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U-007-307.44

MILLER, M. C., ET AL, ELECTROFISHING SURVEY OF THE GREAT MIAMI RIVER, ANNUAL REPORT, FERNALD ENVIRONMENTAL MANAGEMENT CO, CINCINNATI, OH - (USED AS A REFERENCE IN OU 5 RI REPORT)

00/00/84

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REPORT

ANALYSIS OF URANIUM CONTENT IN FISH FROM THE GREAT MIAMI RIVER: 1984

Sample No.	Species	U Content (ug/g wet wt)	Sample No.	Species	U Content (ug/g wet wt)	Sample No.	Species	U Content (ug/g wet wt)
19B01	Micropterus salmoides & M. dolomieui	0.006	24B01	Aplodinotus grunniens, Lepomis spp., & M. dolomieui	0.003	27B01	M. dolomieui	0.013
19B02		0.008						
19C01	Cyprinus carpio	0.007	24C01	Cyprinus Carpio	0.004	27C01	Cyprinus carpio	0.014
19C02	" "	0.010	24C02	" "	0.012	27C02	" "	0.007
19C03	" "	0.019	24C03	Cyprinus carpio & Moxostoma spp.	0.012			
19C04	" "	0.009						
19G01	Dorosoma cepedianum	0.017	24G01	Dorosoma cepedianum	0.010	27G01	Dorosoma cepedianum	0.012
19G02	" "	0.013	24G02	" "	0.028	27G02	" "	0.016
19G03	" "	0.033	24G03	" "	0.032	27G03	" "	0.018
19G04	" "	0.022	24G04	" "	0.032	27G04	" "	0.024
19G05	" "	0.025	24G05	" "	0.020	27G05	" "	0.012
19R01	Carpiodes carpio	0.013	24R01	Carpiodes carpio	0.005	27R01	Carpiodes carpio	0.008
19S01	Lepomis spp.	0.020				27S01	Lepomis spp.	0.012
19W01	Morone chrysops	0.004	24W01	Morone chrysops	0.016	27W01	Morone chrysops	0.014

SUMMARY:

	Site 19	Site 24	Site 27	Species 1	Species 2	Species 3	Species 4	Species 5
Geo. Mean	0.0125	0.0121	0.0129	0.0053	0.0096	0.0195	0.0080	0.0096
Geo. S.D. (%)	1.83	2.30	1.41	5.25	1.58	1.48	1.61	2.15
Range:								
Max.	0.033	0.032	0.024	0.020	0.019	0.033	0.013	0.016
Min.	0.004	0.003	0.007	0.003	0.004	0.010	0.005	0.004

ANALYSES OF VARIANCE:

Test for differences between sites:
All species combined.

Source	Sum of Squares	d.f.	variance
Within	2.4244	33	0.0735
Between	0.0050	2	0.0025
Total	2.4294	35	

F(2,33)= 0.034

Test for differences between sites:
Shad (Dorosoma cepedianum) only.

Source	Sum of Squares	d.f.	variance
Within	0.3437	12	0.0286
Between	0.0646	2	0.0323
Total	0.4083	14	

F(2,12)= 1.128

Test for differences between species:
All sites combined.

Source	Sum of Squares	d.f.	variance
Within	3.6228	10	0.3623
Between	1.6154	4	0.4038
Total	5.2382	14	

F(4,10)= 1.115

Analyses of variance show no significant differences between the means of those groups compared.

NOTES:

Sampling site locations are as follows:

Sample prefix '19' = River mile 19 below Paddy's Run Creek.
Sample prefix '24' = River mile 24.1 immediately above and below the FMPC effluent outfall.
Sample prefix '27' = River mile 27 upstream of the FMPC.

Species designations as shown in the summary are as follows:

1 = Micropterus, Aplodinotus, and Lepomis spp.
2 = Cyprinus carpio.
3 = Dorosoma cepedianum.
4 = Carpiodes carpio.
5 = Morone chrysops.

SPECIES DIVERSITY OF FISHES CAUGHT ABOVE AND BELOW THE FERNALD NUCLEAR STATION OUTFALLS 1-OCT-84.

NO. SPECIES	15	12	15
NO. INDIVID.	105	105	263
SHANNON-WEINER DIVERSITY INDEX H (LOG 2) range 0-5.5	2.24	1.70	2.06
H max assuming equal rep. by all species	3.91	3.58	3.91
EVENESS range 0-1	0.575	0.475	0.527
SIMPSONS INDEX OF DOMINANCE (base 2) range 0-1	0.591	0.788	0.634

