APPENDIX A

TWC WATER RIGHTS DATA BASE CODES

TYPE OF WATER USES

1. MUNICIPAL/DOMESTIC
2. INDUSTRIAL
3. IRRIGATION
4. MINING
5. HYDROELECTRIC
6. NAVIGATION
7. RECREATION
8. OTHER
9. RECHARGE

TYPE OF WATER RIGHTS

1 - APPLICATION/PERMIT
2 - CLAIM
3 - CERTIFIED FILING
5 - DISMISSED/REJECTED
6 - CERTIFICATION OF ADJUDICATION
9 - CONTRACTUAL PERMIT/AGREEMENT

STATUS OF WATER RIGHTS

A - ADJUDICATED
P - PARTIALLY CANCELLED
R - DISMISSED/REJECTED
T - TOTALLY CANCELLED

TERM STATUS

A - SPECIFIC DATE
B - NO SPECIFIC DATE
C - PERMIT TO BE REDUCED IF AWARDED A RIGHT UNDER CLAIM
D - NOT AUTHORIZED TO USE UNTIL AMENDED

BASIN CODES

1. CANADIAN
2. RED
3. SULPHUR
4. CYPRESS
5. SABINE
6. NECHES
7. NECHES-TRINITY
8. TRINITY
9. TRINITY-SAN JACINTO
10. SAN JACINTO
11. SAN JACINTO-BRAZOS
12. BRAZOS
13. BRAZOS-COLORADO
14. COLORADO
15. COLORADO-LAVACA
16. LAVACA
17. LAVACA-GUADALUPE
18. GUADALUPE
19. SAN ANTONIO
20. SAN ANTONIO-NUECES
21. NUECES
22. NUECES-RIO GRANDE
23. RIO GRANDE

APPENDIX B

JN WATER RIGHTS QUESTIONNAIRE

QUESTIONAIRE RESPONSES

Twenty questionaires were sent to those with water rights permits. Twelve responded, seven of which currently use their water rights permit. The purposes of water use are varied: industrial cooling and equipment washing, fire training and emergencies, municipal and industrial water supply, irrigation, and fish cultures. Intake devices also varied. Of the seven companies/corporations currently using their water rights permits, five have some sort of intake device. The several intake devices include a rotating screen (3/8" mesh size), sucker rods (6" apart), a grill (3/4" iron rods at 2"), a #4 mesh screen, and a debris screen for large objects only. No studies have been conducted in regard to the survival rate of fishes in any of the respondents'facilities. (Table 4.1)

QUESTIONAIRE

Q1: Do you currently use your water rights permit?

Q2: How frequently is water diverted? Please provide the time of year or month.

Q3: How much water is diverted during a year, month, or season?

Q4: For what purposes is the water used?

Q5: What is the intake rate (i.e., gallons per minute, etc.) and intake velocity (i.e.,ft/sec.,etc.)?

Q6: Is any method used to screen or divert fish from your intake? If so, please describe the method used (including screen-mesh size).

Q7: Have any studies been conducted to determine the survival rate of impinged fishes or the survival rate of fishes entrained in your process? If so, please provide a reference for these studies or a short summary of the results.

APPENDIX C

LIST OF PERMITTED WATER RIGHTS USERS SENT JN QUESTIONNAIRE

Phillips 66 Company
D S Turner ET UX
HCR 33, Box 522
Uvalde, Texas 78801-1905

Charles T. Jones, Et al.
P.O. Box 198
Winnie, Texas 77665
004304

Mr. Bob Gaddis
Phillips 66 Company
Adams Terminal
149 Phillips Building, Annex
Bartlesville, Oklahoma 74004
003991

Mr. William S. Edwards
P.O. Box 86
Stowell, Texas 77661
004305

Paktank Corporation
Deer Park Terminal
200 West Loop South
Suite 2200
Houston, Texas 77027-3597
005191

Southwestern Barge Fleet Service, Inc.
18319 Market Street
Channelview, Texas 77530
005299

Western Towing Company
P.O. Box 418
Channelview, Texas 77530
005299

Texas Copper Corporation
1201 Logan
Texas City, Texas 77590
005286

Mobil Oil Corporation
dba Mobil Mining & Minerals Company
P.O. Box 3447
Pasadena, Texas 77501
003989

Ethyl Corporation
Environmental Department
P.O. Box 472
Pasadena, Texas 77501
003992

City of Houston
Water Division, Department of Public Works
105 Sabine ST/M Slaughter
Houston, Texas 77007
004261

Trinity Bay Conservation District
P.O. Box 580
Anahuac, Texas 77514
004307

ARMCO, Inc.
Greens Port Ind. Park
P.O. Box 96120
Houston, Texas 77213
003990

Trinity River Authority
P.O. Box 1554
Hunstville, Texas 77340
004248

Chambers-Liberty Cos ND
P.O. Box 518
Anachuac, Texas 77514
004279

City of League City
300 Walker Street
League City, Texas 77573
005178

Oil Tanking of Texas, Inc.
P.O. Box 96290
Houston, Texas 77213
003993

Cooper's Marine Service, Inc.
P.O. Box 1643
Channelview, Texas 77530
005334

Sterling Chemicals, Inc.
P.O. Box 1311
Texas City, Texas 77592-1311
005361

APPENDIX D

FISH KILL DATA BASE SPREADSHEET

FISHKILL.WK3 DATA BASE (PART 1)

REP. NO.	AGENCY	BASIN	WATER BODY	SPECIES	COMMON NAME	NO. KILLED	ROUGH FISH	COMMER. FISH	SPORT FISH	UNCLASS. FISH	SIZE (IN.)
A114	TPWD	San Jacinto – Brazos Coastal	Clear Creek	Arius felis	Hardhead Catfish	10			X		9
A114	TPWD	San Jacinto – Brazos Coastal	Clear Creek	Arius felis	Hardhead Catfish	20			X		11
A114	TPWD	San Jacinto – Brazos Coastal	Clear Creek	Sciaenops ocellatus	Red Drum	70		X	X		9
A114	TPWD	San Jacinto – Brazos Coastal	Clear Creek	Sciaenops ocellatus	Red Drum	170		X	X		11
A114	TPWD	San Jacinto – Brazos Coastal	Clear Creek	Sciaenops ocellatus	Red Drum	10		X	X		15
A114	TPWD	San Jacinto – Brazos Coastal	Clear Creek	Sciaenops ocellatus	Red Drum	40		X	X		7
A114	TPWD	San Jacinto – Brazos Coastal	Clear Creek	Sciaenops ocellatus	Red Drum	20		X	X		13
420	TDWR	San Jacinto – Brazos Coastal	Clear Creek	Unclassified Rough Fish	Rough Fish	49	X				
70	TDWR	San Jacinto – Brazos Coastal	Clear Creek	Unclassified Rough Fish	Rough Fish	3000	X				
116	TDWR	San Jacinto – Brazos Coastal	Clear Creek	Unclassified Rough Fish	Rough Fish	100	X				
35	TDWR	San Jacinto – Brazos Coastal	Clear Creek	Unclassified Rough Fish	Rough Fish	285	X				
211	TDWR	San Jacinto – Brazos Coastal	Clear Creek Channel	Unclassified Rough Fish	Rough Fish	16	X				
A114	TPWD	San Jacinto – Brazos Coastal	Clear Creek	Paralichthys lethostigma	Southern Flounder	50		X	X		9
A114	TPWD	San Jacinto – Brazos Coastal	Clear Creek	Paralichthys lethostigma	Southern Flounder	20		X	X		11
A114	TPWD	San Jacinto – Brazos Coastal	Clear Creek	Leiostomus xanthurus	Spot	90			X		
A114	TPWD	San Jacinto – Brazos Coastal	Clear Creek	Mugil cephalus	Striped Mullet	10		X	X		11
A114	TPWD	San Jacinto – Brazos Coastal	Clear Creek	Mugil cephalus	Striped Mullet	100		X	X		13
A114	TPWD	San Jacinto – Brazos Coastal	Clear Creek	Mugil cephalus	Striped Mullet	20		X	X		9
A131	TPWD	San Jacinto – Brazos Coastal	Dickinson Bayou	Micropogonias undulatus	Atlantic Croaker	2		X	X		
A126	TPWD	San Jacinto – Brazos Coastal	Dickinson Bayou	Unclassified Catfish	Catfish (unclassified)	1000			X		
A126	TPWD	San Jacinto – Brazos Coastal	Dickinson Bayou	Brevoortia gunteri	Finescale menhaden	50000		X	X		
143	TDWR	San Jacinto – Brazos Coastal	Dickinson Bayou	Unclassified Game Fish	Game Fish	20025			X		
346	TDWR	San Jacinto – Brazos Coastal	Dickinson Bayou	Unclassified Game Fish	Game Fish	6			X		
474	TDWR	San Jacinto – Brazos Coastal	Dickinson Bayou	Unclassified Game Fish	Game Fish	20			X		
485	TDWR	San Jacinto – Brazos Coastal	Dickinson Bayou	Unclassified Game Fish	Game Fish	80000			X		
A131	TPWD	San Jacinto – Brazos Coastal	Dickinson Bayou	Lepisosteidae (family)	Gar (family)	1	X				
A131	TPWD	San Jacinto – Brazos Coastal	Dickinson Bayou	Brevoortia patronus	Gulf Menhaden	20000		X	X		
A96	TPWD	San Jacinto – Brazos Coastal	Dickinson Bayou	Brevoortia patronus	Gulf Menhaden	1000000		X	X		
A130	TPWD	San Jacinto – Brazos Coastal	Dickinson Bayou	Brevoortia patronus	Gulf Menhaden	1000		X	X		
A129	TPWD	San Jacinto – Brazos Coastal	Dickinson Bayou	Brevoortia patronus	Gulf Menhaden	3000		X	X		
A127	TPWD	San Jacinto – Brazos Coastal	Dickinson Bayou	Brevoortia patronus	Gulf Menhaden	100000		X	X		
A95	TPWD	San Jacinto – Brazos Coastal	Dickinson Bayou	Sciaenops ocellatus	Red Drum	50		X	X		
474	TDWR	San Jacinto – Brazos Coastal	Dickinson Bayou	Unclassified Rough Fish	Rough Fish	2037	X				
485	TDWR	San Jacinto – Brazos Coastal	Dickinson Bayou	Unclassified Rough Fish	Rough Fish	7920000	X				
58	TDWR	San Jacinto – Brazos Coastal	Dickinson Bayou	Unclassified Rough Fish	Rough Fish	2000000	X				
74	TDWR	San Jacinto – Brazos Coastal	Dickinson Bayou	Unclassified Rough Fish	Rough Fish	3000000	X				
346	TDWR	San Jacinto – Brazos Coastal	Dickinson Bayou	Unclassified Rough Fish	Rough Fish	6	X				
77	TDWR	San Jacinto – Brazos Coastal	Dickinson Bayou	Unclassified Rough Fish	Rough Fish	1000000	X				
777	TDWR	San Jacinto – Brazos Coastal	Dickinson Bayou	Unclassified Rough Fish	Rough Fish	20061	X				
143	TDWR	San Jacinto – Brazos Coastal	Dickinson Bayou	Unclassified Rough Fish	Rough Fish	1982504	X				
284	TDWR	San Jacinto – Brazos Coastal	Chocolate Bayou	Unclassified Game Fish	Rough Fish	50			X		
57	TDWR	San Jacinto – Brazos Coastal	Chocolate Bayou	Unclassified Rough Fish	Rough Fish	500000	X				
284	TDWR	San Jacinto – Brazos Coastal	Chocolate Bayou	Unclassified Rough Fish	Rough Fish	50	X				
A172	TPWD	Galveston Bay and Estuary	Galveston Bay	Micropogonias undulatus	Atlantic Croaker	131		X	X		
375	TDWR	Galveston Bay and Estuary	Galveston Bay	Unclassified Game Fish	Game Fish	92			X		
748	TDWR	Galveston Bay and Estuary	Galveston Bay	Unclassified Game Fish	Game Fish	2475			X		
183	TDWR	Galveston Bay and Estuary	Galveston Bay	Unclassified Game Fish	Game Fish	1485000			X		
A137	TPWD	Galveston Bay and Estuary	Galveston Bay	Opsanus beta	Gulf Toadfish	15			X		2

FISHKILL.WK3 DATA BASE (PART 1)

REP. NO.	AGENCY	BASIN	WATER BODY	SPECIES	COMMON NAME	NO. KILLED	ROUGH FISH	COMMER. FISH	SPORT FISH	UNCLASS. FISH	SIZE (IN.)
A137	TPWD	Galveston Bay and Estuary	Galveston Bay	Opsanus beta	Gulf Toadfish	25			X		4
A71	TPWD	Galveston Bay and Estuary	Galveston Bay	Arius felis	Hardhead Catfish	6			X		
A137	TPWD	Galveston Bay and Estuary	Galveston Bay	Arius felis	Hardhead Catfish	10			X		7
A172	TPWD	Galveston Bay and Estuary	Galveston Bay	Sciaenops ocellatus	Red Drum	32		X	X		
194	TDWR	Galveston Bay and Estuary	Galveston Bay	Unclassified Rough Fish	Rough Fish	30	X				
375	TDWR	Galveston Bay and Estuary	Galveston Bay	Unclassified Rough Fish	Rough Fish	63	X				
748	TDWR	Galveston Bay and Estuary	Galveston Bay	Unclassified Rough Fish	Rough Fish	25	X				
183	TDWR	Galveston Bay and Estuary	Galveston Bay	Unclassified Rough Fish	Rough Fish	15015000	X				
16	TDWR	Galveston Bay and Estuary	Galveston Bay	Unclassified Rough Fish	Rough Fish	500000	X				
281	TDWR	Galveston Bay and Estuary	Galveston Bay	Unclassified Rough Fish	Rough Fish	10000	X				
A71	TPWD	Galveston Bay and Estuary	Galveston Bay	Archosargus probatocephalus	Sheepshead	6		X	X		
A172	TPWD	Galveston Bay and Estuary	Galveston Bay	Paralichthys lethostigma	Southern Flounder	12		X	X		
A172	TPWD	Galveston Bay and Estuary	Galveston Bay	Cynoscion nebulosis	Spotted Seatrout	2		X	X		
A137	TPWD	Galveston Bay and Estuary	Galveston Bay	Mugil cephalus	Striped Mullet	18		X	X		15
A137	TPWD	Galveston Bay and Estuary	Galveston Bay	Mugil cephalus	Striped Mullet	5		X	X		12
A137	TPWD	Galveston Bay and Estuary	Galveston Bay	Mugil cephalus	Striped Mullet	2		X	X		18
A172	TPWD	Galveston Bay and Estuary	Galveston Bay	Mugil cephalus	Striped Mullet	1		X	X		
A137	TPWD	Galveston Bay and Estuary	Galveston Bay	Mugil cephalus	Striped Mullet	1		X	X		6
A137	TPWD	Galveston Bay and Estuary	Galveston Bay	Mugil cephalus	Striped Mullet	1		X	X		2
A137	TPWD	Galveston Bay and Estuary	Galveston Bay	Mugil cephalus	Striped Mullet	1		X	X		20
A137	TPWD	Galveston Bay and Estuary	Galveston Bay	Mugil cephalus	Striped Mullet	2		X	X		5
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Micropogonias undulatus	Atlantic Croaker	1		X	X		14
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Micropogonias undulatus	Atlantic Croaker	1		X	X		13
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Pogonias cromis	Black drum	1		X	X		22
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Pogonias cromis	Black drum	1		X	X		34
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Pogonias cromis	Black drum	1		X	X		20
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Pogonias cromis	Black drum	1		X	X		16
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Pogonias cromis	Black drum	1		X	X		14
37	TDWR	Galveston Bay and Estuary	Trinity Bay	Unclassified Game Fish	Game Fish	20000			X		
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Dorosoma cepedianum	Gizzard shad	355	X				17
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Arius felis	Hardhead Catfish	1			X		16
A148	TPWD	Galveston Bay and Estuary	Trinity Bay	Arius felis	Hardhead Catfish	11			X		
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	5		X	X		23
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	2		X	X		27
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	3		X	X		34
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	12		X	X		28
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	4		X	X		26
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	6		X	X		33
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	4		X	X		21
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	4		X	X		35
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	1		X	X		38
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	17		X	X		29
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	16		X	X		30
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	5		X	X		25
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	1		X	X		36
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	13		X	X		31
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	10		X	X		32
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	6		X	X		24

FISHKILL.WK3 DATA BASE (PART 1)

