Forbes believed with all the intensity of the old school of naturalists in the immutability of species, and in specific centres of distribution; he based his beliefs on facts of his own observation, and if these now appear insufficient and unsatisfactory, it must be remembered that he worked before Darwin's Origin of Species gave to naturalists the modern ideas of natural selection and evolution.

Forbes' name is inseparably associated with the bathymetrical distribution of marine life, and his clearly defined zones—the Littoral, Laminarian, Coralline, and the Region of the Deep-sea Corals—enormously facilitated the work of descriptive naturalists. The region of deep-sea corals extended from 50 fathoms to an unknown depth, and Forbes points out that vegetable life is entirely absent from it, and "as we descend deeper and deeper in this region, the inhabitants become more and more modified, and fewer and fewer, indicating our approach towards an abyss where life is either extinguished, or exhibits but a few sparks to mark its lingering presence. Its confines are yet undetermined, and it is in the exploration of this vast deep-sea region that the finest field for submarine discovery yet remains."[1] In another place he indicates the plateau between Shetland and the Færöe Islands, on which the depth nowhere exceeds 700 fathoms, as the place on which dredging is most likely to settle the question of the existence of a zero of life, and he points out that while the life-zero is probably about the 300 fathom line in the Mediterranean, the researches of Arctic voyagers have shown it to be much deeper in Polar regions. The disciples of all great men tend to assert dogmatically what their master suggested hypothetically, and it was so with the followers of Edward Forbes. They viewed the life-zero, not as a probability, but as a certainty, building their belief more on the *à priori* absurdity of creatures being able to live in the absence of light and air, and under the great pressure which must prevail in the depths of the sea, than on any direct evidence.

The United States Government sent out their first purely scientific expedition in 1838 under the command of Captain Wilkes. This expedition returned in 1842; its work was chiefly geographical and astronomical, but during the first year a few dredgings were made in shallow water, and a number of deep soundings were obtained at intervals during the voyage. The sounding line employed was a copper wire, a great improve menton previous methods. The great American naturalist Dana, who accompanied this expedition, added much to the knowledge of several groups of shallow water and pelagic animals.

A British Antarctic Expedition under Sir James Clark Ross sailed in the "Erebus" and "Terror" in 1839, and returned safely in 1843. Like Sir John Ross in the Arctic voyages, his nephew was determined to make the most of his opportunities in all directions, and was seconded in his efforts by the able co-operation of Sir Joseph Dalton Hooker, who accompanied the expedition as assistant surgeon. Without neglecting

[1] Natural History of European Seas, p. 26, 1859. This classification was given as early as 1839. See Memoir of Edward Forbes, p. 255.