3	1	18	115
3	2		334
3	2	584	331
3	2	516	335
3	2	978	402
3	2	502	315
3	2	816	388
3	2	468	299
3	2	686	378
3	2	412	300
3	2	916	394
3	2	1260	470
3	2	784	394
3	2	50	154
3	3	278	268
3	3	268	270
3	3	212	249
3	3	258	261
3	3	44	161
3	3	14	113
3	3	170	235
3	3	284	278
3	3	416	314
3	3	172	232
3	3	60	162
3	3	344	280
3	4	180	238
3	4	58	61
3	4	88	195
3	4	138	226
3	5	78	147
3	5	12	88
3	5	28	111
3	5	106	171
3	5	30	112
3	5	12	90
3	5	88	152
3	5	28	113
3	5	15	96
3	5	4	66
3	5	97	158
3	6	18	89
3	6	12	86
3	6	26	108
3	6	30	107
3	6	16	91
3	6	24	105
3	6	50	125
3	6	8	78
3	6	50	128
3	6	6	82
3	6	62	131
3	6	10	81
3	6	24	104
3	6	16	95
3	6	79	138
3	6	37	119
3	6	16	93
3	6	40	115
3	6	24	100
3	6	8	75
3	6	42	120
3	6	8	76
3	6	23	102
3	7	280	266
3	8	50	142
3	8	25	106
3	9	54	139
3	9	32	123
3	9	25	112
3	9	38	123
3	9	32	116
3	9	44	132
3	9	13	92
3	9	38	142
3	10	52	166
3	10	312	297
3	12	12	94

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3	1	142	248
3	1	218	284
3	1	13	106
3	1	144	250
3	1	14	112
3	1	136	229
3	1	14	110
3	1	120	228
3	1	26	145
3	1	112	222
3	1	24	122
3	1	106	221
3	1	24	140
3	1	104	210
3	1	15	110
3	1	102	217
3	1	24	132
3	1	174	273
3	1	15	115
3	1	98	215
3	1	16	119
3	1	94	211
3	1	23	130
3	1	92	205
3	1	22	130
3	1	92	203
3	1	16	117
3	1	90	213
3	1	22	136
3	1	88	192
3	1	22	115
3	1	196	269
3	1	22	130
3	1	84	200
3	1	22	132
3	1	80	192
3	1	16	115
3	1	80	201
3	1	22	124
3	1	78	197
3	1	22	120
3	1	142	246
3	1	22	130
3	1	21	121
3	1	16	109
3	1	110	214
3	1	22	135
3	1	103	216
3	1	16	113
3	1	100	207
3	1	16	116
3	1	92	205
3	1	16	116
3	1	90	205
3	1	16	126
3	1	86	207
3	1	17	117
3	1	82	203
3	1	22	128
3	1	78	198
3	1	17	110
3	1	138	241
3	1	22	135
3	1	106	214
3	1	18	115
3	1	98	213
3	1	18	113
3	1	88	204
3	1	18	121
3	1	80	199
3	1	18	121
3	1	114	225
3	1	18	123
3	1	188	267
3	1	18	123
3	1	74	197
3	1	85	195
3	1	100	212

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3	1	132	244
3	1	66	183
3	1	126	243
3	1	318	305
3	1	150	258
3	1	66	188
3	1	124	230
3	1	224	132
3	1	152	247
3	1	136	234
3	1	134	241
3	1	120	232
3	1	128	239
3	1	118	241
3	1	125	240
3	1	114	217
3	1	125	228
3	1	110	224
3	1	122	237
3	1	108	215
3	1		212
3	1	160	262
3	1	152	261
3	1	106	219
3	1	20	127
3	1	104	217
3	1	62	189
3	1	102	225
3	1	58	176
3	1	100	206
3	1	20	126
3	1	100	211
3	1	20	123
3	1	100	214
3	1	20	113
3	1	98	223
3	1	20	129
3	1	98	221
3	1	20	123
3	1	98	211
3	1	20	133
3	1	92	203
3	1	20	119
3	1	92	109
3	1	54	171
3	1	92	219
3	1	20	121
3	1	92	207
3	1	48	248
3	1	92	203
3	1	20	128
3	1	90	198
3	1	19	125
3	1	192	255
3	1	42	160
3	1	88	208
3	1	30	121
3	1	88	195
3	1	18	122
3	1	86	196
3	1	8	90
3	1	196	271
3	1	26	136
3	1	84	195
3	1	10	95
3	1	82	216
3	1	10	98
3	1	80	201
3	1	12	103
3	1	80	220
3	1	12	103
3	1	80	195
3	1	12	105
3	1	78	203
3	1	12	85
3	1	78	200
3	1	12	103
3	1	74	191

