

*Systematics and Biogeography (SB)*

This subcommittee has adopted the following projects and encourages suggestions for additional ones: (1) participation in the ecological surveys of other sections of IBP, especially PT, PF, PM, and HA; (2) salvage operations in natural areas where species and communities are threatened with extinction; (3) comprehensive descriptions of marine ecosystems, particularly where changes may be imminent, as on both sides of the Isthmus of Panama; (4) studies of endemism, extinction, and inventory of local biota.

*Environmental Physiology (EP)*

This subcommittee has construed its terms of reference broadly as (1) physiology of population dynamics with emphasis on (a) understanding of the dynamics of both cosmopolitan and limited populations, (b) factors determining population equilibria and geographic differentiation, including genotypic and environmentally induced variation in key species of the tropics, estuaries, oceans, deserts, and freshwater; (2) physiological mechanisms of adaptation at individual levels and as bases for community structure, including (a) chemical defense methods and (b) response and survival in extreme environments; (3) description of the biosphere and changes occurring therein because of the impact of the expanding human population and industrialization.

(Additional material submitted by Dr. Revelle will be found in Appendix A.)

Dr. REVELLE. We have here in addition to Dr. Bennett, Deputy Director of the Office of Science and Technology, also Dr. Theodore Byerly, who is Vice Chairman of the National Committee for the International Biological Program and Administrator of the Cooperative State Research Service in the Department of Agriculture; Dr. Harve J. Carlson, Director of the Division of Biological and Medical Sciences of the National Science Foundation and Chairman of the Interagency Coordinating Committee for the IBP; and Dr. Frederick Smith, professor at the University of Michigan in the School of Natural Resources, who is director of one of our major programs.

Mr. DADDARIO. The committee welcomes Dr. Byerly, Dr. Carlson, and Dr. Smith. And if you would like to have them all come forward, they can sit around the table, it may be helpful, and they may, if they would like, participate in any way they can or would like to.

Dr. REVELLE. Mr. Chairman, the International Biological Program has been slowly developing now for 4 or 5 years. It was conceived internationally by the International Union of Biological Sciences, and accepted as a major effort by the world's scientists through the International Council of Scientific Unions, which has set up a committee of scientists representing different parts of the earth and different kinds of biology, and called it the Special Committee for the International Biological Program.

This is a very similar organization to the one established for the International Geophysical Year, and similarly, within the United States there is a national committee appointed by Frederick Seitz, the president of the National Academy of Sciences, which is called the U.S. National Committee for the International Biological Program. This committee has selected nearly a hundred scientists to be members of its special subcommittees dealing with different aspects of the program, and they in turn have consulted with and worked with some 150 or so other biologists so that at the present time we have a rapidly spreading network of concern and discussion and ideas among American biologists, thinking about what can be done in the International Biological Program.