-forth in the water. During the organism's life it is protected by the coccoliths (plates) which it has secreted as a covering for its cell wall. A strange feature of their existence is the fact that they keep shedding the coccoliths from their surface and producing new ones.[4]

With respect to numbers, the coccolith-producing organisms are usually even more abundant in ocean waters than are the Foraminifera. Extensive tests have found 1,800 individual organisms per liter to be the average population density for the entire upper 650 feet (200 meters) of water in some temperate latitudes south of the equator.[5] At some water levels they are far more abundant than this. The very small size of the coccoliths prevents rapid settling, so there is no possibility of a rapid buildup of any layer of these particles. (Many of them remain suspended in even tranquil ocean water for a few years before sinking to the ocean floor.)[6] In fact, the amount of deposit of these and the Foraminifera combined is usually less than one centimeter per thousand years in the main parts of the oceans.[7] So, over 25,000 years are usually required for the production of even one foot of the Foraminifera and coccolith ooze which forms such a thick sedimentary covering over much of the ocean floor.

A few recent, popular authors have attempted to speculate that marine organisms might have been spurred into a fantastically rapid growth rate by events of the Biblical Flood. However, this would have been entirely contrary to the principles and laws of biological growth. Whenever the environmental conditions of the ocean are greatly changed by the suspension of large amounts of mud, silt, or volcanic ash, the environment is thus made unsuitable for rapid growth. This is especially true in the case of photosynthetic organisms, such as the coccolithophores and other types of algae. Furthermore, these organisms are wholly dependent upon the meager supply of ionic calcium and carbonate in the water for the building of their skeletal parts. So again we must never make the mistake of supposing that the organisms in a given habitat can go racing on beyond the limitations of their environment to accomplish some spectacular feat of growth or reproduction.

Deposits of Chalk-Producing Organisms on Land

The shells of the Foraminifera and coccolithophores not only form thick deposits on the present ocean floor, but are the major components of several large chalk deposits which are now exposed on land in Europe and the Americas. In northwestern Europe there are deposits of chalk from the Cretaceous Period which are from 330 to 450 meters (1,080 to 1,480 feet) in thickness. Much of this chalk is more than 98% pure calcium carbonate, being composed primarily of the fossilized shells of Foraminifera and coccoliths. An abundance of these shells and coccoliths are in good condition