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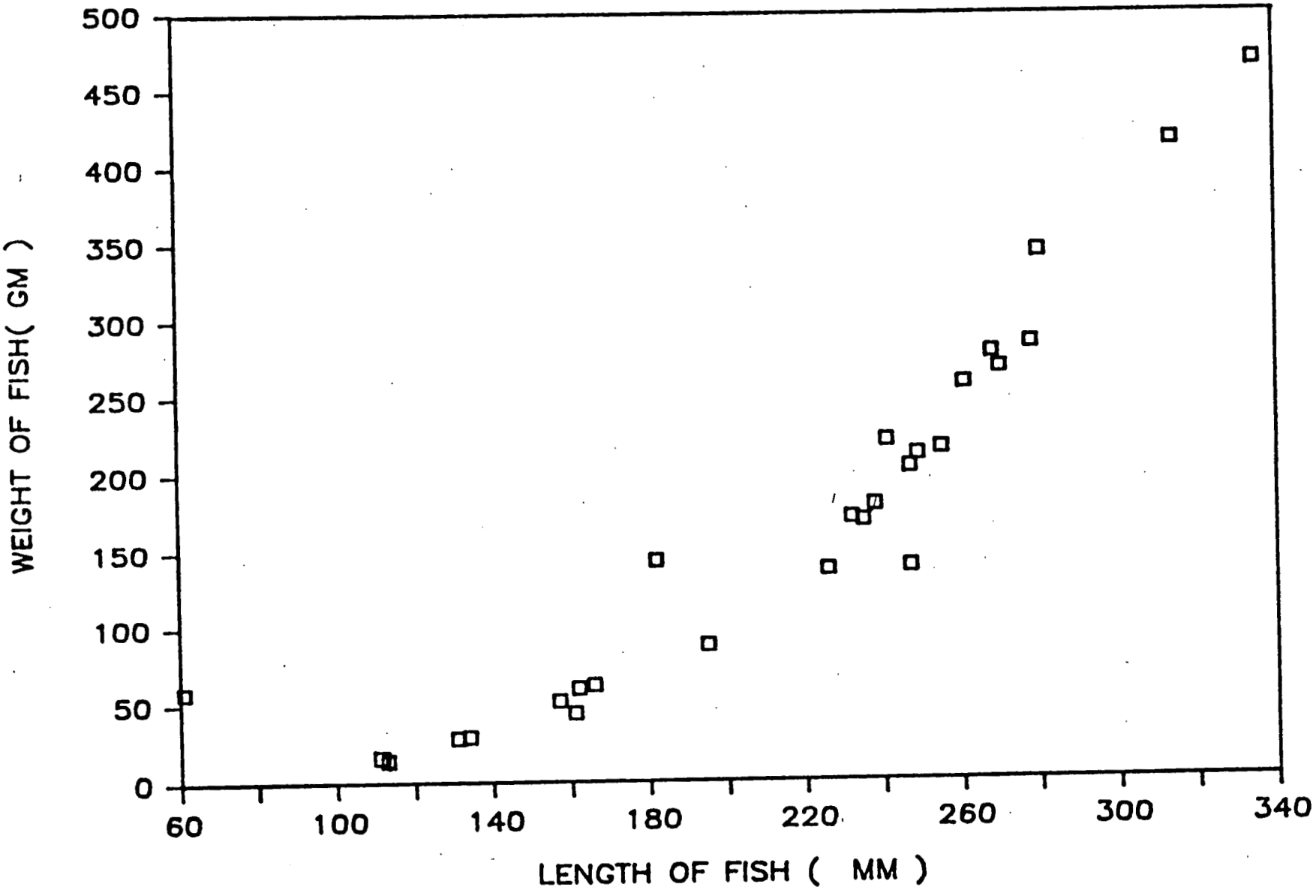
3	13	934	414
3	13	920	392
3	15	584	418
3	15	380	378
3	16		
3	16		
3	16		
3	16		
3	16		
3	16		
3	16		
3	16		
3	16		
3	17		
3	17		
GRAND TOTALS		68119	96.484
		kg of fish	meters of fish
AVERAGES		147.1252	207.4924
		grams	millimeters

LENGTH/WT FOR BLACK BASSES, G. MIAMI

ALL STATIONS 1–OCT. 84.



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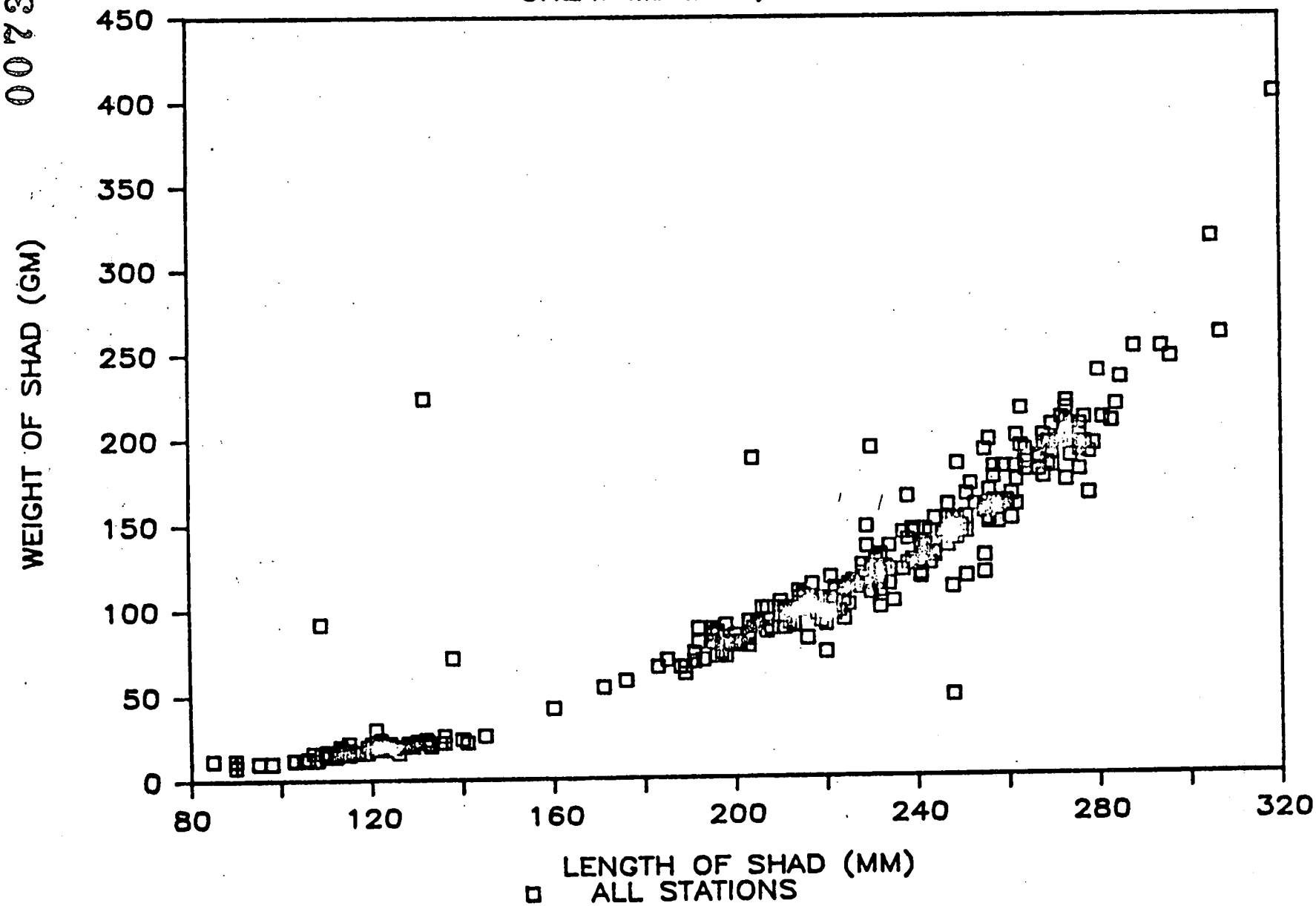
WEIGHT/LENGTH FOR GIZZARD SHAD

