

Comments on the Discussion

Notes on the History, Staff, and the Various Laboratory Activities were presented by Dr. Donaldson.

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Reports and Publications of the Laboratory were outlined by Dr. Donaldson.

The following comments were made:

Dr. Pearson suggested that the Laboratory not be burdened with the task of reproduction of reports. He would like to have a copy of each UWFL manuscript sent to the Division of Biology and Medicine. He encouraged wider publication in technical journals.

Mr. Crane suggested since there is an overlap of information in various reports with various classifications, that this material be assembled into one report for inclusion in a Nuclear Energy Series volume. He said that in re-writing editors must know how the report is to be used.

Dr. Donaldson stated that it is the task of the Laboratory to provide technical information for the A.E.C. on the Bikini-Eniwetok area - not the Laboratory's responsibility to interpret the data.

Mr. Crane suggested that it might be advisable to have someone in Washington, D.C. re-write these reports on the Bikini material for public consumption.

Dr. Pearson said it is certainly not the responsibility of the Laboratory to write technical reports for three different divisions of the A.E.C.

Mr. Crane said that the Laboratory should assign requests from civilian defense organizations to PTI.

Dr. Pearson commented that there is a definite need for making available the data here, but that it is not the Laboratory's responsibility for editing it.

Dr. Pearson requested that we send copies of Dr. St. John's report to PTI, the Security Division, and to the Division of Biology and Medicine, and that Dr. St. John be responsible for publication after the report is cleared.

Mr. Crane suggested that Report UWFL-23 be printed at the Government Printing Office as a Laboratory project.

Dr. Pearson replied that it would not be feasible at all, since approximately twelve offices would be the only ones interested in the material of this report - the Military, no; Production, no.

Dr. Donaldson said the Laboratory simply supplies the data; that it is the Commission's responsibility to make policy decisions, not the Laboratory's.

Dr. Pearson commented that he believed much or part of UWFL-23 will certainly appear in technical journals.

Dr. Donaldson stated that it will not be published unless there are specific requests.

Mr. Crane suggested two things which might be done with the Bikini-Eniwetok material: (1) It could be sent to the Declassification Section to see how much of it can be declassified.

(2) It could be re-written, leaving the FOUO classification, for a Nuclear Energy Series volume.

Dr. Pearson stated that it should be classified down the scale, not declassified.

Dr. Donaldson said that the Laboratory summarizes the data for the A.E.C. - does not make an evaluation.

Mr. Crane suggested that the immediate distribution of UWFL Reports can be improved.

Dr. Pearson said that the information on the Bikini-Eniwetok area should be made more readily available since the Nuclear Energy Series volume is probably a long way off. He added that there is a great deal of excellent material at the Laboratory - not only the data on Bikini-Eniwetok.

Mr. Crane suggested that the tolerance dose of radiation for a wide variety of living forms, on which subject there is little information available, would make excellent report material.

Dr. Pearson added that there is a vast amount of highly desirable data at the Laboratory which should be made available in the best way - whether in scientific journals or in a Nuclear Energy Series volume. One volume would be preferable, but not necessary.

Mr. Crane said that the first UWFL Reports were very comprehensive and that probably the Nuclear Energy Series would be the best way to present the material.

Dr. Pearson commented that the reports will be summarized, whether they are published in the Nuclear Energy Series or in technical

journals - that in their present form they are, of course, much more detailed. He added that Science, Biology, Fisheries will certainly benefit from the release of these materials.

Dr. Donaldson suggested that a composite summary be made first.

Dr. Pearson replied that even in a composite summary some of the material will be omitted. He agreed that there should be a thorough study of the data at the Laboratory before there is any decision made on the best channels of output.

Mr. Crane stated that the classified material remains here at the Laboratory - that there are no other authorized depositories on the campus.

Notes on the Basic Studies of the Effect of X-rays upon Fish in Various Stages of Development were presented by Dr. Donaldson.

Notes on the Identification and Ecology of the Bikini-Eniwetok Fishes were presented by Dr. Welander.

The Effects upon Ensuing Generations of Trout from Exposing the F₁ Generation to X-rays was outlined by Mr. Lowman.

The following comments were made:

Dr. Pearson said that there is no doubt about the value of extending these experiments - how long, it is difficult to say. He asked if the increase in mutations was attributable to radiation and added that in dealing with such large populations there is an excellent opportunity to add to the information on the rate of mutation.

Mr. Lowman replied that it appears to be chromosome mutation rather than gene mutation.

Dr. Pearson stated there seems to be a real field here to establish radiation effects.

Dr. Donaldson agreed that this is indeed an important area of the Laboratory's research.

Dr. Pearson said that he thought it was definitely important.

Mr. Crane suggested that the installation of an IBM machine might be helpful in going through this mass of data.

Dr. Pearson said there is no doubt about the value of the information on this phase of the work to the Biology Division. The work on the minimum levels of radiation at which measurable increases of effects are discernible is of definite interest.

An outline of X-ray Experiments with Embryological Stages of Salmonoid Fishes was presented by Mr. Lowman.

The following comments were made:

Dr. Pearson said that it is a very good experiment - that we may want ^{to} use a lower dosage than 50 r.

Mr. Crane stated that Mr. Russell would be interested in the experiment - that it would be mutually advantageous since Mr. Russell has established at what level of r abnormalities occur in mice.

An outline of the Work on Effects of Ionizing Radiations on Invertebrate Organisms was presented by Dr. Bonham.

The following comment was made:

Dr. Pearson stated that the study of these unique organisms fills in gaps in the information about other living forms.

An outline on the Intended Study of Algae was presented by Mr. Palumbo.

The following comments were made:

Dr. Pearson said that this field is similar to the one in which Mr. G. W. Beadle works.

In discussing the comparatively greater resistance of algae to radiation, Dr. Donaldson stated that the more resistant forms return first at Bikini also.

Dr. Pearson said there is need for the complete picture - the tolerance levels of a wide variety of species.

An outline of the Bikini-Eniwetok Surveys was presented by Mr. Seymour.

The following comments were made:

Dr. Pearson stated that the chemical data needed to establish calcium deficiency in the plants of Eniwetok is lacking.

Dr. Pearson asked if the period of time is limited to gather specimens after the blast - how it is possible to obtain a reliable curve in areas of repeated tests - if it is not possible to go out to the Pacific Area before the next test how that will affect the research being carried on at present.

Dr. Donaldson, in reply to the last question, said that Dr. St. John's report, W. R. Taylor's book, The Plants of Bikini and Other Northern Marshall Islands, the algae report, the invertebrate reports of Dr. Bonham, would in part supplant this information.

Notes on Public Relations and Extra Services of the Laboratory were presented by Dr. Donaldson.

The following comments were made:

Dr. Donaldson said that increasing demands are being made on the members of the Laboratory for extra services - public lectures, monitoring team, civilian defense , State Council, etc. He added that the production of the film was accomplished to eliminate much of the drain on the lecturers since a factual movie can produce the picture very well.

Dr. Pearson commented that the Applied Fisheries Laboratory is not unique in being requested to give numerous lectures, for any organization that has gained notice through conscientious effort and good work will be and has been called on to do the same thing.

Mr. Crane said that at Hanford they have heard nothing but praise for Dr. Donaldson's achievements.

Dr. Pearson stated that it is commendable that these demands for public speeches are made - that the staff must decide how much time it is desirable to devote to these lectures. He added that he is amazed at the amount of time that the Laboratory has been able to give to the Bikini-Eniwetok investigations when it is responsible for so many other projects also.

In conclusion, Dr. Pearson praised the staff for their presentation of the subjects and their superior job of orientation.