REP. NO.	AGENCY	BASIN	WATER BODY	SPECIES	COMMON NAME	NO. KILLED	ROUGH FISH	COMMER. FISH	SPORT FISH	UNCLASS. FISH	SIZE (IN.)
A149	TPWD	Galveston Bay and Estuary	Trinity Bay	Sciaenops ocellatus	Red Drum	3		X	X		22
37	TDWR	Galveston Bay and Estuary	Trinity Bay	Unclassified Rough Fish	Rough Fish	980000	X				
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Micropogonias undulatus	Atlantic Croaker	5474		X	X		6
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Micropogonias undulatus	Atlantic Croaker	467		X	X		7
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Anchoa mitchilli	Bay Anchovy	40340	X				1
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Anchoa mitchilli	Bay Anchovy	32997	X				2
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Pogonias cromis	Black drum	12817		X	X		8
A102	TPWD	Galveston Bay and Estuary	West Galveston Bay	Unclassified Catfish	Catfish (unclassified)	1			X		8
A102	TPWD	Galveston Bay and Estuary	West Galveston Bay	Unclassified Catfish	Catfish (unclassified)	1			X		
A102	TPWD	Galveston Bay and Estuary	West Galveston Bay	Unclassified Catfish	Catfish (unclassified)	1			X		10
A102	TPWD	Galveston Bay and Estuary	West Galveston Bay	Unclassified Catfish	Catfish (unclassified)	1			X		
733	TDWR	Galveston Bay and Estuary	West Galveston Bay	Unclassified Game Fish	Game Fish	1500			X		
266	TDWR	Galveston Bay and Estuary	West Galveston Bay	Unclassified Game Fish	Game Fish	72			X		
A112	TPWD	Galveston Bay and Estuary	West Galveston Bay	Bothidae (family)	Lefteye Flounders	9	X				9
A112	TPWD	Galveston Bay and Estuary	West Galveston Bay	Bothidae (family)	Lefteye Flounders	5	X				
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Lagodon rhomboides	Pinfish	5474			X		4
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Lagodon rhomboides	Pinfish	16583			X		6
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Lagodon rhomboides	Pinfish	60690			X		5
A102	TPWD	Galveston Bay and Estuary	West Galveston Bay	Sciaenops ocellatus	Red Drum	1		X	X		
733	TDWR	Galveston Bay and Estuary	West Galveston Bay	Unclassified Rough Fish	Rough Fish	148500	X				
732	TDWR	Galveston Bay and Estuary	West Galveston Bay	Unclassified Rough Fish	Rough Fish	25000	X				
767	TDWR	Galveston Bay and Estuary	West Galveston Bay	Unclassified Rough Fish	Rough Fish	2000000	X				
266	TDWR	Galveston Bay and Estuary	West Galveston Bay	Unclassified Rough Fish	Rough Fish	3556	X				
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Archosargus probatocephalus	Sheepshead	187		X	X		12
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Archosargus probatocephalus	Sheepshead	280		X	X		14
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Archosargus probatocephalus	Sheepshead	94		X	X		15
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Archosargus probatocephalus	Sheepshead	94		X	X		11
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Archosargus probatocephalus	Sheepshead	187		X	X		13
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Bairdiella chrysoura	Silver Perch	94			X		5
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Leiostomus xanthurus	Spot	27503			X		5
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Leiostomus xanthurus	Spot	27503			X		6
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Mugil cephalus	Striped Mullet	94		X	X		14
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Mugil cephalus	Striped Mullet	5474		X	X		6
A166	TPWD	Galveston Bay and Estuary	West Galveston Bay	Mugil cephalus	Striped Mullet	5474		X	X		12
A121	TPWD	Galveston Bay and Estuary	Clear Lake	Brevoortia patronus	Gulf Menhaden	8		X	X		4
808	TDWR	Galveston Bay and Estuary	Clear Lake	Unclassified Rough Fish	Rough Fish	100000	X				
122	TDWR	Galveston Bay and Estuary	Clear Lake	Unclassified Rough Fish	Rough Fish	5000	X				
A121	TPWD	Galveston Bay and Estuary	Clear Lake	Mugil cephalus	Striped Mullet	18		X	X		
364	TDWR	Galveston Bay and Estuary	Clear Lake	Unidentified Fish	Unidentified Fish	75235				X	
303	TDWR	Galveston Bay and Estuary	San Jacinto Bay	Unclassified Game Fish	Game Fish	1200			X		
A37	TPWD	Galveston Bay and Estuary	San Jacinto Bay	Brevoortia patronus	Gulf Menhaden	1500000		X	X		
221	TDWR	Galveston Bay and Estuary	San Jacinto Bay	Unclassified Rough Fish	Rough Fish	500000	X				
504	TDWR	Galveston Bay and Estuary	San Jacinto Bay	Unclassified Rough Fish	Rough Fish	12	X				
319	TDWR	Galveston Bay and Estuary	San Jacinto Bay	Unclassified Rough Fish	Rough Fish	20000	X				
303	TDWR	Galveston Bay and Estuary	San Jacinto Bay	Unclassified Rough Fish	Rough Fish	4800	X				
144	TDWR	Galveston Bay and Estuary	Black Duck Bay	Unclassified Game Fish	Game Fish	48500			X		
59	TDWR	Galveston Bay and Estuary	Black Duck Bay	Unclassified Rough Fish	Rough Fish	2000	X				
144	TDWR	Galveston Bay and Estuary	Black Duck Bay	Unclassified Rough Fish	Rough Fish	1500	X				

FISHKILL.WK3 DATA BASE (PART 1)

REP. NO.	AGENCY	BASIN	WATER BODY	SPECIES	COMMON NAME	NO. KILLED	ROUGH FISH	COMMER. FISH	SPORT FISH	UNCLASS. FISH	SIZE (IN.)
324	TDWR	Galveston Bay and Estuary	Scott Bay	Unclassified Rough Fish	Rough Fish	1000000	X				
21	TDWR	Galveston Bay and Estuary	Scott Bay	Unclassified Rough Fish	Rough Fish	1100	X				
6	TDWR	Galveston Bay and Estuary	Moses Lake	Unclassified Game Fish	Game Fish	50			X		
28	TDWR	Galveston Bay and Estuary	Moses Lake	Unclassified Game Fish	Game Fish	20			X		
A62	TPWD	Galveston Bay and Estuary	Moses Lake	Brevoortia patronus	Gulf Menhaden	1000000		X	X		
28	TDWR	Galveston Bay and Estuary	Moses Lake	Unclassified Rough Fish	Rough Fish	1980	X				
6	TDWR	Galveston Bay and Estuary	Moses Lake	Unclassified Rough Fish	Rough Fish	4950	X				
230	TDWR	Galveston Bay and Estuary	Chocolate Bay	Unclassified Rough Fish	Rough Fish	150	X				
A168	TPWD	Galveston Bay and Estuary	Texas City Ship Channel	Unidentified Fish	Unidentified Fish	10				X	
134	TDWR	Galveston Bay and Estuary	Bayport Channel	Unclassified Rough Fish	Rough Fish	16600000	X				
A305	HCPC	Galveston Bay and Estuary	Bayport Channel	Mugil cephalus	Striped Mullet	300		X	X		
A56	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Micropogonias undulatus	Atlantic Croaker	200		X	X		
A86	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Micropogonias undulatus	Atlantic Croaker	1056		X	X		
117	TDWR	Galveston Bay and Estuary	Lower Galveston Bay	Unclassified Game Fish	Game Fish	1700			X		
564	TDWR	Galveston Bay and Estuary	Lower Galveston Bay	Unclassified Game Fish	Game Fish	450			X		
A98	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Brevoortia patronus	Gulf Menhaden	1000		X	X		3
A49	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Arius felis	Hardhead Catfish	50			X		6
A56	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Arius felis	Hardhead Catfish	100			X		
A56	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Menticirrhus sp.	Kingfish (unclassified)	50		X	X		
117	TDWR	Galveston Bay and Estuary	Lower Galveston Bay	Unclassified Rough Fish	Rough Fish	15300	X				
239	TDWR	Galveston Bay and Estuary	Lower Galveston Bay	Unclassified Rough Fish	Rough Fish	2000	X				
564	TDWR	Galveston Bay and Estuary	Lower Galveston Bay	Unclassified Rough Fish	Rough Fish	450	X				
A56	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Cynoscion arenarius	Sand Seatrout	100		X	X		
A56	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Archosargus probatocephalus	Sheepshead	50		X	X		
A98	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Cyprinodon variegatus	Sheepshead Minnow	750	X				1
A56	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Bairdiella chrysoura	Silver Perch	200			X		
A56	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Paralichthys lethostigma	Southern Flounder	100		X	X		
A56	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Paralichthys lethostigma	Southern Flounder	350		X	X		
A56	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Myrophis punctatus	Speckled Worm Eel	500			X		
A56	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Leiostomus xanthurus	Spot	200			X		
A56	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Cynoscion nebulosis	Spotted Seatrout	100		X	X		
A98	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Morone saxatilis	Striped Bass	1000			X		8
A98	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Morone saxatilis	Striped Bass	1000			X		6
A86	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Mugil cephalus	Striped Mullet	2112		X	X		
A85	TPWD	Galveston Bay and Estuary	Lower Galveston Bay	Unidentified Fish	Unidentified Fish	6				X	
A123	TPWD	Neches–Trinity Coastal	Crystal Beach Private canal	Mugil cephalus	Striped Mullet	7		X	X		
A150	TPWD	Trinity River	Old River	Brevoortia patronus	Gulf Menhaden	1000000		X	X		
171	TDWR	Trinity–San Jacinto Coastal	HL&P Cedar Bayou Cooling Pond	Unclassified Game Fish	Game Fish	1000			X		
670	TDWR	Trinity–San Jacinto Coastal	HL&P Cedar Bayou Plant Lake	Unclassified Game Fish	Game Fish	200			X		
A141	TPWD	Trinity–San Jacinto Coastal	Discharge canal	Brevoortia patronus	Gulf Menhaden	1000000		X	X		
318	TDWR	Trinity–San Jacinto Coastal	HL&P Old Discharge Canal	Unclassified Rough Fish	Rough Fish	10000000	X				
A141	TPWD	Trinity–San Jacinto Coastal	Discharge canal	Mugil cephalus	Striped Mullet	2		X	X		
669	TDWR	San Jacinto River	Peggy Lake	Unclassified Rough Fish	Rough Fish	100	X				
A8	TPWD	San Jacinto River	Non–freshwater pond	Dorosoma cepedianum	Gizzard Shad	17	X				10
A8	TPWD	San Jacinto River	Non–freshwater pond	Dorosoma cepedianum	Gizzard Shad	44	X				6
A8	TPWD	San Jacinto River	Non–freshwater pond	Dorosoma cepedianum	Gizzard Shad	21	X				12
A20	TPWD	San Jacinto River	Greens Bayou	Brevoortia patronus	Gulf Menhaden	11		X	X		

FISHKILL.WK3 DATA BASE (PART 1)

REP. NO.	AGENCY	BASIN	WATER BODY	SPECIES	COMMON NAME	NO. KILLED	ROUGH FISH	COMMER. FISH	SPORT FISH	UNCLASS. FISH	SIZE (IN.)
A313	HCPC	San Jacinto–Brazos Coastal	Old River	Clupeidae (family)	Herring (family)	1500000	X				
A8	TPWD	San Jacinto River	Non–freshwater pond	Sciaenops ocellatus	Red Drum	1		X	X		24
A8	TPWD	San Jacinto River	Non–freshwater pond	Sciaenops ocellatus	Red Drum	2		X	X		20
A8	TPWD	San Jacinto River	Non–freshwater pond	Sciaenops ocellatus	Red Drum	1		X	X		18
A8	TPWD	San Jacinto River	Non–freshwater pond	Sciaenops ocellatus	Red Drum	1		X	X		30
A8	TPWD	San Jacinto River	Non–freshwater pond	Sciaenops ocellatus	Red Drum	1		X	X		22
487	TDWR	San Jacinto River	Greens Bayou	Unclassified Rough Fish	Rough Fish	60	X				
32	TDWR	San Jacinto River	Lower Hunting Bayou	Unclassified Rough Fish	Rough Fish	20000	X				
408	TDWR	San Jacinto River	Cargill Barge Slip	Unclassified Rough Fish	Rough Fish	1600	X				
251	TDWR	San Jacinto River	Jacintoport Boat Slip	Unclassified Rough Fish	Rough Fish	5000	X				
A316	HCPC	San Jacinto River	Greens Bayou	Dorosoma sp.	Shad (unclassified)	3000	X				
A8	TPWD	San Jacinto River	Non–freshwater pond	Archosargus probatocephalus	Sheepshead	3		X	X		20
A8	TPWD	San Jacinto River	Non–freshwater pond	Archosargus probatocephalus	Sheepshead	1		X	X		6
A8	TPWD	San Jacinto River	Non–freshwater pond	Archosargus probatocephalus	Sheepshead	11		X	X		10
A8	TPWD	San Jacinto River	Non–freshwater pond	Archosargus probatocephalus	Sheepshead	5		X	X		15
A8	TPWD	San Jacinto River	Non–freshwater pond	Paralichthys lethostigma	Southern Flounder	1		X	X		10
A8	TPWD	San Jacinto River	Non–freshwater pond	Paralichthys lethostigma	Southern Flounder	4		X	X		16
A8	TPWD	San Jacinto River	Non–freshwater pond	Paralichthys lethostigma	Southern Flounder	1		X	X		6
A8	TPWD	San Jacinto River	Non–freshwater pond	Paralichthys lethostigma	Southern Flounder	2		X	X		12
A8	TPWD	San Jacinto River	Non–freshwater pond	Paralichthys lethostigma	Southern Flounder	1		X	X		20
A18	TPWD	San Jacinto River	Greens Bayou	Mugil cephalus	Striped Mullet	3430		X	X		
A8	TPWD	San Jacinto River	Non–freshwater pond	Mugil cephalus	Striped Mullet	1		X	X		10
A163	TPWD	San Jacinto River	Patricks Bayou	Mugil cephalus	Striped Mullet	1000		X	X		
A18	TPWD	San Jacinto River	Greens Bayou	Dorosoma petenense	Threadfin Shad	32	X				
A152	TPWD	San Jacinto River	Sims Bayou	Mugil cephalus	Striped Mullet	1		X	X		
A118	TPWD	San Jacinto–Brazos Coastal	Unamed tributary	Anchoa mitchilli	Bay Anchovy	28	X				
A118	TPWD	San Jacinto–Brazos Coastal	Unamed tributary	Brevoortia patronus	Gulf Menhaden	72464		X	X		
71	TDWR	San Jacinto–Brazos Coastal	Cow Bayou	Unclassified Rough Fish	Rough Fish	3500	X				
A118	TPWD	San Jacinto–Brazos Coastal	Unamed tributary	Cynoscion nebulosis	Spotted Seatrout	7		X	X		
A118	TPWD	San Jacinto–Brazos Coastal	Unamed tributary	Cynoscion nebulosis	Spotted Seatrout	7		X	X		
A31	TPWD	San Jacinto–Brazos Coastal	Cow Bayou	Mugil cephalus	Striped Mullet	50		X	X		
219	TDWR	San Jacinto–Brazos Coastal	Monsanto Barge Canal	Unclassified Game Fish	Game Fish	35			X		
219	TDWR	San Jacinto–Brazos Coastal	Monsanto Barge Canal	Unclassified Rough Fish	Rough Fish	3465	X				
480	TDWR	San Jacinto–Brazos Coastal	Monsanto Barge Canal	Unclassified Rough Fish	Rough Fish	4000	X				
292	TDWR	San Jacinto–Brazos Coastal	Amoco Canal	Unclassified Rough Fish	Rough Fish	300	X				
863	TPWD	San Jacinto–Brazos Coastal	East Union Bayou	Unidentified Fish	Unidentified Fish	5500				X	
540	TDWR	San Jacinto–Brazos Coastal	Big Island Slough	Unclassified Game Fish	Game Fish	3			X		
540	TDWR	San Jacinto–Brazos Coastal	Big Island Slough	Unclassified Rough Fish	Rough Fish	348	X				
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Micropogonias undulatus	Atlantic Croaker	40		X	X		8
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Micropogonias undulatus	Atlantic Croaker	370		X	X		6
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Micropogonias undulatus	Atlantic Croaker	10		X	X		10
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Micropogonias undulatus	Atlantic Croaker	10		X	X		12
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Micropogonias undulatus	Atlantic Croaker	20		X	X		2
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Micropogonias undulatus	Atlantic Croaker	160		X	X		4
A48	TPWD	Galveston Bay and Estuary	Discharge canal for cooling water	Micropogonias undulatus	Atlantic Croaker	1922		X	X		
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Micropogonias undulatus	Atlantic Croaker	10		X	X		5
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Micropogonias undulatus	Atlantic Croaker	1		X	X		7
358	TDWR	San Jacinto–Brazos Coastal	HL&P Robinson Cooling Tower In	Unclassified Game Fish	Game Fish	500			X		

FISHKILL.WK3 DATA BASE (PART 1)

REP. NO.	AGENCY	BASIN	WATER BODY	SPECIES	COMMON NAME	NO. KILLED	ROUGH FISH	COMMER. FISH	SPORT FISH	UNCLASS. FISH	SIZE (IN.)
397	TDWR	San Jacinto – Brazos Coastal	HL&P Robinson Discharge Canal	Unclassified Game Fish	Game Fish	80			X		
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Dorosoma cepedianum	Gizzard Shad	4	X				13
A48	TPWD	Galveston Bay and Estuary	Discharge canal for cooling water	Dorosoma cepedianum	Gizzard Shad	41	X				
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Dorosoma cepedianum	Gizzard Shad	2	X				15
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Dorosoma cepedianum	Gizzard Shad	5	X				14
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Brevoortia patronus	Gulf Menhaden	410		X	X		4
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Brevoortia patronus	Gulf Menhaden	12		X	X		3
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Brevoortia patronus	Gulf Menhaden	80		X	X		2
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Brevoortia patronus	Gulf Menhaden	10		X	X		6
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Arius felis	Hardhead Catfish	2			X		3
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Arius felis	Hardhead Catfish	2			X		7
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Arius felis	Hardhead Catfish	1			X		8
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Arius felis	Hardhead Catfish	60			X		12
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Arius felis	Hardhead Catfish	20			X		15
A48	TPWD	Galveston Bay and Estuary	Discharge canal for cooling water	Arius felis	Hardhead Catfish	2			X		
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Arius felis	Hardhead Catfish	10			X		10
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Arius felis	Hardhead Catfish	1			X		10
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Arius felis	Hardhead Catfish	50			X		2
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Arius felis	Hardhead Catfish	40			X		6
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Arius felis	Hardhead Catfish	2			X		6
A48	TPWD	Galveston Bay and Estuary	Discharge canal for cooling water	Lagodon rhomboides	Pinfish	206			X		
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Sciaenops ocellatus	Red Drum	4		X	X		14
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Sciaenops ocellatus	Red Drum	1		X	X		13
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Sciaenops ocellatus	Red Drum	3		X	X		16
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Sciaenops ocellatus	Red Drum	1		X	X		18
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Sciaenops ocellatus	Red Drum	2		X	X		15
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Sciaenops ocellatus	Red Drum	1		X	X		17
A48	TPWD	Galveston Bay and Estuary	Discharge canal for cooling water	Lutjanus campechanus	Red Snapper	2		X	X		
397	TDWR	San Jacinto – Brazos Coastal	HL&P Robinson Discharge Canal	Unclassified Rough Fish	Rough Fish	1920	X				
790	TDWR	Galveston Bay and Estuary	Little Cedar Bayou	Unclassified Rough Fish	Rough Fish	1000	X				
762	TDWR	Galveston Bay and Estuary	Bolivar Pass	Unclassified Rough Fish	Rough Fish	3050	X				
133	TDWR	San Jacinto – Brazos Coastal	E Pump Discharge Canal	Unclassified Rough Fish	Rough Fish	4500	X				
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Cynoscion arenarius	Sand Seatrout	10		X	X		12
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Cynoscion arenarius	Sand Seatrout	10		X	X		15
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Cynoscion arenarius	Sand Seatrout	10		X	X		8
A48	TPWD	Galveston Bay and Estuary	Discharge canal for cooling water	Cynoscion arenarius	Sand Seatrout	66		X	X		
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Archosargus probatocephalus	Sheepshead	20		X	X		4
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Archosargus probatocephalus	Sheepshead	10		X	X		15
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Archosargus probatocephalus	Sheepshead	20		X	X		2
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Paralichthys lethostigma	Southern Flounder	10		X	X		6
A48	TPWD	Galveston Bay and Estuary	Discharge canal for cooling water	Leiostomus xanthurus	Spot	220			X		
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Cynoscion nebulosis	Spotted Seatrout	5		X	X		13
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Cynoscion nebulosis	Spotted Seatrout	3		X	X		17
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Cynoscion nebulosis	Spotted Seatrout	3		X	X		14
A48	TPWD	Galveston Bay and Estuary	Discharge canal for cooling water	Cynoscion nebulosis	Spotted Seatrout	155		X	X		
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Cynoscion nebulosis	Spotted Seatrout	6		X	X		12
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Mugil cephalus	Striped Mullet	10		X	X		12
A48	TPWD	Galveston Bay and Estuary	Discharge canal for cooling water	Mugil cephalus	Striped Mullet	7		X	X		