GREAT MIAMI R., 1-OCT. 84.



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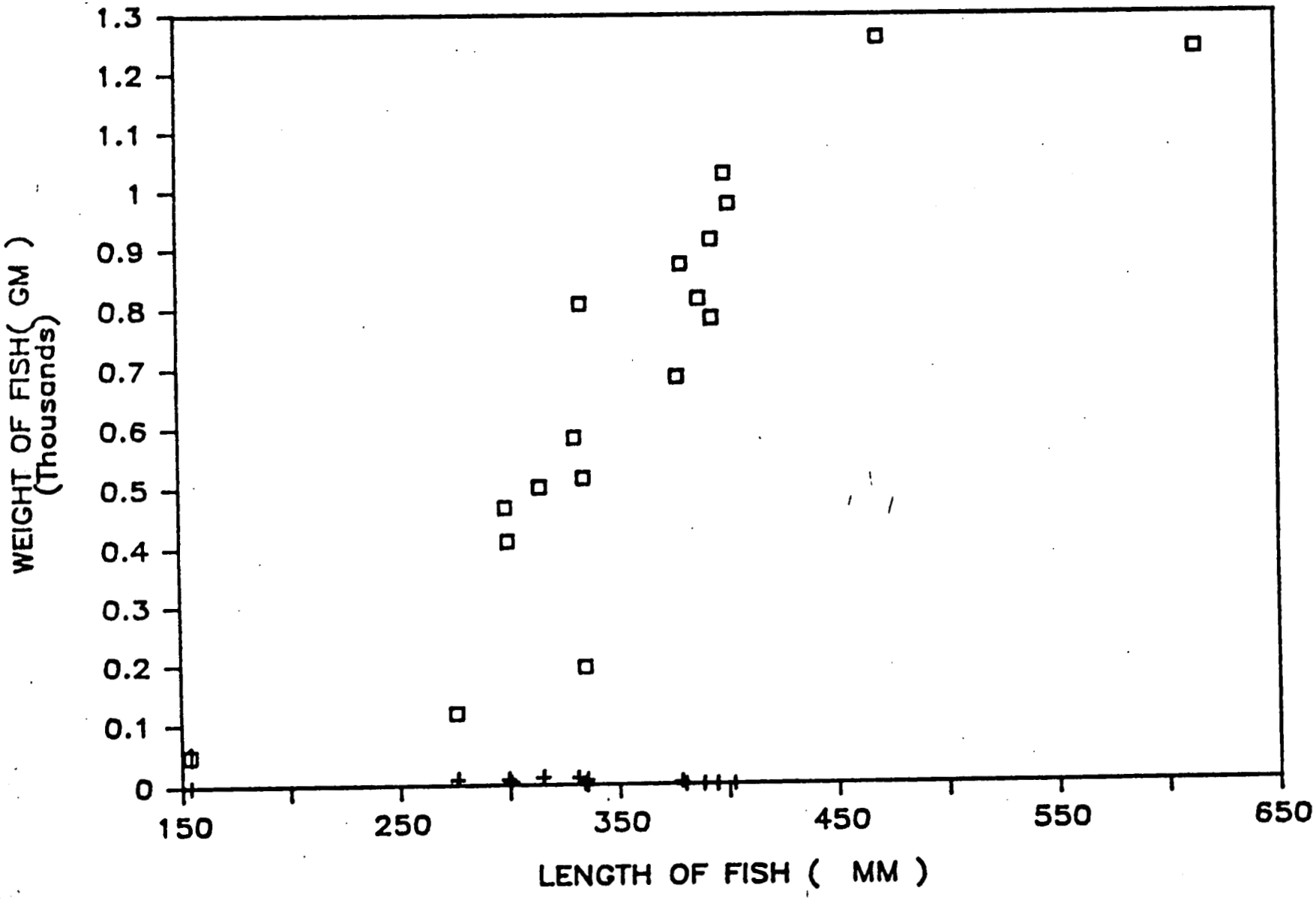
LENGTH/WT FOR CARP, G. MIAMI R.

