Students of creation doctrine may here ask concerning the actual time when the scleractinian corals and the diatoms appeared on earth. Were they <u>not at all</u> in existence until the Mesozoic Era? This we can not answer; but it is obvious that they did not become common or dominant forms of sea life until Mesozoic times. In nature we often observe that it is possible for a particular form of life to be very rare as to its development of a population, and yet survive. So it could be that many life forms and species which do not appear in the fossil record until after the Paleozoic Era were actually in existence long before they became sufficiently numerous to be discovered by paleontologic research.

However, this is not a problem in dealing with the nature of fossil distribution as invalidating the "Flood geology" hypothesis of the formation of the sedimentary cover of the earth. If a certain form of hard-shelled, marine animal were abundant at the time of the Flood, then it would obviously show up in some of the strata that were formed during that event. Those species which were rare would obviously not show up in the record. So, when we say that certain forms of life were "not present" during parts of the geologic record, we are not asserting that they did not exist at all during those times.

(b) The Testimony of Marine Microfossils

Now we will consider another aspect of fossil distribution for which "Flood geology" can not account, unless it resorts to saying that God restricted selected types of fossils to certain stratigraphic levels by special miracles. This has to do with two groups of extremely abundant microfossils. It is well known that the world's oceans are teeming with microorganisms which produce shells (or "skeletons") of various types, in which to live. The fact that the shells are composed of minerals which are more dense than water is really no problem for the floating existence which most of these organisms have. Gas bubbles are usually maintained in the protoplasm of the single cell of the occupant of the shell in order to provide buoyancy.

Some of these microorganisms, such as the coccolithophores and the foraminiferans, produce a calcium carbonate shell, while others--mainly the radiolarians and diatoms -- have a silicon dioxide shell. Either of these 2 great groups could be used to illustrate the fact that the shells of some subgroups of marine microorganisms are restricted to the Mesozoic and Cenozoic strata systems, while other subgroups are found abundantly not only in these systems, but throughout the Paleozoic strata as well--or at least down into the Middle Cambrian. This is of special significance because most of these organisms live in the same marine ecological zone, namely the pelagic. And, of the ones which do live down on the bottom (benthic environment), many are totally absent from the deeper marine-type rock formations. For example, here in the Appalachians none of the thousands of oil wells drilled into Paleozoic rock systems have produced any diatoms -- either pelagic or benthic ones -- from those systems. Yet diatoms are very abundant in the rock systems from the Cretaceous (Upper Mesozoic) on up. They are also very abundant in the oceans of the world, and accumulations of them on the ocean floors are widespread and often very thick and deeply buried.

Perhaps someone will say, "There may have been some influence or force which kept this great accumulation of diatom shells from being mixed into the lower rock layers during the Flood." One might be tempted to accept such a hypothesis were it not for the fact that the oceans are also teeming with microfossils of the Order Radiolaria ("radiolarians") which have an average size very similar to that of diatoms and have shells composed of the <u>same</u> mineral as that of the diatoms (SiO₂). Drillings of the Deep Sea Drilling Project have located very widespread and thick deposits of both diatoms and radiolarians in the ocean floor, practically worldwide. At many sites in the Pacific Ocean, drillings revealed thicknesses