

Dr. COLE. I don't know the amounts going into the North Sea. Of course they are creating high-level atomic wastes and they have had at least one rather serious reactor accident.

Chairman MILLER. As you know, there is a counter current under the Gulf Stream.

Dr. COLE. Yes.

Chairman MILLER. Can the effect of this high-level waste, if enough of it gets into the North Sea, do some damage on the Grand Banks and to the fisheries off the New England coast? I believe these isotopes have an affinity for shellfish, particularly.

Dr. COLE. It would depend on what they are putting in there. If they are putting strontium-90 or cobalt-60 in there these could accumulate in shellfish and could cause tremendous damage. Cobalt-60 wasn't even known to be produced by the bomb that contaminated the island of Rongelap in the Pacific and yet 2 years after the blast, the shellfish there were extremely radioactive. They wouldn't be safe to have on your table.

Mr. DADDARIO. My reason for asking the question was just to get the definitions right. You are just referring to what we are doing and you are not in any way intending by this to make comparisons to other areas?

Dr. COLE. No.

This proposed National Institute of Ecology, in addition to its functions as a research organization, data center, and advisory body will seek to further the infusion of ecological information into education at all levels. In testimony I gave 2 years ago before the Senate Committee on Interior and Insular Affairs I emphasized that we do not now have enough qualified ecologists and that not enough are being trained to conduct the studies and furnish the advice that society urgently needs.

The Ecology Study Committee of the Ecological Society of America has just undertaken, by means of a questionnaire, to learn what the training situation actually is. A summary of the results will be presented to you by Dr. Edward S. Deevey, Jr., of the National Science Foundation who is a regularly attending observer of the ecology study committee.

It is clear to me that the Nation simply must step up the training of ecologists. There is simply no substitute for the type of interdisciplinary approach which is instilled in ecologists. Attempts to solve our environmental problems solely by the narrower traditional approaches employed by physical scientists and engineers will, in my opinion, invite disaster.

Now there are two other things that I wanted to include in the testimony but in the haste in which it was prepared I didn't get time to put these in. Incidentally there are copies of the present statement about the National Institute of Ecology available to you. One is the question of giving ecologists field training. This is an outdoor science, and our people just simply have to get out and see how ecosystems really work and it is a pet project of mine that I hope we can bring to fruition, that we will perhaps under this Institute operate a number of field stations and laboratories, one with access to interesting bodies of fresh water, one marine station, one in the Tropics, one in the Arctic or Alpine situation, and one in an arid land situation, and if we are