ALL STATIONS 1–OCT. 84.



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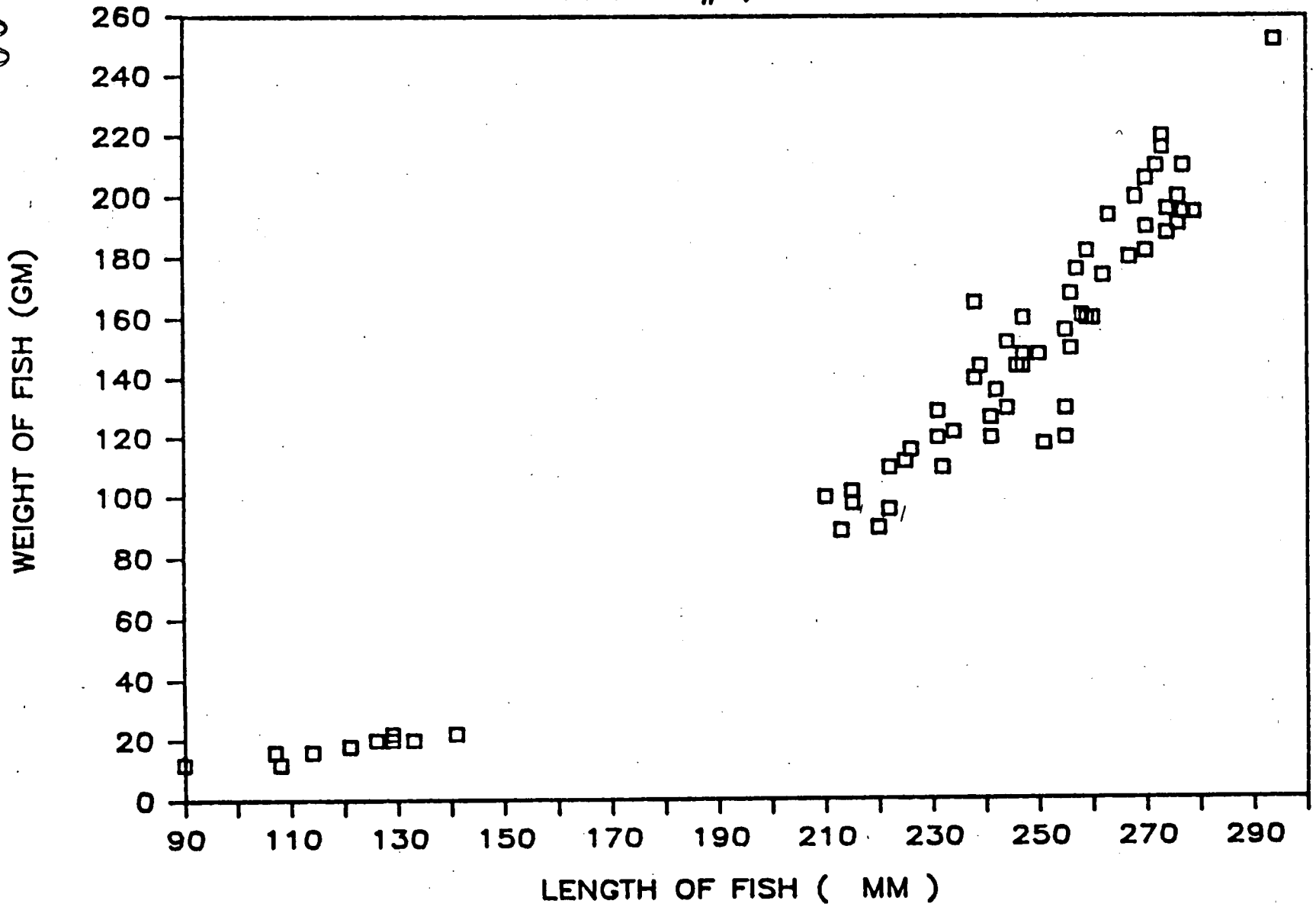
LENGTH / WEIGHT RELATIONSHIP FOR G.SH.

MIAMI R. #1, 1-OCT. 84.



