

UNIVERSITY OF WASHINGTON  
APPLIED FISHERIES LABORATORY  
FISHERIES CENTER  
SEATTLE 5, WASHINGTON

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March 4, 1955

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Dr. Paul B. Pearson, Chief  
Biology Branch  
Division of Biology and Medicine  
United States Atomic Energy Commission  
Washington 25, D.C.

Dear Dr. Pearson:

The accompanying table is a partial list of the results of collections of biological samples in the Marshall Islands during January and February, 1955.

Water samples were also taken at nine stations off Bikini Atoll. A surface sample and two subsurface samples (maximum depth 275 feet) were taken at each station. Duplicate 5 ml aliquots were evaporated to dryness and their radioactivity determined. Of the 54 samples counted, five were at background level, while the maximum activity found was 7.6 d/m/ml.

It is obvious that the plankton samples collected at the same time and place as the water samples contain a great deal more radioactive material.

A great deal of work remains to be done on the nature of the radioactive material and their distribution. We hope these preliminary results will be of use to you.

Sincerely,

*Lauren R. Donaldson*  
Lauren R. Donaldson  
Director

*Folder-NMBS*

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MILITARY RESEARCH & APPL

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Radioactivity in Plankton SamplesCollected in the Marshall Islands  
January and February, 1955

LOCATION	Date of Collection	Net Mesh	d/m/g
Likiep Atoll, at sea 3 mi. off	1-22-55	#6	1,810
Uterik Atoll, Uterik Island	1-23-55	#20	849
" " " "	1-23-55	#6	3,560
Rongelap Atoll, Rongelap Island	1-26-55	#6	1,180
" " " "	1-26-55	#20	2,100
" " Labaredj Island	1-28-55	#6	2,040
" " " "	1-28-55	#20	900
" " Kabelle Island	1-29-55	#6	4,010
" " " "	1-29-55	#20	12,800
" " Lukuen Island	1-30-55	#6	3,390
" " " "	1-30-55	#20	9,610
Bikini Atoll, 1 mi. off Nan	2-15-55	#6	17,700
Off Bikini Atoll 11° 38' N 165° 10' E	2-16-55	#6	719
" " " " " " " "	2-16-55	#20	163
" " " 11° 32' N 165° 10' E	2-16-55	#6	402
" " " " " " " "	2-16-55	#20	5,400
" " " 11° 29' N 165° 19' E	2-16-55	#6	1,190
" " " " " " " "	2-16-55	#20	657
Eniwetok Atoll, Wide Passage	2-12-55	#6	370
" " Leroy	2-12-55	#6	597
" " Belle	2-12-55	#6	4,120
" " Vera	2-12-55	#6	4,340
" " Deep Entrance	2-12-55	#6	2,000