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REP. NO.	AGENCY	BASIN	WATER BODY	SPECIES	COMMON NAME	NO. KILLED	ROUGH FISH	COMMER. FISH	SPORT FISH	UNCLASS. FISH	SIZE (IN.)
A53	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Mugil cephalus	Striped Mullet	10		X	X		8
A48	TPWD	Galveston Bay and Estuary	Discharge canal for cooling water	Unidentified Fish	Unidentified Fish	404				X	
A51	TPWD	Galveston Bay and Estuary	P.H. Robinson discharge canal	Unidentified Fish	Unidentified Fish	89				X	
615	TDWR	Galveston Bay and Estuary	Pix Bayou	Unclassified Game Fish	Game Fish	223			X		
A147	TPWD	Neches–Trinity Coastal	Canal	Brevoortia patronus	Gulf Menhaden	1000000		X	X		
36	TDWR	Neches–Trinity Coastal	Double Bayou	Unclassified Rough Fish	Rough Fish	80000	X				
615	TDWR	Galveston Bay and Estuary	Pix Bayou	Unclassified Rough Fish	Rough Fish	251	X				
A135	TPWD	Neches–Trinity Coastal	Irrigation Canal	Paralichthys lethostigma	Southern Flounder	5		X	X		
A76	TPWD	Neches–Trinity Coastal	Robinson Lake	Paralicthys albigutta	Gulf Flounder	200		X	X		
A134	TPWD	Neches–Trinity Coastal	Robinson Bayou	Brevoortia patronus	Gulf Menhaden	500000		X	X		
A76	TPWD	Neches–Trinity Coastal	Robinson Lake	Arius felis	Hardhead Catfish	200			X		
63	TDWR	Neches–Trinity Coastal	Onion Bayou	Unclassified Rough Fish	Rough Fish	1320000	X				
64	TDWR	Neches–Trinity Coastal	Oyster Bayou	Unclassified Rough Fish	Rough Fish	700000	X				
60	TDWR	Trinity–San Jacinto Coastal	Sun Oil Company Boat Slip	Unclassified Rough Fish	Rough Fish	1000000	X				
A54	TPWD	San Jacinto–Brazos Coastal	Lampasas Street canal	Micropogonias undulatus	Atlantic Croaker	6		X	X		
A54	TPWD	San Jacinto–Brazos Coastal	Lampasas Street canal	Strongylura marina	Atlantic Needlefish	2			X		
124	TDWR	San Jacinto–Brazos Coastal	Drainage Ditch	Unclassified Game Fish	Game Fish	1101			X		
283	TDWR	Galveston Bay and Estuary	English Bayou	Unclassified Game Fish	Game Fish	100			X		
782	TDWR	San Jacinto–Brazos Coastal	Jones Bay	Unclassified Game Fish	Game Fish	20			X		
742	TDWR	San Jacinto–Brazos Coastal	Unamed Tributary to Highland Bay	Unclassified Game Fish	Game Fish	123			X		
A64	TPWD	San Jacinto–Brazos Coastal	Jones Bay	Brevoortia patronus	Gulf Menhaden	100000		X	X		
A81	TPWD	San Jacinto–Brazos Coastal	Diversionary canal	Brevoortia patronus	Gulf Menhaden	79200		X	X		
A61	TPWD	San Jacinto–Brazos Coastal	Ditch	Brevoortia patronus	Gulf Menhaden	12		X	X		
A54	TPWD	San Jacinto–Brazos Coastal	Lampasas Street canal	Brevoortia patronus	Gulf Menhaden	112500		X	X		
A167	TPWD	San Jacinto–Brazos Coastal	Lake Madeline	Brevoortia patronus	Gulf Menhaden	1000		X	X		
A99	TPWD	San Jacinto–Brazos Coastal	Highland Bayou	Brevoortia patronus	Gulf Menhaden	1000		X	X		3
A106	TPWD	San Jacinto–Brazos Coastal	Lake Madeline	Brevoortia patronus	Gulf Menhaden	7000		X	X		
A54	TPWD	San Jacinto–Brazos Coastal	Lampasas Street canal	Arius felis	Hardhead Catfish	2			X		
136	TDWR	San Jacinto–Brazos Coastal	Canal	Unclassified Rough Fish	Rough Fish	24000	X				
137	TDWR	San Jacinto–Brazos Coastal	Canal	Unclassified Rough Fish	Rough Fish	1440000	X				
52	TDWR	San Jacinto–Brazos Coastal	Canal	Unclassified Rough Fish	Rough Fish	70000	X				
314	TDWR	San Jacinto–Brazos Coastal	Offats and English Bayous	Unclassified Rough Fish	Rough Fish	20000	X				
50	TDWR	San Jacinto–Brazos Coastal	Canal	Unclassified Rough Fish	Rough Fish	5000	X				
283	TDWR	Galveston Bay and Estuary	English Bayou	Unclassified Rough Fish	Rough Fish	1900	X				
124	TDWR	San Jacinto–Brazos Coastal	Drainage Ditch	Unclassified Rough Fish	Rough Fish	109048	X				
742	TDWR	San Jacinto–Brazos Coastal	Unamed Tributary to Highland Bay	Unclassified Rough Fish	Rough Fish	50	X				
486	TDWR	San Jacinto–Brazos Coastal	Highland Bayou	Unclassified Rough Fish	Rough Fish	1500	X				
195	TDWR	San Jacinto–Brazos Coastal	Dead End Canal	Unclassified Rough Fish	Rough Fish	100100	X				
413	TDWR	San Jacinto–Brazos Coastal	Boat Canal	Unclassified Rough Fish	Rough Fish	10000	X				
25	TDWR	San Jacinto–Brazos Coastal	Offats Bayou	Unclassified Rough Fish	Rough Fish	12000000	X				
787	TDWR	San Jacinto–Brazos Coastal	Jones Bay	Unclassified Rough Fish	Rough Fish	200	X				
374	TDWR	San Jacinto–Brazos Coastal	Lake Madeline	Unclassified Rough Fish	Rough Fish	1000	X				
A103	TPWD	San Jacinto–Brazos Coastal	Unamed tributary	Unidentified Fish	Unidentified Fish	1				X	
537	TDWR	San Jacinto–Brazos Coastal	Taylor Bayou	Unclassified Game Fish	Game Fish	7486			X		
215	TDWR	San Jacinto–Brazos Coastal	Taylor Lake	Unclassified Game Fish	Game Fish	406512			X		
22	TDWR	San Jacinto–Brazos Coastal	HL&P Discharge Canal	Unclassified Game Fish	Game Fish	8000			X		
226	TDWR	San Jacinto–Brazos Coastal	Bayport Ditch A Canal	Unclassified Game Fish	Game Fish	530			X		
373	TDWR	San Jacinto–Brazos Coastal	Bayport Ditch A Canal	Unclassified Game Fish	Game Fish	300			X		

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REP. NO.	AGENCY	BASIN	WATER BODY	SPECIES	COMMON NAME	NO. KILLED	ROUGH FISH	COMMER. FISH	SPORT FISH	UNCLASS. FISH	SIZE (IN.)
A44	TPWD	San Jacinto – Brazos Coastal	Bayport Ditch A Canal	Brevoortia patronus	Gulf Menhaden	200000		X	X		
A39	TPWD	San Jacinto – Brazos Coastal	Bayport Ditch A Canal	Brevoortia patronus	Gulf Menhaden	475000		X	X		
A10	TPWD	San Jacinto – Brazos Coastal	Bayport Ditch A Canal	Brevoortia patronus	Gulf Menhaden	1000		X	X		
A83	TPWD	San Jacinto – Brazos Coastal	Jarbo Bayou	Brevoortia patronus	Gulf Menhaden	2677		X	X		
A32	TPWD	San Jacinto – Brazos Coastal	Taylor Lake	Brevoortia patronus	Gulf Menhaden	3000		X	X		
A41	TPWD	San Jacinto – Brazos Coastal	Nassau Bay	Menidia beryllina	Inland Silverside	180	X				
A170	TPWD	San Jacinto – Brazos Coastal	Taylor Lake	Sciaenops ocellatus	Red Drum	1		X	X		
412	TDWR	San Jacinto – Brazos Coastal	Taylor Lake	Unclassified Rough Fish	Rough Fish	10000	X				
270	TDWR	San Jacinto – Brazos Coastal	Taylor Lake	Unclassified Rough Fish	Rough Fish	500000	X				
651	TDWR	San Jacinto – Brazos Coastal	Bayport Ditch A Canal	Unclassified Rough Fish	Rough Fish	15000	X				
41	TDWR	San Jacinto – Brazos Coastal	Taylor Bayou	Unclassified Rough Fish	Rough Fish	1000	X				
316	TDWR	San Jacinto – Brazos Coastal	Bayport Ditch A Canal	Unclassified Rough Fish	Rough Fish	200	X				
31	TDWR	San Jacinto – Brazos Coastal	Taylor Bayou	Unclassified Rough Fish	Rough Fish	12000	X				
40	TDWR	San Jacinto – Brazos Coastal	Taylor Bayou	Unclassified Rough Fish	Rough Fish	600000	X				
55	TDWR	San Jacinto – Brazos Coastal	Taylor Bayou	Unclassified Rough Fish	Rough Fish	50000	X				
215	TDWR	San Jacinto – Brazos Coastal	Taylor Lake	Unclassified Rough Fish	Rough Fish	5400812	X				
22	TDWR	San Jacinto – Brazos Coastal	HL&P Discharge Canal	Unclassified Rough Fish	Rough Fish	792000	X				
445	TDWR	San Jacinto – Brazos Coastal	Bayport Ditch B Canal	Unclassified Rough Fish	Rough Fish	100	X				
51	TDWR	San Jacinto – Brazos Coastal	Taylor Bayou	Unclassified Rough Fish	Rough Fish	300000	X				
537	TDWR	San Jacinto – Brazos Coastal	Taylor Bayou	Unclassified Rough Fish	Rough Fish	39301	X				
308	TDWR	San Jacinto – Brazos Coastal	Bayport Ditch B Canal	Unclassified Rough Fish	Rough Fish	100	X				
301	TDWR	San Jacinto – Brazos Coastal	Bayport Ditch A Canal	Unclassified Rough Fish	Rough Fish	1100	X				
226	TDWR	San Jacinto – Brazos Coastal	Bayport Ditch A Canal	Unclassified Rough Fish	Rough Fish	10070	X				
373	TDWR	San Jacinto – Brazos Coastal	Bayport Ditch A Canal	Unclassified Rough Fish	Rough Fish	29785	X				
598	TDWR	San Jacinto – Brazos Coastal	Bayport Ditch A Canal	Unclassified Rough Fish	Rough Fish	500	X				
A170	TPWD	San Jacinto – Brazos Coastal	Taylor Lake	Cynoscion nebulosis	Spotted Seatrout	1		X	X		
A10	TPWD	San Jacinto – Brazos Coastal	Bayport Ditch A Canal	Mugil cephalus	Striped Mullet	50		X	X		
A44	TPWD	San Jacinto – Brazos Coastal	Bayport Ditch A Canal	Mugil cephalus	Striped Mullet	300		X	X		
A41	TPWD	San Jacinto – Brazos Coastal	Nassau Bay	Mugil cephalus	Striped Mullet	90		X	X		
A14	TPWD	San Jacinto – Brazos Coastal	Taylor Lake	Mugil cephalus	Striped Mullet	5		X	X		
A43	TPWD	San Jacinto – Brazos Coastal	Unamed tributary	Unidentified Fish	Unidentified Fish	1				X	36
A33	TPWD	Trinity – San Jacinto Coastal	Goose Creek	Makaira nigricans	Blue Marlin	2			X		
145	TDWR	San Jacinto River	Goose Creek	Unclassified Game Fish	Game Fish	308			X		
145	TDWR	San Jacinto River	Goose Creek	Unclassified Rough Fish	Rough Fish	30564	X				
609	TDWR	San Jacinto River	Goose Creek	Unclassified Rough Fish	Rough Fish	500	X				
884	TDWR	Trinity – San Jacinto Coastal	Boat Slip	Unclassified Rough Fish	Rough Fish	30000	X				
A45	TPWD	San Jacinto – Brazos Coastal	Tucker Bayou	Cyprinodon variegatus	Sheepshead Minnow	2000	X				
129	TDWR	San Jacinto – Brazos Coastal	34th Street Drainage Ditch	Unclassified Game Fish	Game Fish	1672			X		
562	TDWR	San Jacinto – Brazos Coastal	Drainage Ditch	Unclassified Game Fish	Game Fish	60			X		
118	TDWR	San Jacinto – Brazos Coastal	34th Street Drainage Ditch	Unclassified Game Fish	Game Fish	105			X		
114	TDWR	San Jacinto – Brazos Coastal	34th Street Drainage Ditch	Unclassified Game Fish	Game Fish	600			X		
A105	TPWD	Galveston Bays and Estuaries	Dollar Bay	Brevoortia patronus	Gulf Menhaden	211		X	X		
A100	TPWD	Galveston Bay and Estuary	Dollar Bay	Mixed Species	Menhaden/Shad	1000		X	X		
129	TDWR	San Jacinto – Brazos Coastal	34th Street Drainage Ditch	Unclassified Rough Fish	Rough Fish	40137	X				
76	TDWR	San Jacinto – Brazos Coastal	Canal	Unclassified Rough Fish	Rough Fish	200	X				
118	TDWR	San Jacinto – Brazos Coastal	34th Street Drainage Ditch	Unclassified Rough Fish	Rough Fish	1995	X				
562	TDWR	San Jacinto – Brazos Coastal	Drainage Ditch	Unclassified Rough Fish	Rough Fish	140	X				
126	TDWR	San Jacinto – Brazos Coastal	34th Street Drainage Ditch	Unclassified Rough Fish	Rough Fish	70000	X				

FISHKILL.WK3 DATA BASE (PART 2)

REP. NO.	AGENCY	COUNTY	SOURCE	SOURCE2	SOURCE3	CAUSE CODE	POLLUTANT	SPILLED MATERIAL	SPILLED AMOUNT	AFFECT	DATE
A114	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	15-Aug-83
A114	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	15-Aug-83
A114	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	15-Aug-83
A114	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	15-Aug-83
A114	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	15-Aug-83
A114	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	15-Aug-83
A114	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	15-Aug-83
420	TDWR	Galveston	UN	B	16		U			LDO	24-Aug-77
70	TDWR	Harris	UN	B	16		U			LDO	05-Aug-71
116	TDWR	Galveston	UN	B	16		U				12-Feb-72
35	TDWR	Harris	UN	B	16		C	Unspecified Chemical			18-Apr-71
211	TDWR	Harris	UN	B	16		U				09-Aug-73
A114	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	15-Aug-83
A114	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	15-Aug-83
A114	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	15-Aug-83
A114	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	15-Aug-83
A114	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	15-Aug-83
A114	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	15-Aug-83
A131	TPWD	Galveston	NPS	EE	51		UR			LDO	08-Aug-82
A126	TPWD	Galveston	UN	B	16	03	U			LDO	30-Aug-81
A126	TPWD	Galveston	UN	B	16	03	U			LDO	30-Aug-81
143	TDWR	Galveston	UN	B	16		U			LDO	31-Jul-72
346	TDWR	Galveston	NPS	DD	7		UNPS			LDO	21-Apr-76
474	TDWR	Galveston	UN	B	16		U			LDO	29-Jul-78
485	TDWR	Galveston	UN	B	16		U	Hydrogen sulfide, nutrients		LDOTOX	29-Aug-78
A131	TPWD	Galveston	NPS	EE	51		UR			LDO	08-Aug-82
A131	TPWD	Galveston	NPS	EE	51		UR			LDO	08-Aug-82
A96	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	11-Aug-88
A130	TPWD	Galveston	UN	B	16		U			LDO	30-Oct-82
A129	TPWD	Galveston	UN	B	16		U			LDO	08-Oct-82
A127	TPWD	Galveston	NPS	DD	7		UNPS			LDO	01-Sep-82
A95	TPWD	Galveston	UN	B	16	19	U				31-Aug-88
474	TDWR	Galveston	UN	B	16		U			LDO	29-Jul-78
485	TDWR	Galveston	UN	B	16		U	Hydrogen sulfide, nutrients		LDOTOX	29-Aug-78
58	TDWR	Galveston	NPS	DD	7		UNPS			LDO	07-Jul-71
74	TDWR	Galveston	NPS	DD	7		UNPS			LDO	16-Aug-71
346	TDWR	Galveston	NPS	DD	7		UNPS			LDO	21-Apr-76
77	TDWR	Galveston	UN	B	16		U			LDO	01-Sep-71
777	TDWR	Galveston	UN	B	16		U			LDO	08-Aug-82
143	TDWR	Galveston	UN	B	16		U			LDO	31-Jul-72
284	TDWR	Brazoria	UN	B	16		U				29-Jul-74
57	TDWR	Brazoria	UN	B	16		U				12-Jul-71
284	TDWR	Brazoria	UN	B	16		U				29-Jul-74
A172	TPWD	Galveston	PS	V	24		H	Heated Water		Htemp	27-Jun-91
375	TDWR	Chambers	UN	B	16		U				03-Sep-76
748	TDWR	Galveston	PS	V	24		H	Heated Water		HTEMP	01-Jun-82
183	TDWR	Chambers	UN	B	16		U			LDO	06-Sep-72
A137	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	27-Aug-83

FISHKILL.WK3 DATA BASE (PART 2)