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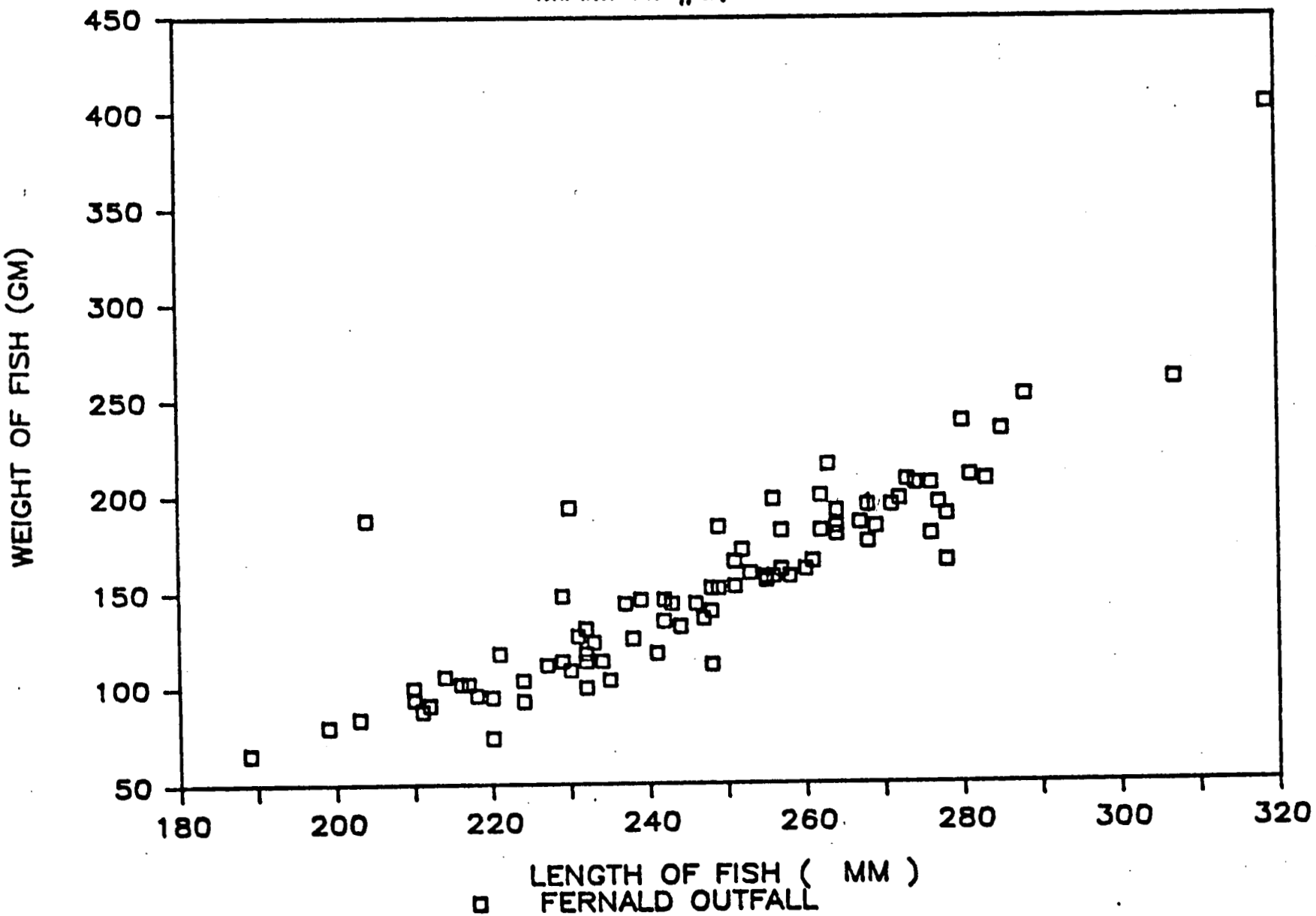
LENGTH / WEIGHT RELATIONSHIP FOR G.SH.

MIAMI R. #2, 1-OCT. 84.



