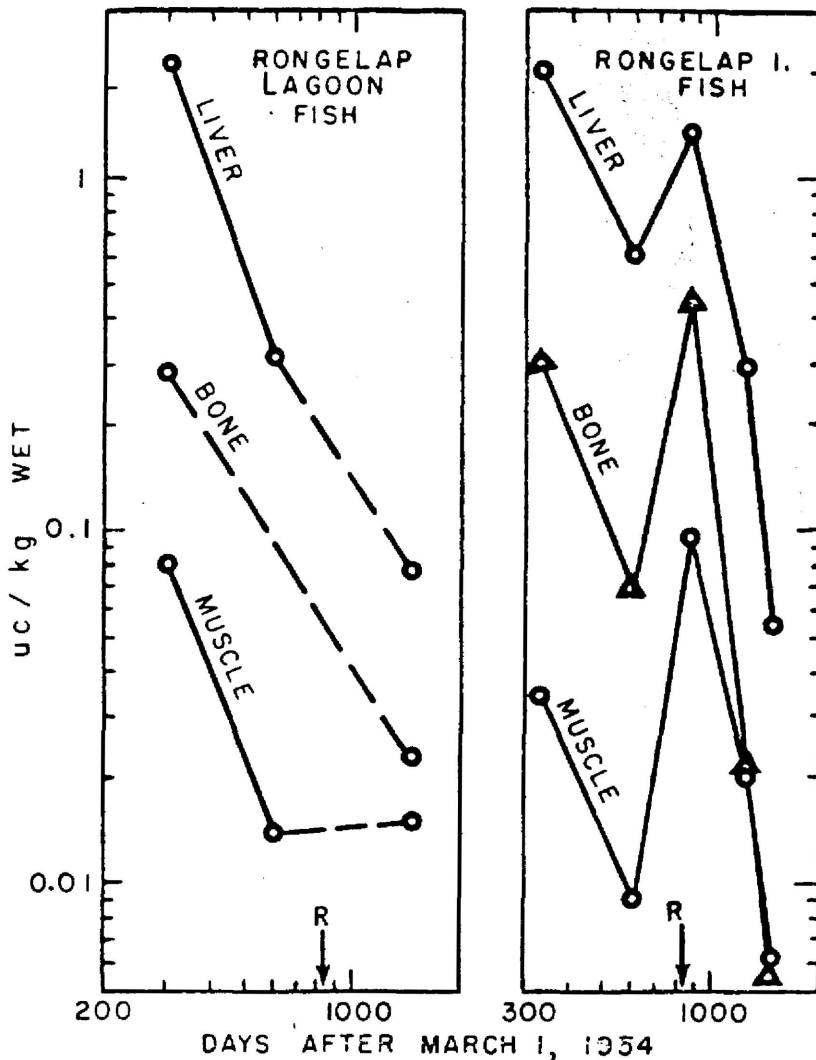


NMTB 7

5002252

Fig. 1. Decline over a 4-year period following the March 1, 1954 detonation at Bikini Atoll of gross beta radioactivity as measured in methane flow counters using samples of tissues of reef fishes collected at the indicated times at Kabelle I., Rongelap Atoll. "R" shows the time of the Redwing series.



NMBF

Fig. 2. Decline over a period 1 to 4 years after the March 1, 1954 detonation at Bikini Atoll, of the gross beta radioactivity as measured in methane flow counters using samples of tissues of lagoon and Rongelap Island reef fishes collected at the indicated times at Rongelap Atoll. Dashed lines indicate lack of observations immediately following the Redwing series (R).

PRELIMINARY INVESTIGATIONS

359 Rongelap Goatfish Summary

	Sample number	Net wt. of fish grams	Dry wt. of sample grams	Sex	$\gamma$ Zn per sample	$\gamma$ Zn per gram dry sample	Net c/m (Non) sample
I Gonads	- 2	98	.115	M	100	869	1.7
	-41	115	.186	F	157	844	3.6
	- 5	125	.116	F	70	604	2.7
	-27	130	.114	M	75	658	1.8
	-15	249	.109	M	168	1541	0
II Liver	-43	45	.054		21.7	402	7.3
	-24	51	.041		15.0	366	2.5
	-23	55	.060		31.3	523	2.8
	- 2	95	.208		68.0	630	0.5
	-34	102	.116		76.5	660	0
	- 3	127	.186		18.7	100	0.7
	-25	159	.130		47.0	366	0
	-15	249	.317		153.0	483	0.8
III Vertebrae	-56	43	.117		25.2	215	9.1
	- 9	45	.110		13.4	112	1.6
	-29	45	.250		54.0	340*	19
	-19	98	.231		44.0	190	0
	-34	102	.214		35.7	167	0
	-44	105	.261		34.3	131	0
	-48	131	.288		35.7	124	1.4
	-25	159	.422		70.5	167	0
	-15	249	.422		76.0	180	0

\*questionable, possible contamination

NMBZ

3 Squares  
Chart

759 Kabelle Goatfish Summary

Tissue	No. fish in sample	Wt. class of fish	Dry wt. of sample grams	$\gamma$ Zn per sample	$\gamma$ Zn per gram dry sample (ppm)	e/m Zn <sup>65</sup>	e/m/g dry Zn <sup>65</sup>	$\frac{\gamma \text{ Zn}}{\text{e/m Zn}^{65}}$
Muscle	0	B	5.95	195	17.7	9.0	1.5	11.7
	0	C	6.57	240	36.6	-	-	-
Liver	0	B	2.42	12	5.0	18.8	7.8	0.6
	0	C	1.43	840	588	23.0	16.0	36.5
Bone	0	B	2.41	138	57.4	46.1	19.1	3.0
	0	C	3.34	231	69.2	10.9	3.3	21.0
G.I. Tract	0	B	6.50	9000	1380	450.2	69.4	20
	0	C	4.98	9000	1800	16.7	3.4	610
Ovary	2	C	0.50	6039	20,100	326	1080	18.6
Whole fish -(head and viscera)	3	B	0.108	22.5	208	-	-	-
	2	C	0.100	16.4	164	-	-	-
Gills	0	B	0.106	28.0	263	-	-	-
	0	C	0.242	58.0	240	-	-	-

67 = B = 103 grams  
240 = C = 393 grams