REP. NO.	AGENCY	COUNTY	SOURCE	SOURCE2	SOURCE3	CAUSE CODE	POLLUTANT	SPILLED MATERIAL	SPILLED AMOUNT	AFFECT	DATE
A137	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	27-Aug-83
A71	TPWD	Galveston	PS	X	25		F	Fish Cull		NET	03-May-82
A137	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	27-Aug-83
A172	TPWD	Galveston	PS	V	24		H	Heated Water		Htemp	27-Jun-91
194	TDWR	Harris	UN	B	16		U				22-Jun-73
375	TDWR	Chambers	UN	B	16		U				03-Sep-76
748	TDWR	Galveston	PS	V	24		H	Heated Water		HTEMP	01-Jun-82
183	TDWR	Chambers	UN	B	16		U			LDO	06-Sep-72
16	TDWR	Harris	UN	B	16		U			LDO	14-Oct-70
281	TDWR	Harris	UN	B	16		U			LDO	18-Jul-74
A71	TPWD	Galveston	PS	X	25		F	Fish Cull		NET	03-May-82
A172	TPWD	Galveston	PS	V	24		H	Heated Water		Htemp	27-Jun-91
A172	TPWD	Galveston	PS	V	24		H	Heated Water		Htemp	27-Jun-91
A137	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	27-Aug-83
A137	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	27-Aug-83
A137	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	27-Aug-83
A172	TPWD	Galveston	PS	V	24		H	Heated Water		Htemp	27-Jun-91
A137	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	27-Aug-83
A137	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	27-Aug-83
A137	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	27-Aug-83
A137	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	27-Aug-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
37	TDWR	Chambers	NPS	CF	58		AR	Pesticides		TOX	28-Apr-78
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A148	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	30-Jun-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83

FISHKILL.WK3 DATA BASE (PART 2)

REP. NO.	AGENCY	COUNTY	SOURCE	SOURCE2	SOURCE3	CAUSE CODE	POLLUTANT	SPILLED MATERIAL	SPILLED AMOUNT	AFFECT	DATE
A149	TPWD	Chambers	PS	V	24	08	H	Heated Water		Htemp	25-May-83
37	TDWR	Chambers	NPS	CF	58		AR	Pesticides		TOX	28-Apr-78
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X	Shockwaves		SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A102	TPWD	Galveston	UN	B	16		O	Waste Oil			17-May-82
A102	TPWD	Galveston	UN	B	16		O	Waste Oil			17-May-82
A102	TPWD	Galveston	UN	B	16		O	Waste Oil			17-May-82
A102	TPWD	Galveston	UN	B	16		O	Waste Oil			17-May-82
733	TDWR	Galveston	UN	B	16		U			LDO	29-Apr-82
266	TDWR	Galveston	UN	B	16		U				08-Aug-74
A112	TPWD	Galveston	UN	B	16	19	U				07-Jul-85
A112	TPWD	Galveston	UN	B	16	19	U				07-Jul-85
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A102	TPWD	Galveston	UN	B	16		O	Waste Oil			17-May-82
733	TDWR	Galveston	UN	B	16		U			LDO	29-Apr-82
732	TDWR	Galveston	UN	B	16		U			LDO	29-Apr-82
767	TDWR	Galveston	UN	B	16		U			LDO	14-Jul-82
266	TDWR	Galveston	UN	B	16		U				08-Aug-74
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X	Shockwaves		SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X	Shockwaves		SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X	Shockwaves		SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X	Shockwaves		SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A166	TPWD	Galveston	PS	Y	50	10	X			SHOCKWAVE	01-Oct-90
A121	TPWD	Galveston	PS	G	50	10	X	Shockwaves			06-Dec-85
808	TDWR	Galveston	UN	B	16		U			LDO	28-Sep-82
122	TDWR	Harris	UN	B	16		U				07-Jul-72
A121	TPWD	Galveston	PS	G	50	10	X	Shockwaves			06-Dec-85
364	TDWR	Harris	PS	B	50		X	Shockwaves		SHOCKWAVE	29-Jul-76
303	TDWR	Harris	UN	B	16		C	Lannate		TOX	27-May-75
A37	TPWD	Harris	NPS	DD	7	03	UNPS			LDO	08-Sep-80
221	TDWR	Harris	PS	ZZ	62		I				17-Sep-73
504	TDWR	Harris	UN	B	16		U	Unspecified Waste			01-Nov-78
319	TDWR	Harris	UN	B	16		U				07-Oct-75
303	TDWR	Harris	UN	B	16		C	Lannate		TOX	27-May-75
144	TDWR	Harris	NPS	DD	7		UNPS			LDO	24-Aug-72
59	TDWR	Harris	NPS	DD	7		UNPS			LDO	02-Jul-71
144	TDWR	Harris	NPS	DD	7		UNPS			LDO	24-Aug-72

FISHKILL.WK3 DATA BASE (PART 2)

REP. NO.	AGENCY	COUNTY	SOURCE	SOURCE2	SOURCE3	CAUSE CODE	POLLUTANT	SPILLED MATERIAL	SPILLED AMOUNT	AFFECT	DATE
324	TDWR	Harris	UN	B	16		U				10-Oct-75
21	TDWR	Harris	UN	B	16		U			LDO	15-Jan-71
6	TDWR	Galveston	PS	I	16		I	Unspecified Material		LDO	05-Aug-70
28	TDWR	Galveston	PS	BB	16		I	Industrial Wastewater			28-Apr-71
A62	TPWD	Galveston	UN	B	16	03	U			LDO	20-Aug-80
28	TDWR	Galveston	PS	BB	16		I	Industrial Wastewater			28-Apr-71
6	TDWR	Galveston	PS	I	16		I	Unspecified Material		LDO	05-Aug-70
230	TDWR	Brazoria	UN	B	16		U				04-Dec-73
A168	TPWD	Galveston	PS	S	22	17	C	Butyl acrylate	17		16-Oct-90
134	TDWR	Harris	UN	B	16		U			LDO	07-Jul-72
A305	HCPC	Harris	UN	B	16		U				23-Jun-86
A56	TPWD	Galveston	UN	B	16	03	U			LDO	25-Jul-81
A86	TPWD	Galveston	PS	X	25	09	F	Shrimp Cull			08-May-85
117	TDWR	Galveston	UN	B	16		U				05-Jun-72
564	TDWR	Galveston	UN	B	16		U				21-Sep-79
A98	TPWD	Galveston	NPS	U	45	16	O	Oil-contaminated Runoff			23-Aug-83
A49	TPWD	Galveston	PS	BB	21	06	C	Malathion		tox	27-Jul-83
A56	TPWD	Galveston	UN	B	16	03	U			LDO	25-Jul-81
A56	TPWD	Galveston	UN	B	16	03	U			LDO	25-Jul-81
117	TDWR	Galveston	UN	B	16		U				05-Jun-72
239	TDWR	Galveston	UN	B	16		U			LDO	05-Nov-73
564	TDWR	Galveston	UN	B	16		U				21-Sep-79
A56	TPWD	Galveston	UN	B	16	03	U			LDO	25-Jul-81
A56	TPWD	Galveston	UN	B	16	03	U			LDO	25-Jul-81
A98	TPWD	Galveston	NPS	U	45	16	O	Oil-contaminated Runoff			23-Aug-83
A56	TPWD	Galveston	UN	B	16	03	U			LDO	25-Jul-81
A56	TPWD	Galveston	UN	B	16	03	U			LDO	25-Jul-81
A56	TPWD	Galveston	UN	B	16	03	U			LDO	25-Jul-81
A56	TPWD	Galveston	UN	B	16	03	U			LDO	25-Jul-81
A56	TPWD	Galveston	UN	B	16	03	U			LDO	25-Jul-81
A56	TPWD	Galveston	UN	B	16	03	U			LDO	25-Jul-81
A98	TPWD	Galveston	NPS	U	45	16	O	Oil-contaminated Runoff			23-Aug-83
A98	TPWD	Galveston	NPS	U	45	16	O	Oil-contaminated Runoff			23-Aug-83
A86	TPWD	Galveston	PS	X	25	09	F	Shrimp Cull			08-May-85
A85	TPWD	Galveston	PS	I	21		C	Phenol	350		07-Aug-82
A123	TPWD	Galveston	NPS	EE	51	03	UR			LDO	27-Jan-84
A150	TPWD	Chambers	NPS	DD	7		UNPS			LDO	28-Aug-80
171	TDWR	Chambers	UN	B	16		U				04-Dec-72
670	TDWR	Chambers	PS	V	24		H	Heated Water		HTEMP	29-May-82
A141	TPWD	Chambers	UN	B	16		U			LDO	27-May-81
318	TDWR	Chambers	UN	B	16		U			LDO	29-Sep-75
A141	TPWD	Chambers	UN	B	16		U			LDO	27-May-81
669	TDWR	Harris	PS	V	16		O	Turbine Oil			23-May-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A20	TPWD	Harris	UN	B	16		U			LDO	09-Aug-82

FISHKILL.WK3 DATA BASE (PART 2)

REP. NO.	AGENCY	COUNTY	SOURCE	SOURCE2	SOURCE3	CAUSE CODE	POLLUTANT	SPILLED MATERIAL	SPILLED AMOUNT	AFFECT	DATE
A313	HCPC	Harris	UN	B	16		U			LDO	28-Aug-80
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
487	TDWR	Harris	UN	B	16		U			LDO	01-Sep-78
32	TDWR	Harris	UN	B	16		U				23-Mar-71
408	TDWR	Harris	PS	S	16		C	Fertilizer		LDO	12-Jul-77
251	TDWR	Harris	NPS	DD	7		UNPS			LDO	08-Jul-74
A316	HCPC	Harris	UN	B	16		U			LDO	01-Jun-78
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A18	TPWD	Harris	UN	B	16		U			LDO	23-Sep-82
A8	TPWD	Harris	UN	B	16		U			LDO	27-Jul-82
A163	TPWD	Harris	UN	B	16	19	U				10-Sep-90
A18	TPWD	Harris	UN	B	16		U			LDO	23-Sep-82
A152	TPWD	Harris	UN	B	16	03	U			LDO	27-Feb-90
A118	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	12-Aug-80
A118	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	12-Aug-80
71	TDWR	Harris	NPS	DD	7		UNPS			LDO	18-Aug-71
A118	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	12-Aug-80
A118	TPWD	Galveston	NPS	DD	7	03	UNPS			LDO	12-Aug-80
A31	TPWD	Harris	NPS	DD	7	03	UNPS			LDO	05-Aug-88
219	TDWR	Brazoria	PS	I	16		C	Benzene		TOX	05-Sep-73
219	TDWR	Brazoria	PS	I	16		C	Benzene		TOX	05-Sep-73
480	TDWR	Brazoria	UN	B	16		U				06-Sep-78
292	TDWR	Brazoria	NPS	DD	7		UNPS			LDO	14-Mar-75
863	TPWD	Brazoria	UN	B	16		UNPS			LDO	16-Jul-83
540	TDWR	Harris	UN	B	16		U	Saline Water		LDOSAL	31-Jul-79
540	TDWR	Harris	UN	B	16		U	Saline Water		LDOSAL	31-Jul-79
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A48	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	09-Jun-88
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
358	TDWR	Galveston	PS	V	24		H	Heated Water		HTEMP	28-Jun-76

FISHKILL.WK3 DATA BASE (PART 2)

REP. NO.	AGENCY	COUNTY	SOURCE	SOURCE2	SOURCE3	CAUSE CODE	POLLUTANT	SPILLED MATERIAL	SPILLED AMOUNT	AFFECT	DATE
397	TDWR	Galveston	PS	V	24		H	Heated Water		HTEMP	27-May-77
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A48	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	09-Jun-88
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A48	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	09-Jun-88
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A48	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	09-Jun-88
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A48	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	09-Jun-88
397	TDWR	Galveston	PS	V	24		H	Heated Water		HTEMP	27-May-77
790	TDWR	Harris	PS	X	25		F	Fish Cull		LDO	29-Aug-82
762	TDWR	Galveston	UN	B	16		U				30-Jun-82
133	TDWR	Galveston	UN	B	16		U			LDO	15-Aug-72
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A48	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	09-Jun-88
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A48	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	09-Jun-88
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A48	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	09-Jun-88
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A48	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	09-Jun-88

FISHKILL.WK3 DATA BASE (PART 2)

REP. NO.	AGENCY	COUNTY	SOURCE	SOURCE2	SOURCE3	CAUSE CODE	POLLUTANT	SPILLED MATERIAL	SPILLED AMOUNT	AFFECT	DATE
A53	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	26-May-83
A48	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	09-Jun-88
A51	TPWD	Galveston	PS	V	24	08	H	Heated Water		Htemp	28-Jun-83
615	TDWR	Chambers	UN	B	16		U			LDO	18-Nov-80
A147	TPWD	Chambers	UN	B	16	03	U			LDO	13-Jun-88
36	TDWR	Chambers	PS	I	16		C	Unspecified Chemical		TOX	30-May-71
615	TDWR	Chambers	UN	B	16		U			LDO	18-Nov-80
A135	TPWD	Chambers	NPS	DD	7		U			LDO	26-Oct-78
A76	TPWD	Chambers	NPS	CF	15	03	AR	Anoxic Water		LDO	17-Aug-88
A134	TPWD	Chambers	UN	B	16		U			LDO	14-Sep-82
A76	TPWD	Chambers	NPS	CF	15	03	AR	Anoxic Water		LDO	17-Aug-88
63	TDWR	Chambers	NPS	DD	7		UNPS			LDO	28-Jun-71
64	TDWR	Chambers	NPS	DD	7		UNPS			LDO	28-Jun-71
60	TDWR	Galveston	NPS	DD	7		UNPS			LDO	14-Jun-71
A54	TPWD	Galveston	UN	B	16	03	U			LDO	28-Jul-81
A54	TPWD	Galveston	UN	B	16	03	U			LDO	28-Jul-81
124	TDWR	Galveston	NPS	DD	7		UNPS			LDO	22-Jun-72
283	TDWR	Galveston	UN	B	16		U			LDO	22-Jul-74
782	TDWR	Galveston	UN	B	16		U			LDO	14-Aug-82
742	TDWR	Galveston	PS	QQ	16		O	Oil			17-May-82
A64	TPWD	Galveston	PS	T	33		S	Sewage		LDO	22-Aug-82
A81	TPWD	Galveston	PS	T	33	01	S	Sewage		LDO	16-Sep-85
A61	TPWD	Galveston	PS	Q	19	17	C	Sugar		H2S	17-Jul-81
A54	TPWD	Galveston	UN	B	16	03	U			LDO	28-Jul-81
A167	TPWD	Galveston	UN	B	16	03	U			LDO	11-Oct-90
A99	TPWD	Galveston	NPS	EE	51	03	UR			LDO	15-May-83
A106	TPWD	Galveston	UN	B	16		U				16-Nov-79
A54	TPWD	Galveston	UN	B	16	03	U			LDO	28-Jul-81
136	TDWR	Galveston	UN	B	16		U			LDO	19-Jul-72
137	TDWR	Galveston	UN	B	16		U			LDO	10-Aug-72
52	TDWR	Galveston	UN	B	16		U			LDO	18-Jul-71
314	TDWR	Galveston	UN	B	16		U	Hydrogen sulfide, nutrients		LDOTOX	02-Jul-75
50	TDWR	Galveston	UN	B	16		U			LDO	01-Jul-71
283	TDWR	Galveston	UN	B	16		U			LDO	22-Jul-74
124	TDWR	Galveston	NPS	DD	7		UNPS			LDO	22-Jun-72
742	TDWR	Galveston	PS	QQ	16		O	Oil			17-May-82
486	TDWR	Galveston	UN	B	16		U			LDO	29-Aug-78
195	TDWR	Galveston	UN	B	16		U			LDO	10-Jul-73
413	TDWR	Galveston	UN	B	16		U			LDO	17-Jul-77
25	TDWR	Galveston	UN	B	16		U			LDO	23-Apr-71
787	TDWR	Galveston	UN	B	16		U			LDO	22-Aug-82
374	TDWR	Galveston	UN	B	16		U				02-Sep-76
A103	TPWD	Galveston	PS	BB	16		O	Cutting oil			29-Mar-82
537	TDWR	Harris	UN	B	16		U			LDO	31-Jul-79
215	TDWR	Harris	UN	B	16		U			LDO	02-Aug-73
22	TDWR	Harris	PS	V	16		C	Cleansing Solution		TOX	14-May-70
226	TDWR	Harris	UN	B	16		U			LDO	08-Nov-73
373	TDWR	Harris	UN	B	16		U				30-Aug-76

FISHKILL.WK3 DATA BASE (PART 2)

REP. NO.	AGENCY	COUNTY	SOURCE	SOURCE2	SOURCE3	CAUSE CODE	POLLUTANT	SPILLED MATERIAL	SPILLED AMOUNT	AFFECT	DATE
A44	TPWD	Harris	PS	I	4		I	Industrial Wastewater	5500	LDO	24-Jun-81
A39	TPWD	Harris	NPS	DD	7		UNPS			LDO	17-Sep-80
A10	TPWD	Harris	PS	BB	52		C	HCL acid		LpH	01-Oct-81
A83	TPWD	Galveston	PS	J	17	03	F	Fish parts		LDO	22-Oct-85
A32	TPWD	Harris	UN	B	16	03	U			LDO	17-Jun-88
A41	TPWD	Harris	NPS	EE	51	03	UR			LDO	15-Sep-85
A170	TPWD	Harris	UN	B	16	19	O	Petroleum product			11-Feb-90
412	TDWR	Harris	UN	B	16		U			LDO	17-Jul-77
270	TDWR	Harris	NPS	DD	7		UNPS			LDO	14-Sep-74
651	TDWR	Harris	PS	BB	16		C	Titanium Chloride		TOX	01-Oct-81
41	TDWR	Harris	UN	B	16		U			LDO	21-May-71
316	TDWR	Harris	PS	BB	16		U				07-Aug-75
31	TDWR	Harris	NPS	DD	7		UNPS			LDO	06-May-71
40	TDWR	Harris	UN	B	16		U			LDO	15-Jun-71
55	TDWR	Harris	NPS	DD	7		UNPS			LDO	16-Jul-71
215	TDWR	Harris	UN	B	16		U			LDO	02-Aug-73
22	TDWR	Harris	PS	V	16		C	Cleansing Solution		TOX	14-May-70
445	TDWR	Harris	UN	B	16		C	Organic Waste		LDOTOX	14-Mar-78
51	TDWR	Harris	NPS	DD	7		UNPS			LDO	16-Jun-71
537	TDWR	Harris	UN	B	16		U			LDO	31-Jul-79
308	TDWR	Harris	UN	B	16		U			LDO	25-Jun-75
301	TDWR	Harris	UN	B	16		U				14-Apr-75
226	TDWR	Harris	UN	B	16		U			LDO	08-Nov-73
373	TDWR	Harris	UN	B	16		U				30-Aug-76
598	TDWR	Harris	UN	B	16		U				28-Apr-80
A170	TPWD	Harris	UN	B	16	19	O	Petroleum product			11-Feb-90
A10	TPWD	Harris	PS	BB	52		C	HCL acid		LpH	01-Oct-81
A44	TPWD	Harris	PS	I	4		I	Industrial Wastewater	5500	LDO	24-Jun-81
A41	TPWD	Harris	NPS	EE	51	03	UR			LDO	15-Sep-85
A14	TPWD	Harris	UN	B	16		U				29-Sep-88
A43	TPWD	Harris	PS	T	32	01	S			LDO	16-Aug-85
A33	TPWD	Harris	NPS	DD	7	03	UNPS			LDO	23-May-88
145	TDWR	Harris	NPS	DD	7		UNPS			LDO	25-Aug-72
145	TDWR	Harris	NPS	DD	7		UNPS			LDO	25-Aug-72
609	TDWR	Harris	UN	B	16		U				16-Oct-80
884	TDWR	Harris	UN	B	16		U				12-Aug-83
A45	TPWD	Harris	PS	BB	40		C	p-Xylene	275000		21-Nov-78
129	TDWR	Galveston	UN	B	16		U			LDO	04-Jul-72
562	TDWR	Galveston	PS	P	4		O	Crude oil			21-Dec-78
118	TDWR	Galveston	NPS	DD	7		UNPS			LDO	29-May-72
114	TDWR	Galveston	UN	B	16		U			LDO	09-May-72
A105	TPWD	Galveston	PS	T	30		S	Sewage		LDO	29-Sep-81
A100	TPWD	Galveston	NPS	U	38		O	Oil		LDO	03-Oct-82
129	TDWR	Galveston	UN	B	16		U			LDO	04-Jul-72
76	TDWR	Galveston	NPS	DD	7		UNPS			LDO	01-Sep-71
118	TDWR	Galveston	NPS	DD	7		UNPS			LDO	29-May-72
562	TDWR	Galveston	PS	P	4		O	Crude oil			21-Dec-78
126	TDWR	Galveston	UN	B	16		U			LDO	09-Jun-72