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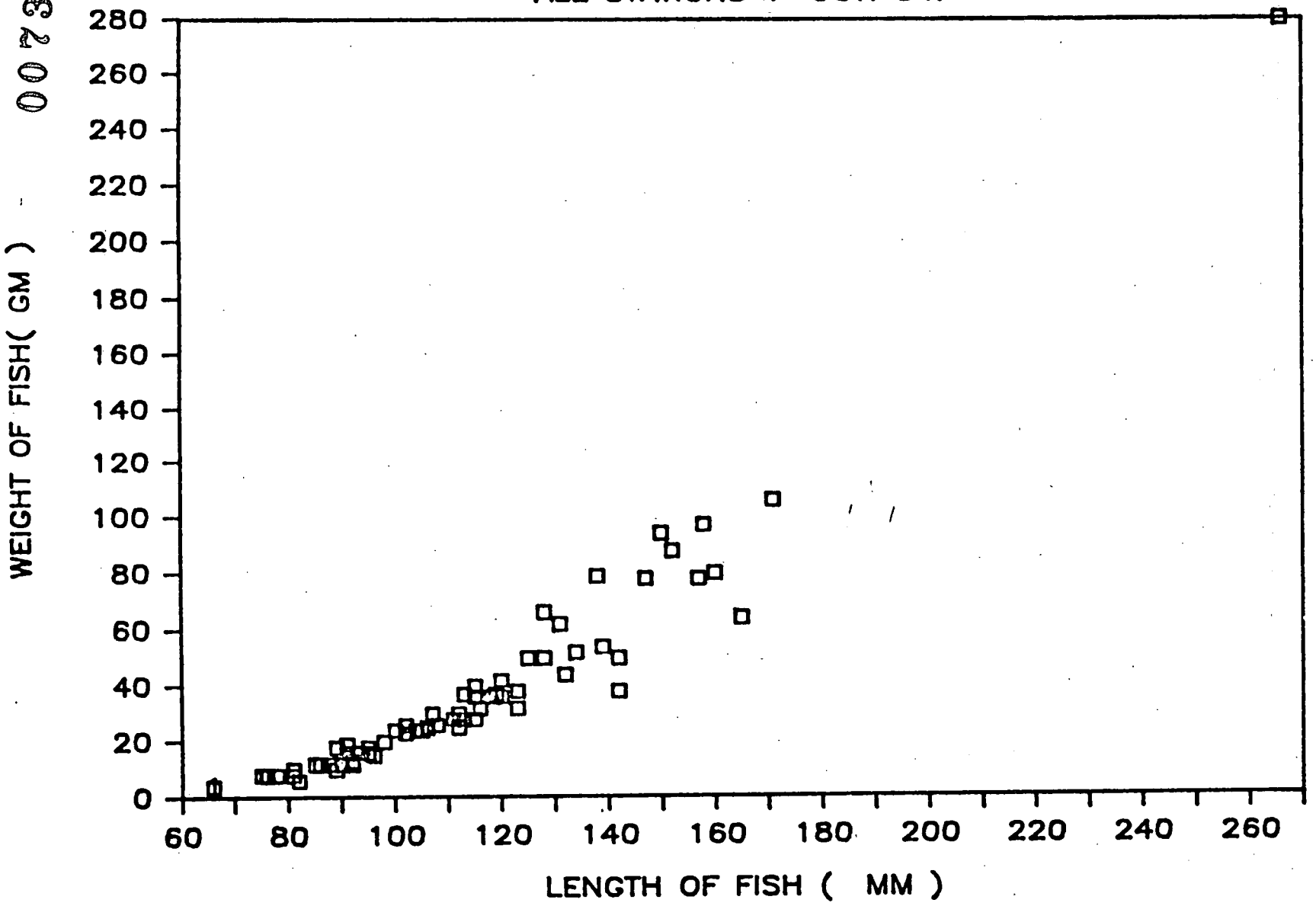
LENGTH/WT FOR PAN FISH, G. MIAMI R.

ALL STATIONS 1-OCT. 84.



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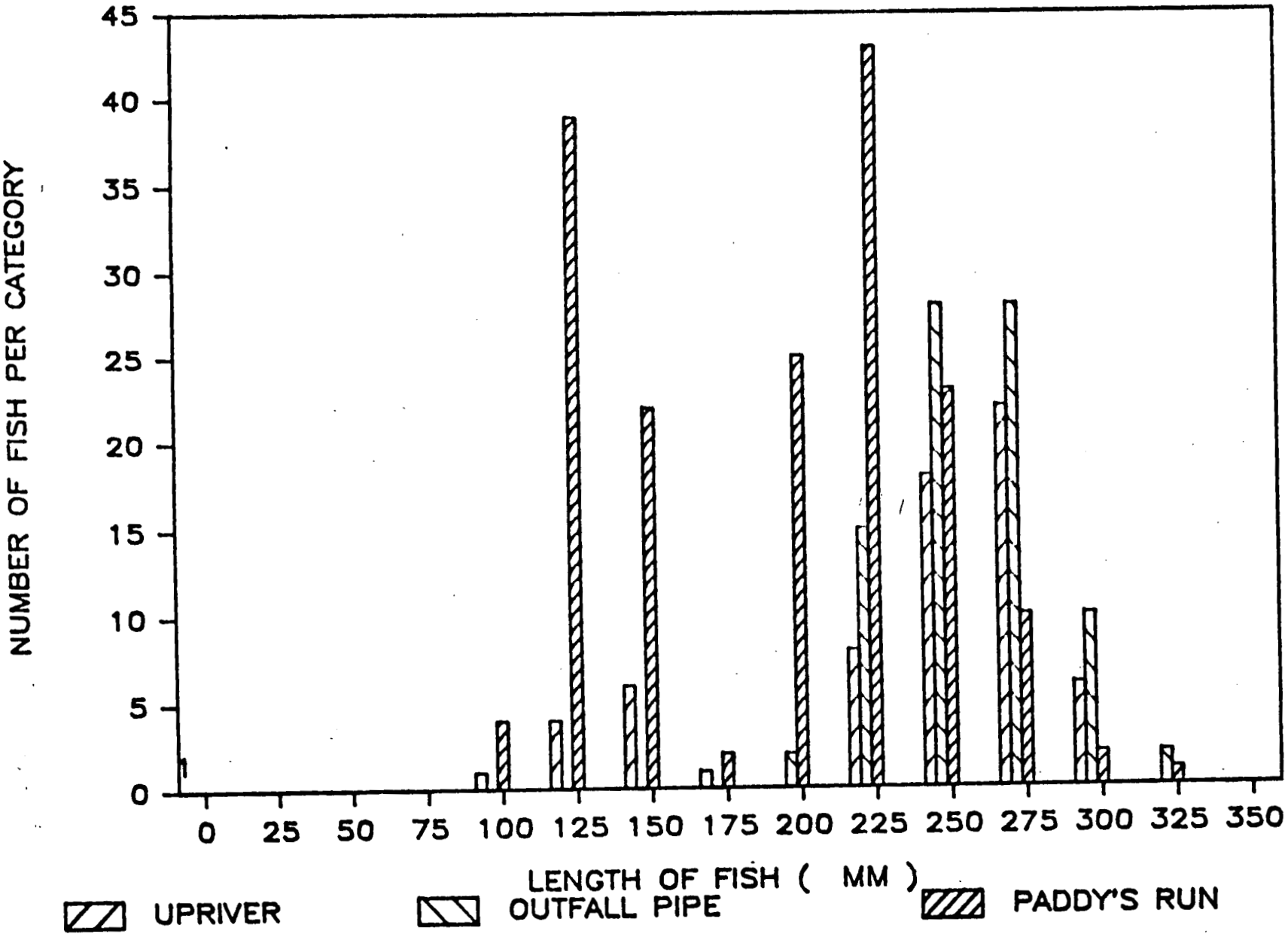
LENGTH FREQUENCY FOR G.SHAD

