

Abigail Kingsley Alling - Biography



For the past 33 years, Abigail Kingsley Alling has been actively engaged in marine and environmental research and development projects. Presently, Ms. Alling serves as Chairman and President of the Biosphere Foundation (BF) and its division, the Planetary Coral Reef Foundation (PCRF), which she co-founded in 1991.

On behalf of PCRF, Ms. Alling has spearheaded the development of a variety of innovative programs in science, technology, and education to preserve and protect coral reefs.

These included the operation of PCRF's coral reef research vessel – the only ship continually at sea dedicated to the study of coral reefs on a planetary basis for 14 years; and, in cooperation with institutions such as the Massachusetts Institute of Technology (MIT) and the Scripps Institution of Oceanography, the development of the Coral Reef Satellite Mission (CRSM) – a pioneering effort to map and monitor reefs from space, which will create an urgently needed first comprehensive baseline map of living coral reefs.

On behalf of BF and scientists at NASA, Ms. Alling also coordinated the design for a long-term project to place a sustainable human habitat on Mars. To this end she managed the research and development of a 12' diameter sealed system to grow plants and study soil, water and atmospheric dynamics in support of the design for a space-based human life support system; and she directed the design and development of Mars On Earth®, a simulation on Earth of an inhabited base for Mars. The goal of this project was to determine the feasibility of maintaining humans in a space-based self-sustaining system.

From 1991-1993, Ms. Alling was one of the eight "biospherians" to live for two years inside Biosphere 2, a 3.15-acre Laboratory for Global Ecology. At Biosphere 2, she created and operated the largest artificial ecological marine system, a 1,000,000-gallon mangrove, marsh, and ocean coral reef. She also served as Scientific Chief for over sixty research projects.

Previously, Ms. Alling was the Expedition Chief on the "Circumnavigation of South America" Expedition, which included a six-week voyage to the Antarctic Peninsula to study humpback whale population genetics, in collaboration with the National Cancer Research Institute. In 1985, she was the marine biologist who supervised the historic first successful release of two captive bottlenose dolphins back to the wild. Additionally, she has studied marine mammals in Greenland, Labrador Canada, North Pacific, Indian Ocean and the Bay of Bengal.

A Fellow of the Linnean Society, World Academy of Art and Science, and the Explorers Club, Ms. Alling is a *cum laude* graduate of Middlebury College (Biology) and she also received an M.S. degree in Environmental Studies, *cum laude* from Yale University. She did further studies in chemistry at Harvard University, and in zoology at Cambridge University.