FISHKILL.WK3 DATA BASE (PART 2)

REP. NO.	AGENCY	COUNTY	SOURCE	SOURCE2	SOURCE3	CAUSE CODE	POLLUTANT	SPILLED MATERIAL	SPILLED AMOUNT	AFFECT	DATE
227	TDWR	Galveston	UN	B	16		U			LDO	23-Nov-73
17	TDWR	Galveston	UN	B	16		U			LDO	10-Aug-70
115	TDWR	Galveston	UN	B	16		U			LDO	14-May-72
114	TDWR	Galveston	UN	B	16		U			LDO	09-May-72
224	TDWR	Galveston	UN	B	16		U			LDO	03-Oct-73
A105	TPWD	Galveston	PS	T	30		S	Sewage		LDO	29-Sep-81
A105	TPWD	Galveston	PS	T	30		S	Sewage		LDO	29-Sep-81
A105	TPWD	Galveston	PS	T	30		S	Sewage		LDO	29-Sep-81
464	TDWR	Brazoria	UN	B	16		C	Pesticides		TOX	03-Jun-78
464	TDWR	Brazoria	UN	B	16		C	Pesticides		TOX	03-Jun-78
A158	TPWD	Harris	PS	S	22	17	C	Vinyl acetate	40		27-Jun-90
A158	TPWD	Harris	PS	S	22	17	C	Vinyl acetate	40		27-Jun-90
29	TDWR	Galveston	PS	BB	16		I	Industrial Wastewater		LDO	29-Apr-71
695	TDWR	Galveston	PS	BB	16		C	Toxic Waste		TOX	09-Nov-82
92	TDWR	Galveston	PS	I	44		U			LDO	27-Sep-71
217	TDWR	Galveston	NPS	DD	7		UNPS			LDO	30-Aug-73
170	TDWR	Galveston	UN	B	16		U			LDO	06-Mar-73
15	TDWR	Galveston	UN	B	16		U			LDO	20-Sep-70
A93	TPWD	Galveston	PS	I	4		I	Concentrated wastewater		LDO	09-Nov-89
233	TDWR	Galveston	UN	B	16		C			LDOTOX	07-Nov-73
1	TDWR	Galveston	NPS	DD	7		UNPS			LDO	30-Jun-70
170	TDWR	Galveston	UN	B	16		U			LDO	06-Mar-73
15	TDWR	Galveston	UN	B	16		U			LDO	20-Sep-70
29	TDWR	Galveston	PS	BB	16		I	Industrial Wastewater		LDO	29-Apr-71
363	TDWR	Galveston	UN	B	16		C	Unspecified Chemical		LDO	16-Jul-76
217	TDWR	Galveston	NPS	DD	7		UNPS			LDO	30-Aug-73
232	TDWR	Galveston	UN	B	16		C	Toxic Waste		LDOTOX	02-Oct-73
695	TDWR	Galveston	PS	BB	16		C	Toxic Waste		TOX	09-Nov-82
92	TDWR	Galveston	PS	I	44		U			LDO	27-Sep-71
93	TDWR	Galveston	UN	B	16		U			LDO	08-Oct-71
A93	TPWD	Galveston	PS	I	4		I	Concentrated wastewater		LDO	09-Nov-89
A92	TPWD	Galveston	PS	S	21	17	O	2-ethyl hexanol	6000		16-Jul-85

APPENDIX E

FISH KILL DATA COLUMNS DESCRIPTION FOR BASE SPREADSHEET

Base Spreadsheet Columns Descriptions

AGENCY (TEXT 4) - Identifier for the agency from which data was obtained.

HCPC	-	Harris County Pollution Control
TDWR	-	Texas Department of Water Resources
TPWD	-	Texas Parks and Wildlife Department
TWC	-	Texas Water Commission

BASINCOD (TEXT 2) - Texas Water Commission basin code.

07	-	Neches-Trinity Coastal Basin
08	-	Trinity River Basin
09	-	Trinity-San Jacinto Coastal Basin
10	-	San Jacinto River Basin
11	-	San Jacinto-Brazos Coastal Basin
24	-	Galveston Bays and Estuaries

BASINAME (TEXT 20) - Basin name (see Basincod)

BOTHSEGS (TEXT 8) Texas Water Commission waterbody segment code. Unclassified waterways are represented by the segment code for the first effected classified segment and are preceded by an "x".

x0702	Tributary of Intracoastal Waterway
x0801	Tributary of Trinity River
x0901	Tributary of Cedar Bayou
0901	Cedar Bayou
1001	San Jacinto River (Tidal)
x1005	Tributary of Houston Ship Channel/San Jacinto River
1005	Houston Ship Channel/San Jacinto River
x1006	Tributary of Houston Ship Channel
1006	Houston Ship Channel
x1007	Tributary of Houston Ship Channel/Buffalo Bayou
1007	Houston Ship Channel/Buffalo Bayou
x1101	Tributary of Clear Creek (Tidal)
1101	Clear Creek (Tidal)
1103	Dickinson Bayou (Tidal)
x1107	Tributary Chocolate Bayou (Tidal)
1107	Chocolate Bayou (Tidal)
x1109	Tributary of Oyster Creek (Tidal)
x1113	Tributary of Armand Bayou (Tidal)
x2421	Inlet to Upper Galveston Bay
2421	Upper Galveston Bay
x2422	Inlet to Trinity Bay
2422	Trinity Bay
x2423	Inlets to East Galveston Bay
x2424	Inlets to West Galveston Bay
2424	West Galveston Bay
x2425	Inlets to Clear Lake

2425	Clear Lake
x2426	Inlets to Tabbs Bay
x2427	Inlets to San Jacinto Bay
2427	San Jacinto Bay
2428	Black Duck Bay
2429	Scott Bay
x2431	Inlets to Moses Lake
2431	Moses Lake
x2432	Inlets to Chocolate Bay
2432	Chocolate Bay
2437	Texas City Ship Channel
x2438	Inlets to Bayport Channel
2438	Bayport Channel
x2439	Inlets to Lower Galveston Bay
2439	Lower Galveston Bay

CAUSECOD (TEXT 3) - Texas Parks and Wildlife Department cause code

01	-	Municipal Sewerage System Low Dissolved Oxygen
02	-	Industrial Wastewater System Low Dissolved Oxygen
03	-	Other Low Dissolved Oxygen
06	-	Pesticides
08	-	Temperature
09	-	Commercial Fishing Operations
10	-	Seismic Operations
12	-	Oilfield Brine
15	-	Crude Oil Transportation
16	-	Other Oil Spills
17	-	Chemical Spills
18	-	Other Causes
19	-	Unknown
21	-	Mining Activity

C_FISH (TEXT 1) - Commercial fish species are indicated with an "x".

CO_CODE (TEXT 3) - Texas County Code

20	-	Brazoria County
36	-	Chambers County
84	-	Galveston County
101	-	Harris County

COMMON (TEXT 50) - Common name of fish reported killed. A comprehensive list is provided sorted by species code under SPEC_COD.

CO_NAME (TEXT 20) - County name (see CO_CODE)

DATE (DATE) - Date of reported fishkill incident.

EFFECT (TEXT 6) - The effect on water quality which was reported to have caused the fishkill.

H2S	-	Hydrogen Sulfide
H2SLDO	-	Hydrogen Sulfide and Low Dissolved Oxygen
HTemp	-	High Temperatures
IMPING	-	Impingement
LDO	-	Low Dissolved Oxygen
LDOSAL	-	Low Dissolved Oxygen and Low Salinity
LDOTOX	-	Toxicity and Low Dissolved Oxygen
LpH	-	Low pH
LSAL	-	Low Salinity
SHOCKW	-	Shockwaves due to Detonation of Explosives
TEMPSAL	-	Low Temperature and Salinity
TOX	-	Toxicity

EWBNAME (TEXT 30) - Name of directly effected waterbody.

EWBTYPE (TEXT 1) - Directly effected waterbody type:

A	-	Tidal passes
B	-	Bay
C	-	Channel
D	-	Ditch
L	-	Lake
N	-	Canal
P	-	Pond
S	-	Stream, river or bayou

NOKILLED (INTEGER) - Total number of fish killed of each category of fish killed in each incident

POLLTNT (TEXT 4) - Code identifier for pollutant categories

AR	-	Agricultural Runoff
C	-	Chemical Spills
F	-	Food Industry Waste Discharges
H	-	Thermal Discharges
I	-	Industrial Wastewater Discharges
O	-	Oil Spills
S	-	Sewage Spills
U	-	Unknown Pollutants
UNPS	-	Unidentified Nonpoint Source Runoff
X	-	Shockwaves

R_FISH (TEXT 1) - Rough fish species are indicated with an "x".

RPT_NUM (TEXT 6) - Report number identifying specific fishkill investiogation report

S_FISH (TEXT 1) - Sport fish species are indicated with an "x".

SIZE_IN (INTEGER) - Size (in inches) of fish killed.

SOURCE1 (TEXT 3) - Primary source code indicating the origin of pollutant input:

NPS	-	Non-Point Source
PS	-	Point Source
UN	-	Unknown Source

SOURCE2 (TEXT 6) - Secondary source code indicating the type of industry or activity causing the fishkill:

B	-	Undefined activity
BB	-	Other Industries
CF	-	Agricultural Industry
DD	-	Nutrient Buildup from Unknown Sources
EE	-	Urban Nutrient Buildup
G	-	Construction activity
I	-	Chemical Manufacturing/Storing
J	-	Food Processing Industry
P	-	Oil Pipeline Conveyance
Q	-	Trucking Industry
QQ	-	Illegal Waste Disposal
S	-	Barge Operations
T	-	Sewage Treatment Plants/Septic Tanks
U	-	Industrial Landfills
V	-	Electrical Power Generation
X	-	Commercial Fishing
Y	-	Seismic Testing
ZZ	-	Ocean Dumping Activities

SOURCE3 (TEXT 6) - Tertiary source indicating the mechanism by which the fishkill was caused.

4	-	Pipe Leaks
7	-	Nutrient Input
15	-	Rice Field Drainage
16	-	Unknown
17	-	Fish Processing Waste Discharge
19	-	Collision Spills
21	-	Mishandling Spills
22	-	Liquid Transfer Spills
24	-	Cooling Tower Discharge
25	-	Cull from Shrimp Boats
30	-	Lift Station By-pass
32	-	Sewer Line Leaks
33	-	STP Plant By-pass
35	-	Storage Tank Leak
38	-	Industrial Landfarm Runoff
40	-	Unsecured Pipe
44	-	Elevated Pollutants Levels in Permitted Discharge
45	-	Runoff Caused by Greater than Design Storm
48	-	Accidental Explosion
50	-	Detonation of Explosives
51	-	Urban Runoff
52	-	Leakage from Holding Pit
58	-	Irrigation Tailwater

61 - Impingement
62 - Barge Leak

SPEC_COD (TEXT 5) - Species codes. Texas Parks and Wildlife species codes

2	Lepisosteous occulatus	Spotted Gar
15	Dorosoma cepedianum	Gizzard Shad
16	Dorosoma petenence	Theadfin shad
50	Gambusia affinis	Mosquito Fish
51	Menidia beryllina	Inland Silverside
111	Morone saxatilis	Striped Bass
234	Menticirrhus sp.	Kingfish (unclassified)
375	Bothidae (family)	Lefteye Flounders (family)
434	Cyprinodontidae (family)	Killifish (family)
458	Clupeidae (family)	Herring (family)
458.1 *	Dorosoma sp.	Shad (unclassified)
465	Lepisosteidae (family)	Gar (family)
536	Makaira nigricans	Blue Marlin
601	Anchoa mitchilli	Bay Anchovies
602	Micropogonias undulatus	Atlantic Croaker
604	Brevoortia patronus	Gulf Menhaden
608	Leiostomus xanthurus	Spot
610	Arius felis	Hardhead Catfish
612	Mugil cephalus	Striped Mullet
613	Cynoscion arenarius	Sand Seatrout
614	Cynoscion nebulosis	Spotted Seatrout
616	Paralichthys lethostigma	Southern Flounder
621	Archosargus probatocephalus	Sheepshead
625	Pogonias cromis	Black drum
627	Bairdiella chrysoura	Silver Perch
629	Sciaenops ocellatus	Red Drum
633	Lagodon rhomboides	Pinfish
658	Brevoortia gunteri	Finescale menhaden
664	Myrophis punctatus	Speckled Worm Eel
665	Strongylura marina	Atlantic Needlefish
686	Cyprinodon variegatus	Sheepshead Minnow
689	Opsanus beta	Gulf Toadfish
745	Poecilia latipinna	Sailfin Molly
780	Paralicthys albigutta	Gulf Flounder
818	Lutjanus campechanus	Red Snapper
849	Unidentified Fish	Unidentified Fish
98001**	Unclassified Gamefish	Game fish (Unclassified)
98002**	Unclassified Rough Fish	Rough Fish (Unclassified)

* Added code not part of Texas Parks and Wildlife species code list.
** Texas Water Commission species code.

SPECIES (TEXT 50) - Lowest practical taxon of organisms listed in fish mortality reports.

SPILLAMT (TEXT 12) - Amount of spill (if known) in gallons.

SPILAREA (REAL) - Area (acres) effected by the spill.

SPILLMAT (TEXT 50) - Type of material spilled (if known).

SPILNGTH (INTEGER) - Length of waterbody effected by spill in miles.

U_FISH (TEXT 1) - Unidentified fish species are indicated with an "x".

APPENDIX F

RESPONSE FROM WATER RIGHTS PERMITTEES

GALVESTON BAY NATIONAL ESTUARY PROGRAM
QUESTIONNAIRE
FEBRUARY 27, 1992

Do you currently use your water rights permit?

YES

How frequently is water diverted? Please provide the time of year or month.

YEAR ROUND

How much water is diverted during a year, month, or season?

APPROXIMATELY 66,000 AC. FEET PER YEAR

For what purposes is the water used?

IRRIGATION, MUNICIPAL

What is the intake rate (i.e., gallons per minute, etc.) and intake velocity (i.e., ft/sec., etc.)?

240,000 GPM THE MOST THAT CAN BE PUMPED.

Is any method used to screen or divert fish from your intake? If so, please describe the method used (including screen-mesh size.)

SUCKER RODS 6 INCHES APART

Have any studies been conducted to determine the survival rate of impinged fishes or the survival rate of fishes entrained in your process? Is so, please provide a reference for these studies or a short summary of the results.

NO

JONES AND NEUSE, INC.
Environmental and Engineering Services

April 14, 1992

ENGINEERING
APR 24 1992

Mr. Harold McCune
ARMCO Advanced Materials Corporation
P. O. Box 1609
Butler, PA 16003-1609

Re: Texas Water Commission Water Rights Permit No. 003990

Dear Mr. McCune:

Jones and Neuse, Inc. (JN) has received a contract from the Galveston Bay National Estuary Program (GBNEP) to evaluate and quantify the impact of man's activities, not including fishing, on fisheries resources in Galveston Bay. Two of the many possible causes of fish mortality that GBNEP has instructed JN to address are the impingement of fishes on water intake structures, and the entrainment or passage of fishes that by-pass intake structures through the process for which the water is used.

A review of Texas Water Commission records indicates that either you or your company has an active water right in the Galveston Bay area. For purposes of this study, JN requests a response to the attached questionnaire. This information will be combined with responses to similar questionnaires to fulfill GBNEP's request.

JN requests that this information be provided by April 30, 1992. If you are unable to meet this deadline or have any questions about the questionnaire or how the information will be used, please feel free to contact either me or Victor Palma at 1-800-580-9840.

Thank you in advance for your timely response. 218

Sincerely,

JONES AND NEUSE, INC.

Dennis Palafox

Dennis Palafox 217
Environmental Specialist

DP/adp:50/ltr\GBNEP.ltr

Attachment

GALVESTON BAY NATIONAL ESTUARY PROGRAM
QUESTIONNAIRE
FEBRUARY 27, 1992

Do you currently use your water rights permit?

No

How frequently is water diverted? Please provide the time of year or month.

N/A

How much water is diverted during a year, month, or season?

N/A

For what purposes is the water used?

COOLING WATER FOR INDUSTRIAL EQUIPMENT

What is the intake rate (i.e., gallons per minute, etc.) and intake velocity (i.e., ft/sec., etc.)?

N/A

Is any method used to screen or divert fish from your intake? If so, please describe the method used (including screen-mesh size.)

N/A

Have any studies been conducted to determine the survival rate of impinged fishes or the survival rate of fishes entrained in your process? Is so, please provide a reference for these studies or a short summary of the results.