GREAT MIAMI R., 1–OCT. 84.



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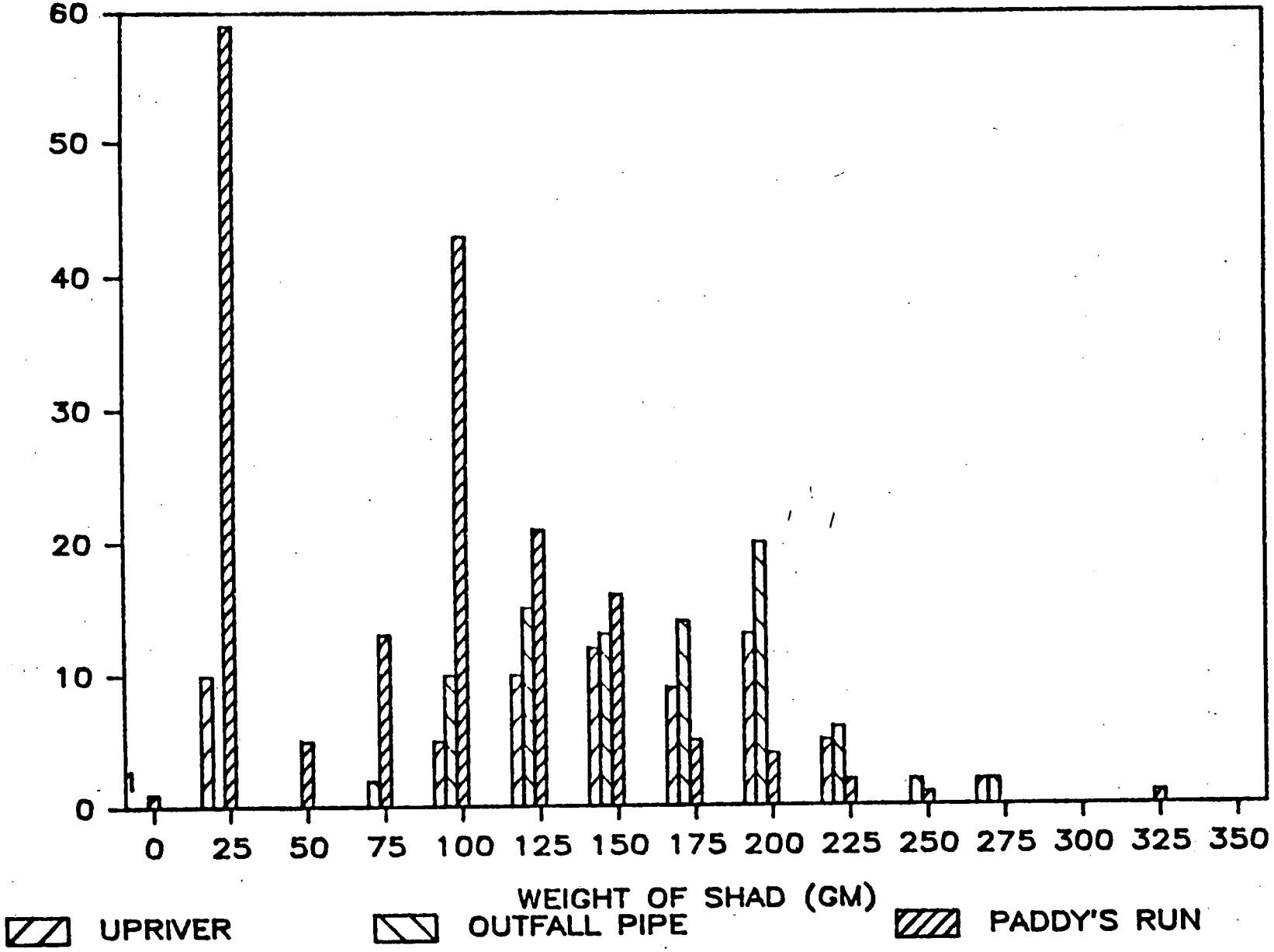
WEIGHT FREQUENCY FOR G.SHAD

GREAT MIAMI R., 1-OCT. 84.



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