Mr. Miller. The residue after they get rid of it, what effect is this going to have on the oysters?

Dr. RIPLEY. That is right.

Mr. Miller. And I must say that some years ago in this country the Atomic Energy Commission filed a report on the disposal of atomic waste on the Atlantic and gulf coasts; they were thoroughly examined by a committee, which I served on. They never filed one on the disposal of atomic waste on the west coast because by that time the fishery people had become alive. It is interesting to note that when in Japan they talked about using big reactors and disposing of wastes, the Japanese contracted with the Picards to make a study for them. They found upwellings of water where they never imagined they would be and which brought this stuff to the surface. As a result no development has taken place over there.

Isn't this what you are telling us, that we have to do to support

biology?

Dr. Ripley. Very much so, Mr. Chairman.

I am afraid that technology is not enough. And we cannot engineer our environment unless we know what it consists of. And we won't until we get an impetus to understand it.

Mr. MILLER. As I understand it, using a lot of these pesticides that at one time were effective, they become less effective when the earth mutations have taken place, and what is this going to do to the future?

Dr. RIPLEY. Quite true; yes, sir.

Mr. Daddario. Well, Dr. Ripley, thank you ever so much. I hope we might be able to forward some further questions to you or contact you for informal discussions.

Dr. Ripley. Be very happy to.

Mr. Daddario. We appreciate it. Thank you. (Information requested is as follows:)

SMITHSONIAN INSTITUTION, Washington, D.C., June 12, 1967.

Hon. Emilio Q. Daddario, House of Representatives, Rayburn House Office Building, Washington, D.C.

DEAR MR. DADDARIO: In accordance with your invitation, we are submitting the enclosed addendum to our written transcript submitted to your Committee on Science Research and Development on June 6. This addendum describes the research being undertaken in the various bureaus of the Smithsonian Institution which relate to the IBP programs, and which if expansion were possible, could serve as major contributions in a number of study areas. The talents and experience of scientific staff of the Smithsonian are also being well applied in a variety

of guidance functions.

During the hearing several references were made to the International Geophysical Year (IGY). Since that program may possibly serve as a useful pattern for the IBP in some organizational respects, you might be interested in knowing how it operated. Congress provided a grant of money to the National Science Foundation (NSF) specifically marked for support of the U.S. program of the IGY. The NSF contracted with the National Academy of Sciences to set up evaluation panels, review committees, and management councils to determine the relative merits of research proposals and their relevance to the program as established by the National Committee. They also functioned to stimulate interest among the scientists to participate in these program areas. Thus, the Academy served as the scientific and management agency, while the NSF served as the administrative agency. The success of the program was owed in large part to the excellent coordination between the two groups.