NO

Harold
4-30-92

GALVESTON BAY NATIONAL ESTUARY PROGRAM
QUESTIONNAIRE
FEBRUARY 27, 1992

TRINITY BAY CONSERVAITON DISTRICT
PERMIT NO. 004307

Do you currently use your water rights permit? Permit is for maintenance of salt water control structure only.

How frequently is water diverted? Please provide the time of year or month.

N/A

How much water is diverted during a year, month, or season?

N/A

For what purposes is the water used?

N/A

What is the intake rate (i.e., gallons per minute, etc.) and intake velocity (i.e., ft/sec., etc.)?

N/A

Is any method used to screen or divert fish from your intake? If so, please describe the method used (including screen-mesh size.)

N/A

Have any studies been conducted to determine the survival rate of impinged fishes or the survival rate of fishes entrained in your process? Is so, please provide a reference for these studies or a short summary of the results.

ETHYL CORPORATION
HOUSTON PLANT

PLEASE ADDRESS REPLY
TO:-BOX 472
PASADENA, TEXAS 77501-0472

March 19, 1992

Mr. Dennis Palafox
Jones and Neuse, Inc.
912 Capital of Texas Highway South
Suite 300
Austin, Texas 78746

Dear Mr. Palafox,

Attached is a completed questionnaire on water rights for Ethyl Corporation's Houston Plant. Should you have any questions, please do not hesitate to contact me.

Very truly yours,

ETHYL CORPORATION

Paula C. McLemore

Paula C. McLemore
Manager, Regulatory Affairs

PCM:B
Attachments

GALVESTON BAY NATIONAL ESTUARY PROGRAM
QUESTIONNAIRE
FEBRUARY 27, 1992

Do you currently use your water rights permit? Yes - for fire training and emergencies

How frequently is water diverted? Please provide the time of year or month.

Variable - 8 hours in 1991

How much water is diverted during a year, month, or season?

720,000 gallons in 1991 (1500 gpm)

For what purposes is the water used?

Firetraining only in 1991

What is the intake rate (i.e., gallons per minute, etc.) and intake velocity (i.e., ft/sec., etc.)?

21,000 gpm - maximum; 46.67 cfs - maximum

Is any method used to screen or divert fish from your intake? If so, please describe the method used (including screen-mesh size.)

pump screen is #4 mesh (¼" openings)

Have any studies been conducted to determine the survival rate of impinged fishes or the survival rate of fishes entrained in your process? Is so, please provide a reference for these studies or a short summary of the results.

No studies have been conducted.

JONES AND NEUSE, INC.
Environmental and Engineering Services

February 27, 1992

Cooper's Marine Service, Inc.
P. O. Box 1643
Channelview, Texas 77530

Re: Texas Water Commission Water Rights Permit No. 005334

Dear Sir or Madam:

Jones and Neuse, Inc. (JN) has received a contract from the Galveston Bay National Estuary Program (GBNEP) to evaluate and quantify the impact of man's activities, not including fishing, on fisheries resources in Galveston Bay. Two of the many possible causes of fish mortality that GBNEP has instructed JN to address are the impingement of fishes on water intake structures, and the entrainment or passage of fishes that by-pass intake structures through the process for which the water is used.

A review of Texas Water Commission records indicates that either you or your company has an active water right in the Galveston Bay area. For purposes of this study, JN requests a response to the attached questionnaire. This information will be combined with responses to similar questionnaires to fulfill GBNEP's request.

JN requests that this information be provided by March 31, 1992. If you are unable to meet this deadline or have any questions about the questionnaire or how the information will be used, please feel free to contact either me or Victor Palma at 1-800-580-9840.

Thank you in advance for your timely response.

Sincerely,

JONES AND NEUSE, INC.

Dennis Palafox
Environmental Specialist

DP/adp:50/ltr\GBNEP.ltr

Attachment

GALVESTON BAY NATIONAL ESTUARY PROGRAM
QUESTIONNAIRE
FEBRUARY 27, 1992

Do you currently use your water rights permit? Yes

How frequently is water diverted? Please provide the time of year or month.

3 times maybe a week.

How much water is diverted during a year, month, or season? 0.4.acre -feet per year.

For what purposes is the water used?

to wash grain dust left from sweeping up left of small part of grain that is left in barge,after unloading.

What is the intake rate (i.e., gallons per minute, etc.) and intake velocity (i.e., ft/sec., etc.)?

20 gls.pr.minute.

Is any method used to screen or divert fish from your intake? If so, please describe the method used (including screen-mesh size.) No

Have any studies been conducted to determine the survival rate of impinged fishes or the survival rate of fishes entrained in your process? Is so, please provide a reference for these studies or a short summary of the results.

There is a Mr.Moulton with the Texas Parks & WildLife Dept. who has visited our facility , it has no danger to the fishes of the waters where I am at these facilities.

GALVESTON BAY NATIONAL ESTUARY PROGRAM
QUESTIONNAIRE
FEBRUARY 27, 1992

Do you currently use your water rights permit?

NO

How frequently is water diverted? Please provide the time of year or month.

N.A.

How much water is diverted during a year, month, or season?

N.A.

For what purposes is the water used?

Heating other liquid

What is the intake rate (i.e., gallons per minute, etc.) and intake velocity (i.e., ft/sec., etc.)?

Is any method used to screen or divert fish from your intake? If so, please describe the method used (including screen-mesh size.)

Not installed

Have any studies been conducted to determine the survival rate of impinged fishes or the survival rate of fishes entrained in your process? Is so, please provide a reference for these studies or a short summary of the results.

No.

GALVESTON BAY NATIONAL ESTUARY PROGRAM
QUESTIONNAIRE
FEBRUARY 27, 1992

Do you currently use your water rights permit? yes

How frequently is water diverted? Please provide the time of year or month.
2 times pr yr. Winter Jan & Feb Fall Sept Oct & Nov.

How much water is diverted during a year, month, or season?
Av. 6 to 800 Ac Ft pr yr

For what purposes is the water used?
Fish Culture

What is the intake rate (i.e., gallons per minute, etc.) and intake velocity (i.e., ft/sec., etc.)?
14,167 gpm velocity .4 ft/sec. At full Speed.

Is any method used to screen or divert fish from your intake? If so, please describe the method used (including screen-mesh size.)
A grill is used; ~~con~~ 3/4" Iron rods 2" apart.

Have any studies been conducted to determine the survival rate of impinged fishes or the survival rate of fishes entrained in your process? Is so, please provide a reference for these studies or a short summary of the results.

No studies have been conducted. Due to Low intake velocity no impingment of fish has been observed. Most pumping is done at less than full RPM capacity (ie, velocity at less than .4 ft/sec).

W. S. EDWARDS
P. O. BOX 85
STOWELL, TEXAS 77661
Texas Water Commission W/R Permit No 004 305

JONES AND NEUSE, INC.
Environmental and Engineering Services

February 27, 1992

City of League City
300 Walker Street
League City, Texas 77573

Re: Texas Water Commission Water Rights Permit No. 005178

Dear Sir or Madam:

Jones and Neuse, Inc. (JN) has received a contract from the Galveston Bay National Estuary Program (GBNEP) to evaluate and quantify the impact of man's activities, not including fishing, on fisheries resources in Galveston Bay. Two of the many possible causes of fish mortality that GBNEP has instructed JN to address are the impingement of fishes on water intake structures, and the entrainment or passage of fishes that by-pass intake structures through the process for which the water is used.

A review of Texas Water Commission records indicates that either you or your company has an active water right in the Galveston Bay area. For purposes of this study, JN requests a response to the attached questionnaire. This information will be combined with responses to similar questionnaires to fulfill GBNEP's request.

JN requests that this information be provided by March 31, 1992. If you are unable to meet this deadline or have any questions about the questionnaire or how the information will be used, please feel free to contact either me or Victor Palma at 1-800-580-9840.

Thank you in advance for your timely response.

Sincerely,

JONES AND NEUSE, INC.

Dennis Palafox

Dennis Palafox
Environmental Specialist

DP/adp:50/ltr\GBNEP.ltr

Attachment

GALVESTON BAY NATIONAL ESTUARY PROGRAM
QUESTIONNAIRE
FEBRUARY 27, 1992

Do you currently use your water rights permit?

N/A

How frequently is water diverted? Please provide the time of year or month.

N/A

How much water is diverted during a year, month, or season?

N/A

For what purposes is the water used?

N/A

What is the intake rate (i.e., gallons per minute, etc.) and intake velocity (i.e., ft/sec., etc.)?

N/A

Is any method used to screen or divert fish from your intake? If so, please describe the method used (including screen-mesh size.)

N/A

Have any studies been conducted to determine the survival rate of impinged fishes or the survival rate of fishes entrained in your process? Is so, please provide a reference for these studies or a short summary of the results.

N/A

STERLING CHEMICALS

April 16, 1992

Mr. Dennis Palafox
Jones and Neuse, Inc.
912 Capital of Texas Highway South, Suite 300
Austin, Texas 78746

RE: Galveston Bay National Estuary Program Questionnaire

Dear Mr. Palafox:

Per our telephone conversation, enclosed is the above-referenced questionnaire. Further information on water use of all permit holders is available in the public record in annual reports submitted to the Texas Water Commission (TWC) and the Texas Water Development Board (TWDB). Sterling submitted a "Report of Surface Water Used for the Year Ending on December 31, 1991" to the TWC under our TWC Water Rights Permit Number 5361. This is the "adjudication number" on the report form. We also submitted a "Survey of Ground and Surface Water Use for Calendar Year Ending December 31, 1991" to the TWDB under Code Number 575600. This TWDB code number is referenced on the TWC report.

If I can offer further information or clarification, please contact me at 409-942-3847.

Sincerely,

STERLING CHEMICALS, INC.

Lisa Tuck

Lisa Tuck
Environmental Geologist

/pm

Sterling Chemicals, Inc.
P.O. Box 1311
Texas City, Texas 77592-1311
409-945-4431

gbnepsur ltr

GALVESTON BAY NATIONAL ESTUARY PROGRAM
QUESTIONNAIRE
FEBRUARY 27, 1992

Do you currently use your water rights permit?

Yes

How frequently is water diverted? Please provide the time of year or month.

Daily

How much water is diverted during a year, month, or season?

Approximately 75,000 acre-ft/yr.

For what purposes is the water used?

Once through cooling.

What is the intake rate (i.e., gallons per minute, etc.) and intake velocity (i.e., ft/sec., etc.)?

Rate is approximately 48,000 gpm. Velocity is 0.5-2 ft/sec

Is any method used to screen or divert fish from your intake? If so, please describe the method used (including screen-mesh size.)

Yes. We have a rotating screen, mesh size 3/8". The screen rolls screened objects into a trough. The trough goes into a pipe which returns them to the cooling water return canal.

Have any studies been conducted to determine the survival rate of impinged fishes or the survival rate of fishes entrained in your process? Is so, please provide a reference for these studies or a short summary of the results.

No. Per conversations with department personnel, we believe that $>$90% survive. Often there are large numbers of live bait fish in the screen wash return system.

GALVESTON BAY NATIONAL ESTUARY PROGRAM
QUESTIONNAIRE
FEBRUARY 27, 1992

Do you currently use your water rights permit? NO

How frequently is water diverted? Please provide the time of year or month.
THIS WATER SYSTEM HAS NOT BEEN USED SINCE THE MID 1970'S

How much water is diverted during a year, month, or season?

For what purposes is the water used? INDUSTRIAL COOLING

What is the intake rate (i.e., gallons per minute, etc.) and intake velocity (i.e., ft/sec., etc.)?

Is any method used to screen or divert fish from your intake? If so, please describe the method used (including screen-mesh size.)

Have any studies been conducted to determine the survival rate of impinged fishes or the survival rate of fishes entrained in your process? Is so, please provide a reference for these studies or a short summary of the results. NO

CITY OF HOUSTON

Post Office Box 1562 Houston, Texas 77251-1562

Bob Lanier, Mayor

CITY COUNCIL MEMBERS: Helen Huey Ernest McGowen, Sr. Vince Ryan Alfred J. Calloway Frank O. Mancuso John G. Goodner Christin Hartung Dale M. Gorczynski Ben T. Reyes Gracie Guzman Saenz Eleanor Tinsley Jim Greenwood Sheila Jackson Lee Judson W. Robinson, III CITY CONTROLLER: George Greanias

April 3, 1992

Mr. Dennis Palafox
Jones and Neuse, Inc.
912 Capital of Texas Highway South, Suite 300
Austin, Texas 78746

Dear Mr. Palafox:

Subject: Galveston Bay Nation Estuary Program Questionnaire

Enclosed is a completed copy of the above referenced questionnaire. Also enclosed is a copy of a map from the Houston Water Master Plan that shows the location of the Coastal Water Authority's intake and pump station on the Trinity River. As we discussed, this pumping station is located approximately seven to 10 river miles upstream from the Interstate Highway 10 crossing of the Trinity River. At this location only fresh water is being pumped for municipal and industrial use and only fresh water species of fish would possibly be affected.

We hope this provides the information you need. If you have any questions, please call Charles Settle at 247-2507.

Very truly yours,

Marsha W. Slaughter

Marsha W. Slaughter, P.E.
Assistant Director
Public Utilities Department

MWS:CFS/dj
Enclosures (3)

GALVESTON BAY NATIONAL ESTUARY PROGRAM
QUESTIONNAIRE
FEBRUARY 27, 1992

Do you currently use your water rights permit?

The Coastal Water Authority transports City of Houston Trinity River water under this permit for municipal and industrial use.

How frequently is water diverted? Please provide the time of year or month.

Daily, 365 days a year.

How much water is diverted during a year, month, or season?

See attached sheet for 1987 through 1991

For what purposes is the water used?

Municipal and Industrial Water Supply.

What is the intake rate (i.e., gallons per minute, etc.) and intake velocity (i.e., ft/sec., etc.)?

Average of 330 mgd at the Trinity River Pump Station. Intake velocity is unknown.

Is any method used to screen or divert fish from your intake? If so, please describe the method used (including screen-mesh size.)

There are debris screens for trash that would only keep out large fish.

Have any studies been conducted to determine the survival rate of impinged fishes or the survival rate of fishes entrained in your process? Is so, please provide a reference for these studies or a short summary of the results.

No study conducted.

COASTAL WATER AUTHORITY
IN MILLIONS OF GALLONS
JAN 1987 THRU DEC 1991

	1987	1988	1989	1990	1991
JAN	7,484.3	6,942.2	7,170.2	7,361.4	8,081.4
FEB	6,715.1	6,477.9	6,552.7	6,644.7	7,304.4
MAR	7,578.0	7,226.2	7,671.7	7,316.7	8,921.7
APR	8,591.2	8,010.9	8,177.4	7,479.6	8,467.4
MAY	8,089.6	8,912.0	8,394.6	8,618.8	9,760.4
JUN	7,220.4	8,635.8	8,530.7	9,827.0	10,307.0
JUL	8,045.4	9,069.7	8,533.0	10,572.9	11,100.3
AUG	8,477.7	7,975.0	8,513.3	10,084.8	11,423.5
SEP	7,493.1	6,965.2	8,142.0	9,260.9	11,259.6
OCT	7,643.9	6,984.7	7,741.4	9,221.1	11,355.1
NOV	7,293.1	5,505.6	7,146.8	8,856.3	10,304.5
DEC	7,012.5	6,195.9	7,580.8	9,182.7	11,200.0
TOTALS	91,644.3	88,901.1	94,154.6	104,426.9	119,485.3
AVG PER MONTH	7,637.0	7,408.4	7,846.2	8,702.2	9,957.1

