Summary of NSA Appropriation

U. OF CALIFORNIA - SCRIPPS INSTITUTION OF OCEANOGRAPHY - MARINE RESOURCES

Over seven-tenths of the surface of the earth is covered with water, but mankind gets only about 1.2 per cent of his total food from the sea. Scientists are just beginning to realize that the long-range food requirements of our planet make it essential to work toward a substantial modification of the 1.2 per cent figure just quoted. This, in turn, means that we must have a vastly improved stock of basic knowledge concerning the now almost wholly unknown biological resources of the oceans and seas.

The study of marine biology is, by virtue of certain obvious physical facts, difficult and expensive. The study of the cycle of life existing in these vast and hidden regions cannot be done with small-scale equipment in the laboratory. It is necessary to go to sea in fairly large and expensive research vessels, equipped with complicated mechanical gear which permits sampling of the sea bottom, the sea water, and the marine life itself at depths which run from the surface down to many thousands of feet. It is also necessary to have many other types of equipment located in the research vessel, such as sonar equipment. The development of marine biology has been seriously handicapped by such factors and by the fact that a really effective approach to problems of the resources of the sea requires a sizable staff of men trained in a variety of scientific disciplines.

The Scripps Institution of Oceanography, one of the important branches of the University of California, is located at La Jolla in southern California. It is an impressive establishment with five buildings and five seagoing vessels, most of which are capable of traveling the open ocean to any point in the world. There are at the present time 18 on the professional staff and some 50 more on the technical staff. The entire personnel of the Institution, including all of the staff on ships, is approximately 350.
It is characteristic of this Institution as a whole that all of its members tend to think of the sea as one vast organism, with each one interested in one or another aspect of the great metabolic cycle of this whole organism. Underlying all of the individual activities are two basic problems. The first problem relates to the individual organisms of the sea, and has as its leading curiosity the bewildering fact that there are so many and so widely divergent kinds of organisms in the sea. The second problem has to do with the over-all aspects of the marine populations — what is the standing crop of marine life, and what are the factors that limit this standing crop and the factors which produce in it such dramatic variations from year to year.

To enable this institution significantly to expand its present interests in marine biology, through additions to its faculty and through increased aid for research, The Rockefeller Foundation made to the Scripps Institution of Oceanography, in 1954, an outright grant of one million dollars. It is planned that about two thirds of the available money will be expended over a five year period, and the remainder over an eight year period.