

(2) The sea is by no means limitless. Much of it is desert, in fact.
(3) Much of the sea's resources are already depleted: whales, salmon, coastal fishes—the list is probably endless.

(4) It is tremendously expensive to operate by sea, especially where depth is concerned. That is, the sea is just a difficult place to be and much of what is promised takes on the aura of "pie-in-the-sky."

(5) The processes of productivity in the sea are unknown mostly. We have but scratched the surface in spite of all the underwater vehicular travel. Here we return to the first point—how best to capture knowledge, which we all must admit is a first step, but on an international basis.

(6) Lastly, in the history of human affairs there have been two major revolutions, the agricultural and the industrial. Now we are in the midst of a third, the marine, wherein man attacks and conquers (as is our egocentric wont to say) the 71 percent of the planet Earth, as an urgent necessity following the decimation of the land. But if we speak of revolutions, let us remind ourselves that in knowledge and technique, man is still preagricultural by sea. He is still the hunter-gatherer there. Significantly, the IBP PM Subcommittee calls for a major research effort in the field of planned modifications of the environment, by which is meant, at least in part, increased productivity, farming, if you will.

The worthiness and necessity of a vastly expanded U.S. marine sciences effort is well-known to us all. As cases in point, we recall the reports "Effective Use of the Sea," The White House, June 1966, and "Marine Science Affairs—A Year of Transition," the First Report to the Congress on Marine Resources and Engineering and Development, February 1967. Now these worthy publications are replete with graphs, charts, data, and words which boil down to and provide some fire for "we'd better get moving or else." But they are also replete with international implications and complexities which will only be solved by a world effort.

I maintain and am willing to defend within the limited realm of my knowledge, that the long-range International Biological Program is the best means today for getting moving as far as finding out about the sea's biological resources goes.

I am also willing to defend the proposition that for all sorts of reasons the sea's biological resources are its most important by far. We are biological organisms and in spite of Judeo-Christian tradition which teaches *use of the land*, we now know that we must *live with the land (and sea)* or perish. To reap biological harvest from the sea is not likely to damage other resources, but to reap geological and mineral harvest carelessly can ruin the biological harvest. In this connection, the sea is not like the land for the waters are a continuum and no matter what is done or where, eventually it is worldwide by sea. Hence the real concern over atomic waste disposal by sea.

Now, specifically, why a special appropriation for the IBP? For one thing, it is perfectly possible to have a program approved by IBP, yet turned down by one or many of the funding agencies in the Federal or private systems. Many or most of the IBP's aims are not appropriate for these agencies which tend to be much more jurisdictional and provincial than the IBP calls for. For another, with-