* *Volume curtailed due to EWPP maintenance and repairs*

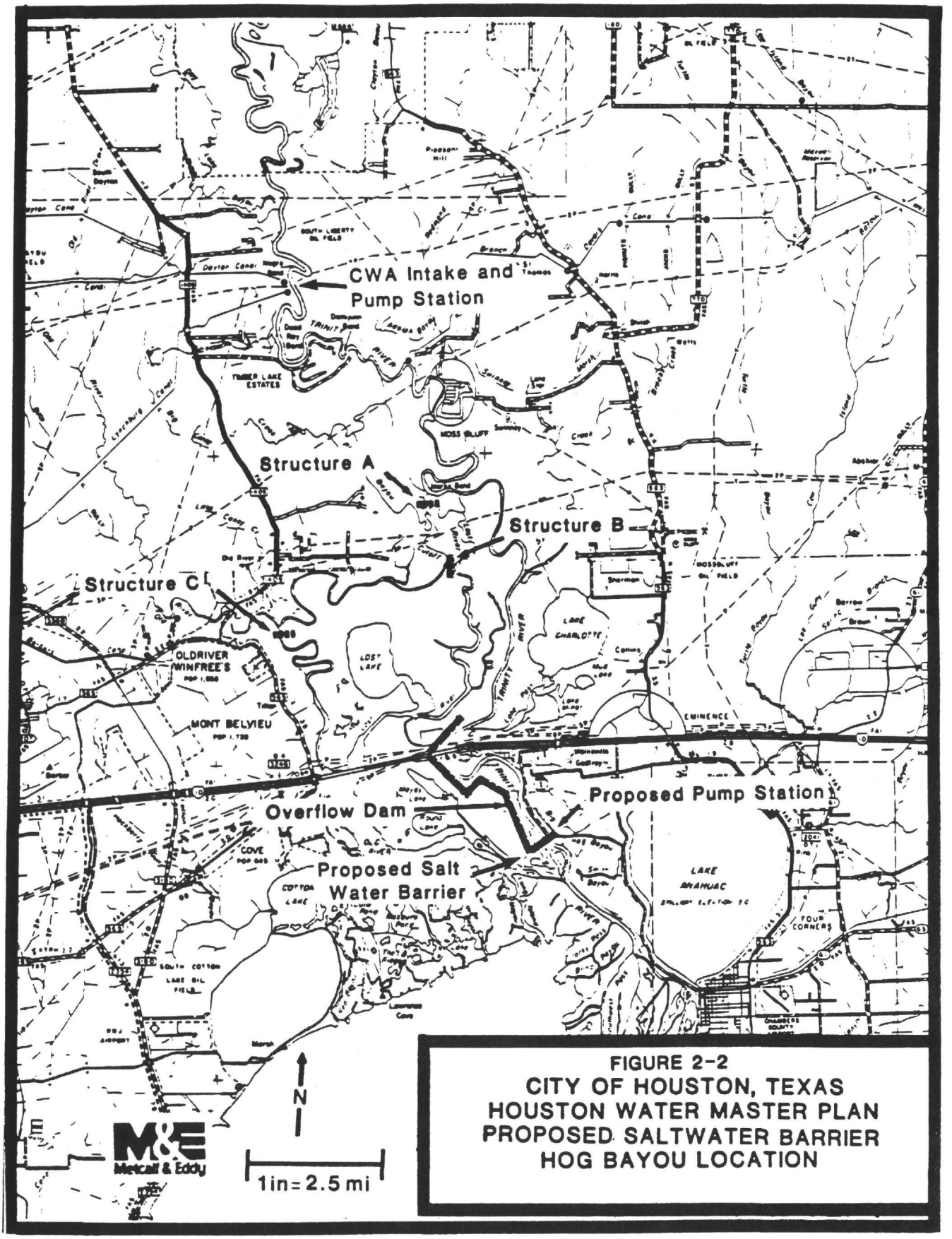


FIGURE 2-2
CITY OF HOUSTON, TEXAS
HOUSTON WATER MASTER PLAN
PROPOSED SALTWATER BARRIER
HOG BAYOU LOCATION

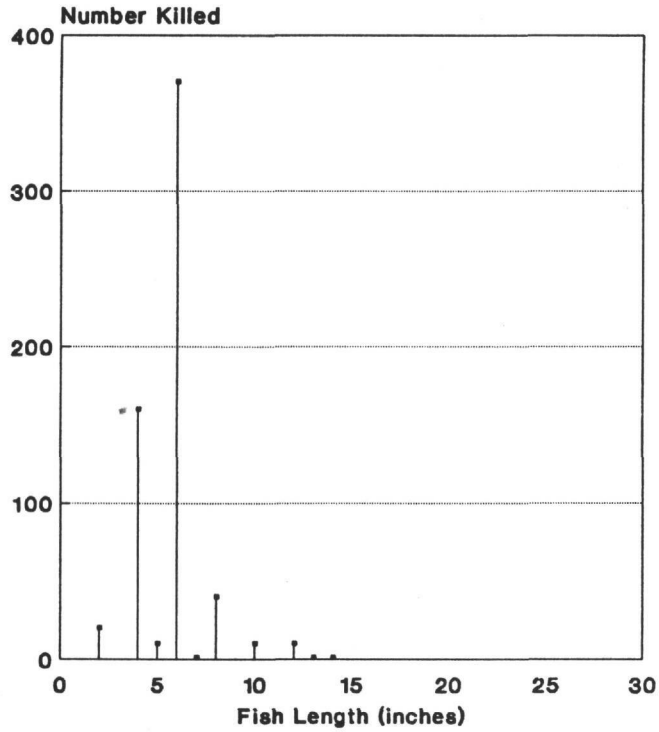
APPENDIX G-1

SPECIES SIZE DISTRIBUTION

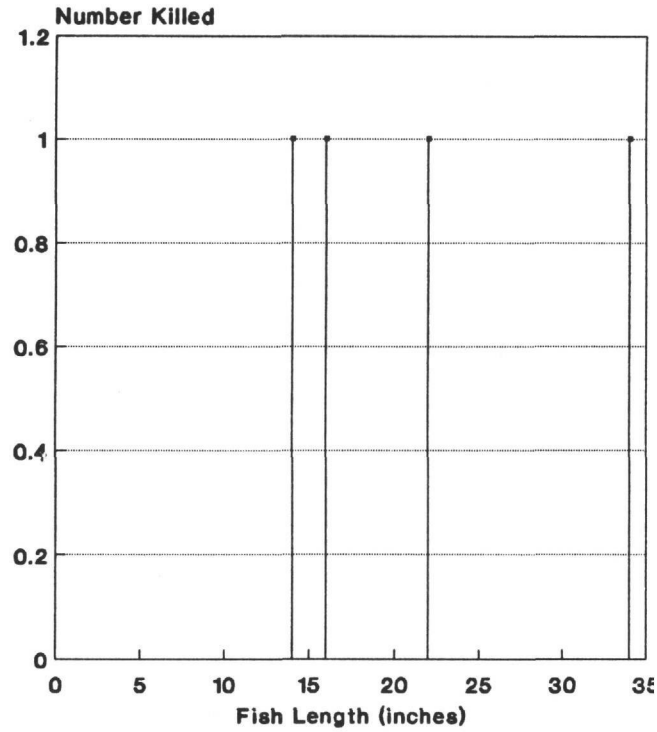
POINT SOURCE FISH KILLS

(Excludes Seismic Blast Kills)

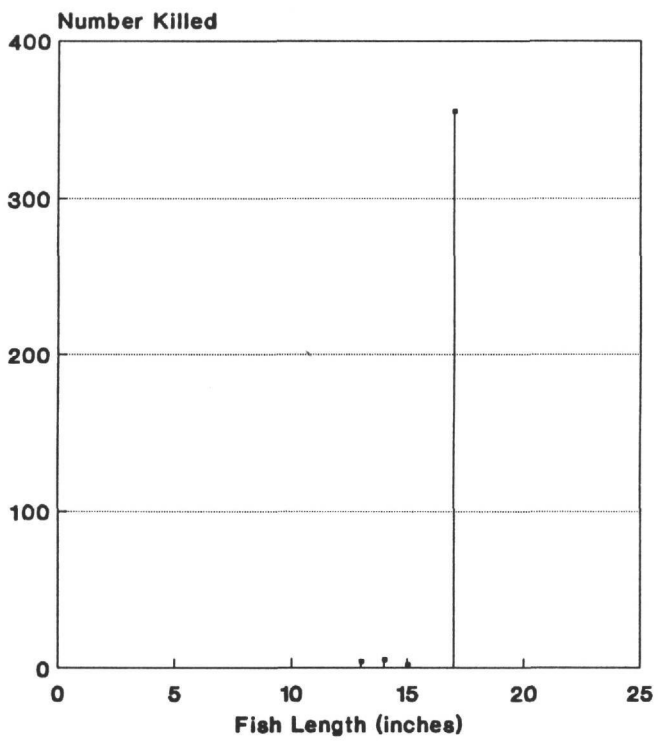
Atlantic Croaker
(Micropogonias undulatus)



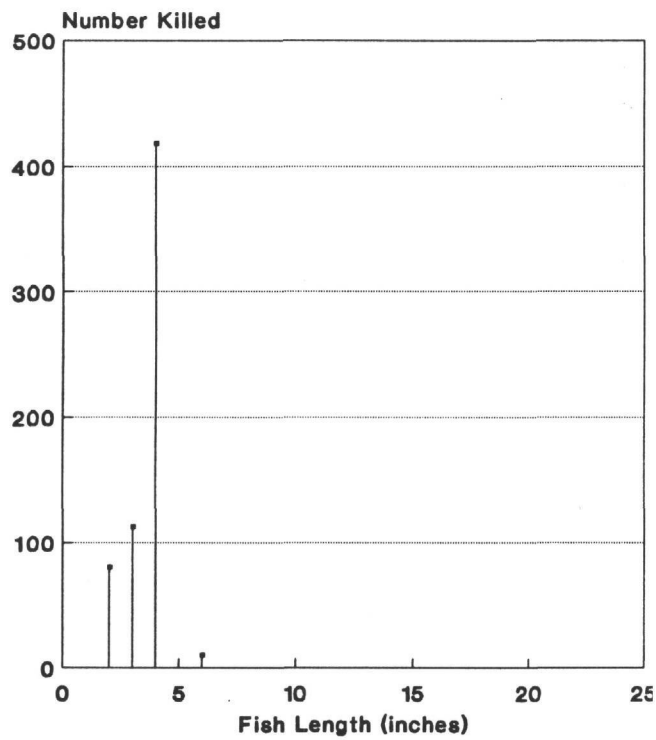
Black Drum
(Pogonias cromis)



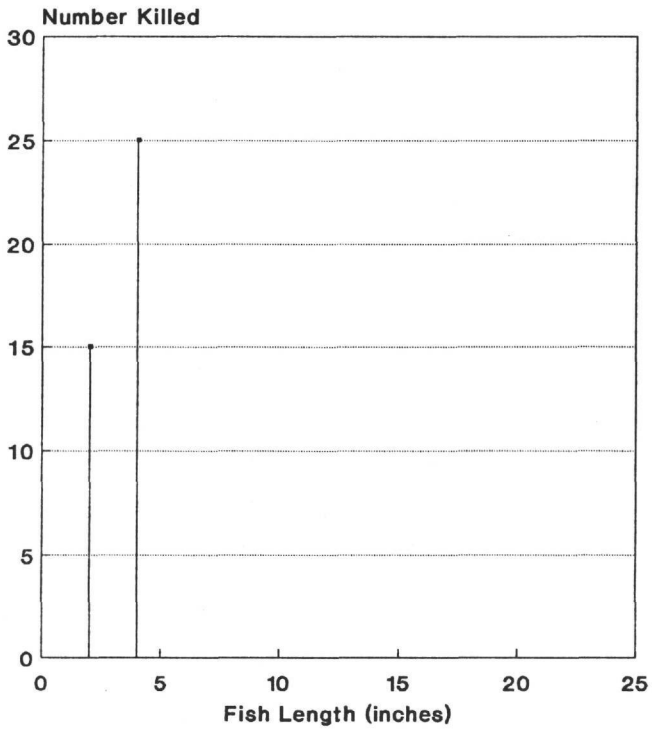
Gizzard Shad
(Dorosoma cepedianum)



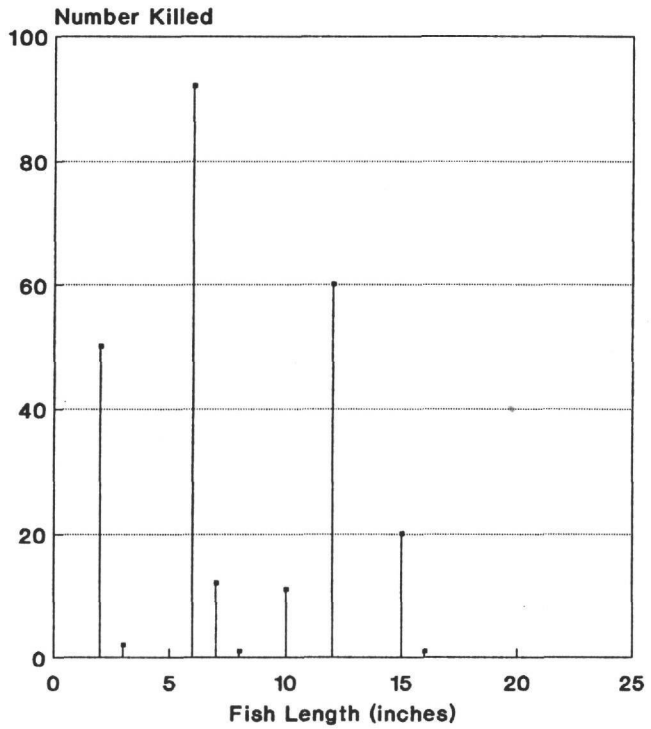
Gulf Menhaden
(Brevoortia patronus)



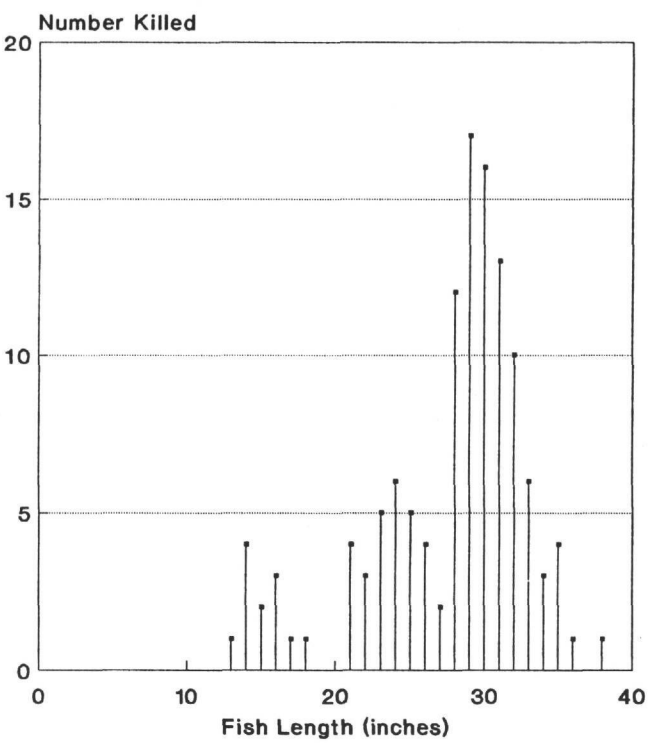
Gulf Toadfish
(Opsanus beta)



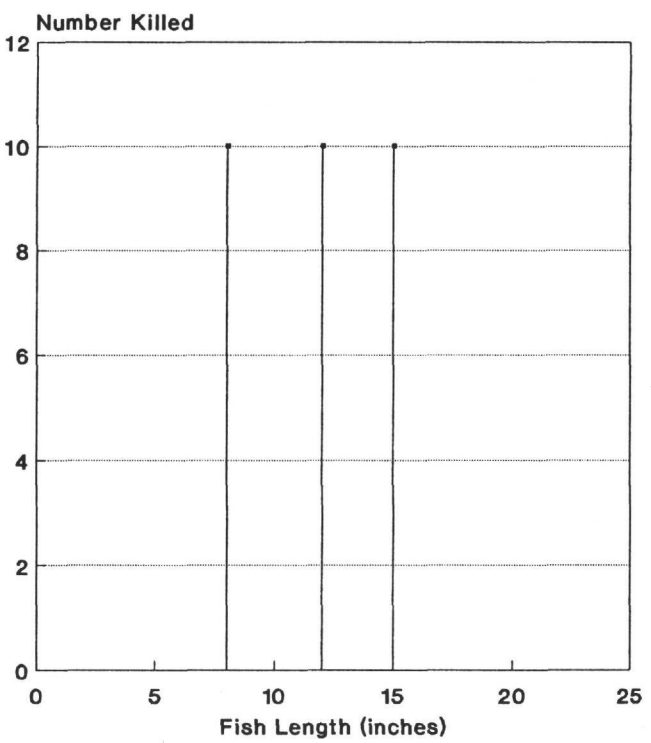
Hardhead Catfish
(Arius felis)



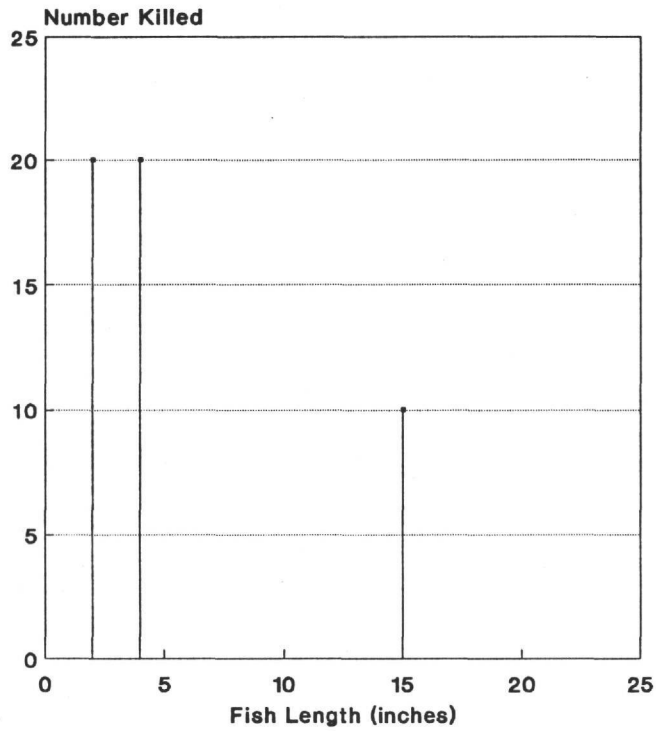
Red Drum
(Sciaenops ocellatus)



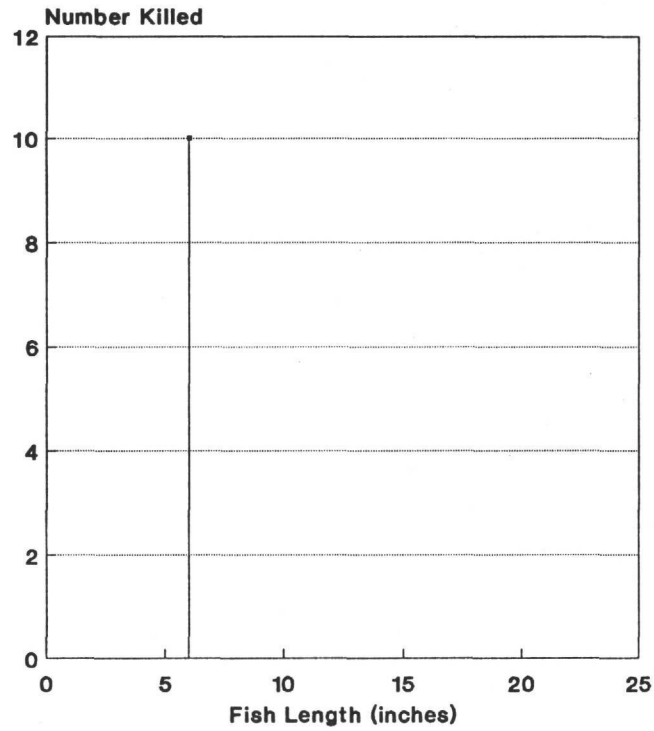
Sand Seatrout
(Cynoscion arenarius)



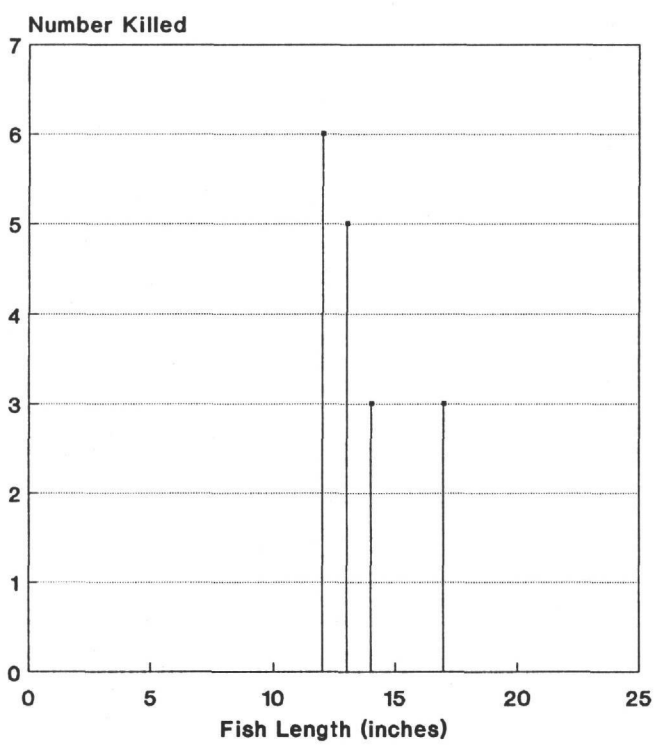
Sheepshead
(Archosargus probatocephalus)



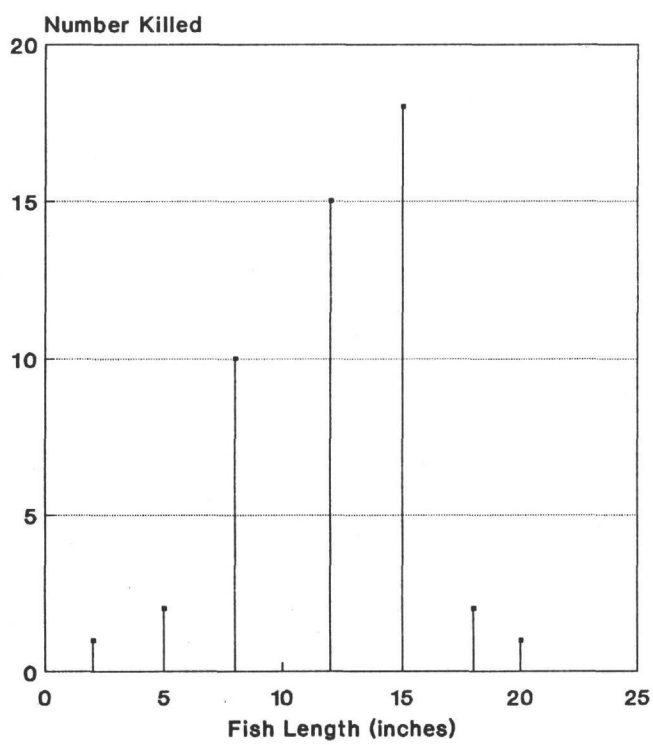
Southern Flounder
(Paralichthys lethostigma)



Spotted Seatrout
(Cynoscion nebulosus)



Striped Mullet
(Mugil cephalus)



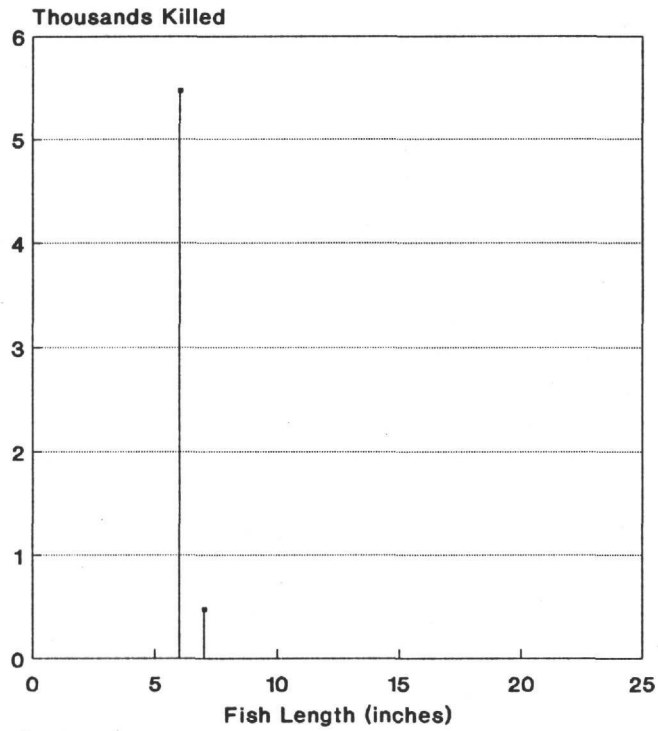
APPENDIX G-2

SPECIES SIZE DISTRIBUTION

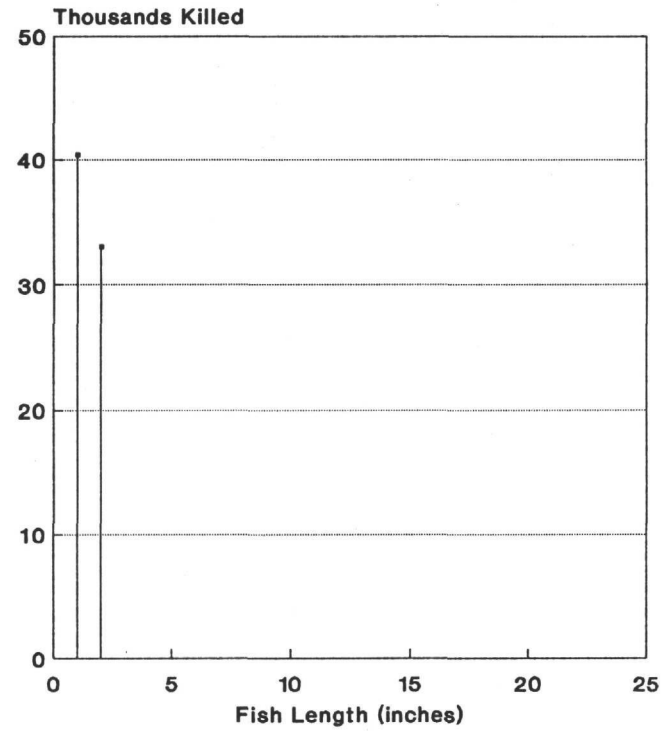
POINT SOURCE FISH KILLS

SEISMIC BLAST FISH KILLS ONLY

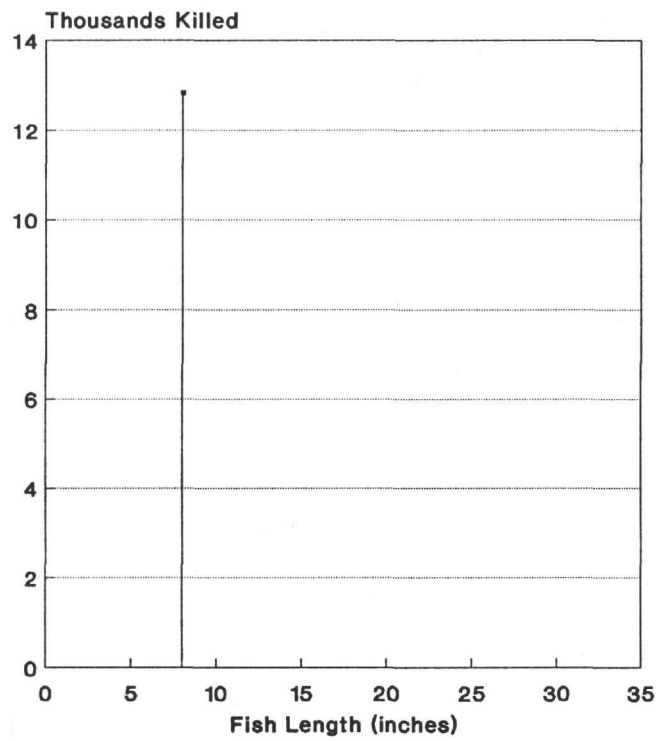
Atlantic Croaker
(Micropogonias undulatus)



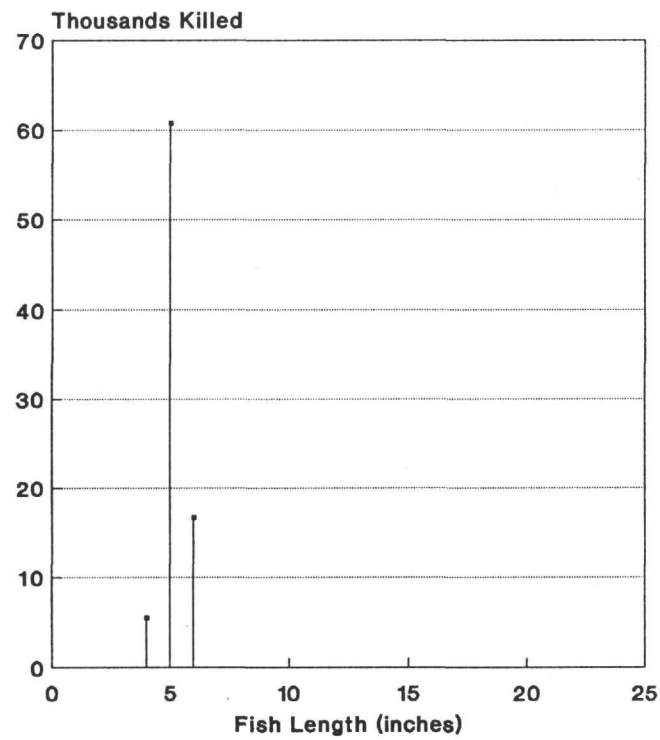
Bay Anchovy
(Anchoa mitchilli)



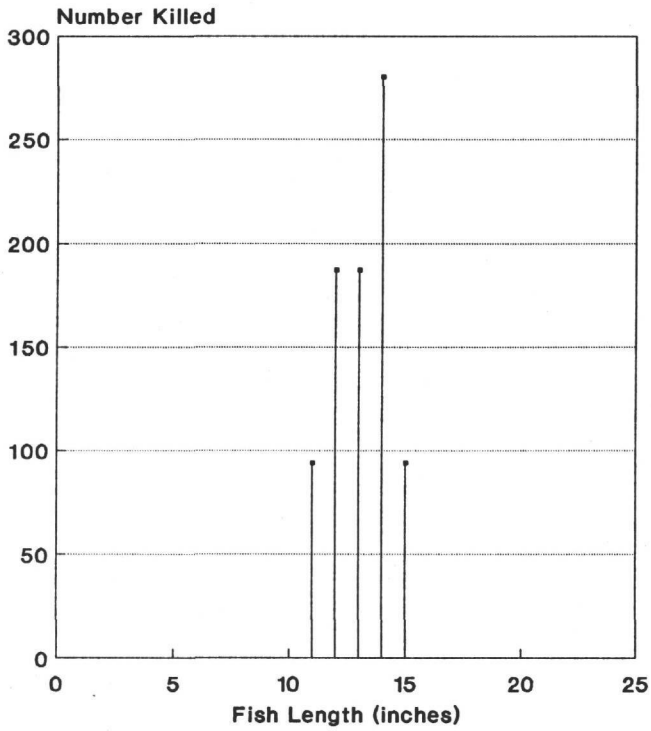
Black Drum
(Pogonias cromis)



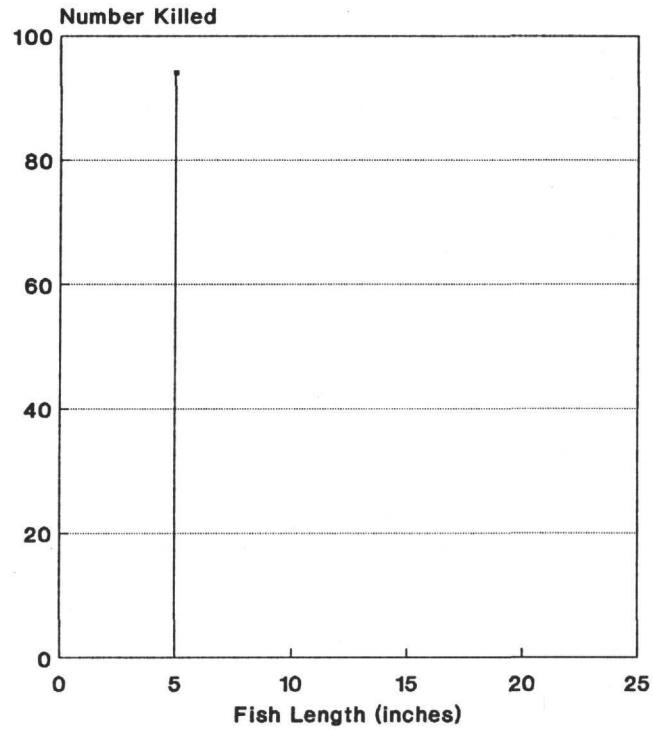
Pinfish
(Lagodon rhomboides)



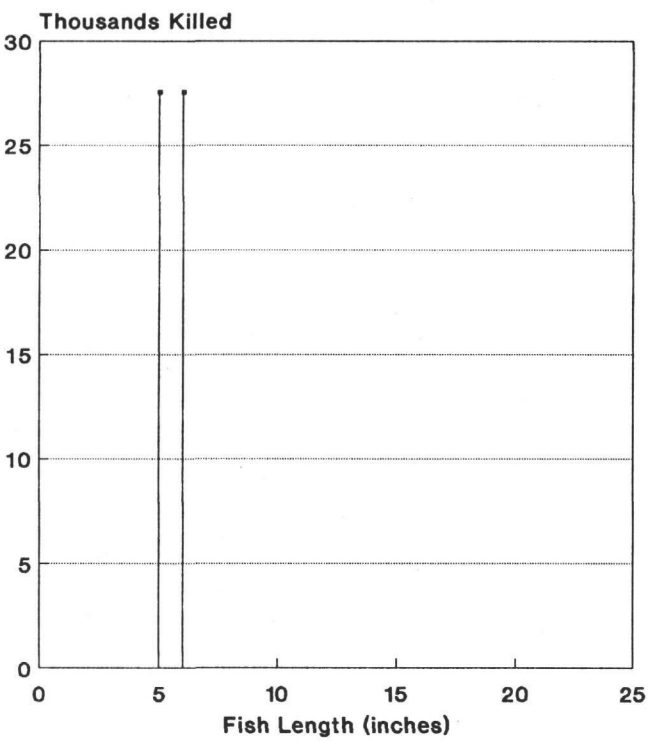
Sheepshead
(Archosargus probatocephalus)



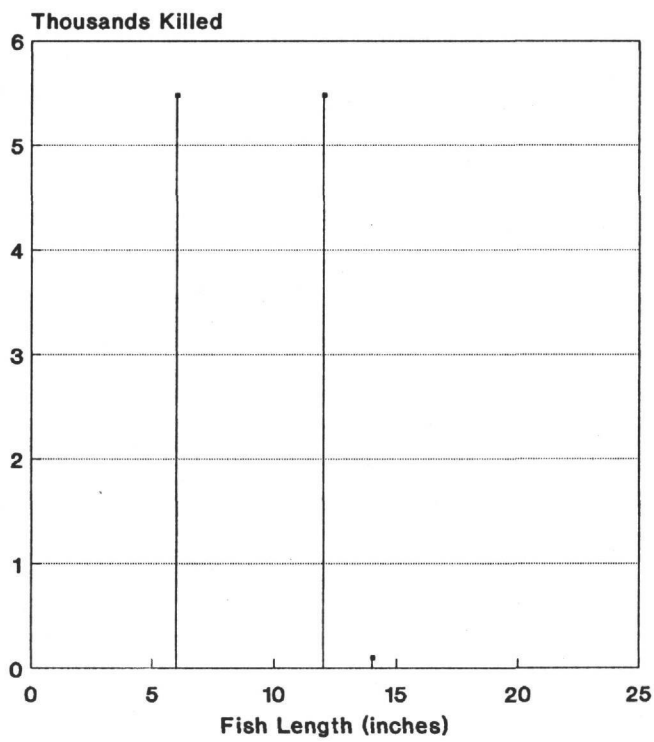
Silver Perch
(Bairdiella chrysoura)



Spot
(Leiostomus xanthurus)



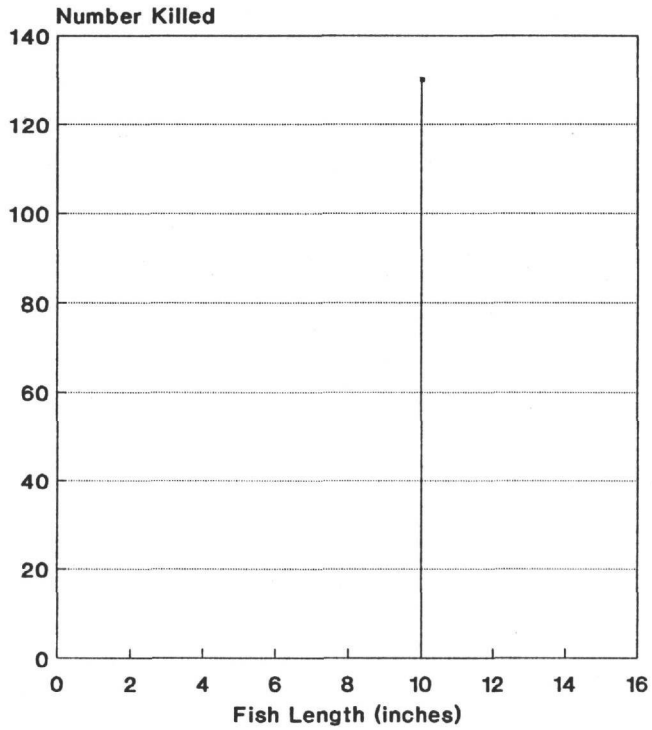
Striped Mullet
(Mugil cephalus)



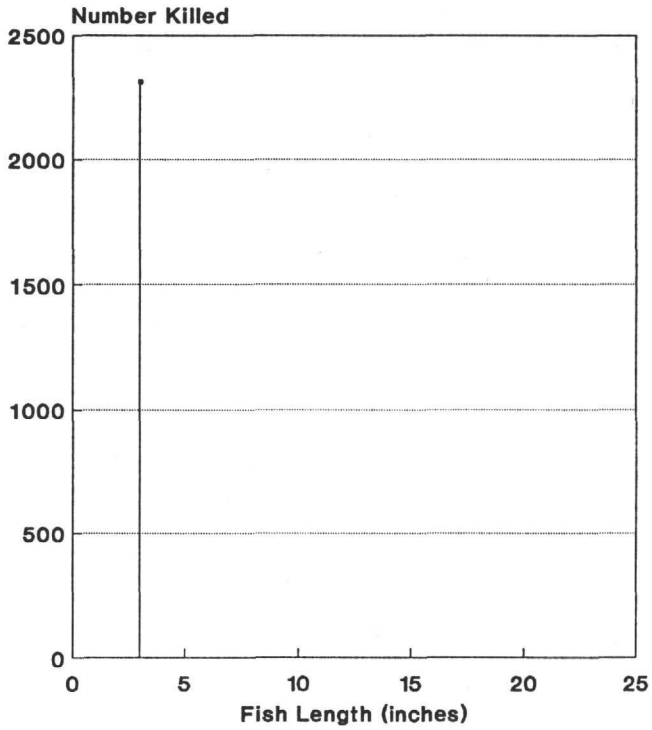
APPENDIX H

SPECIES SIZE DISTRIBUTION FOR NONPOINT FISH KILLS

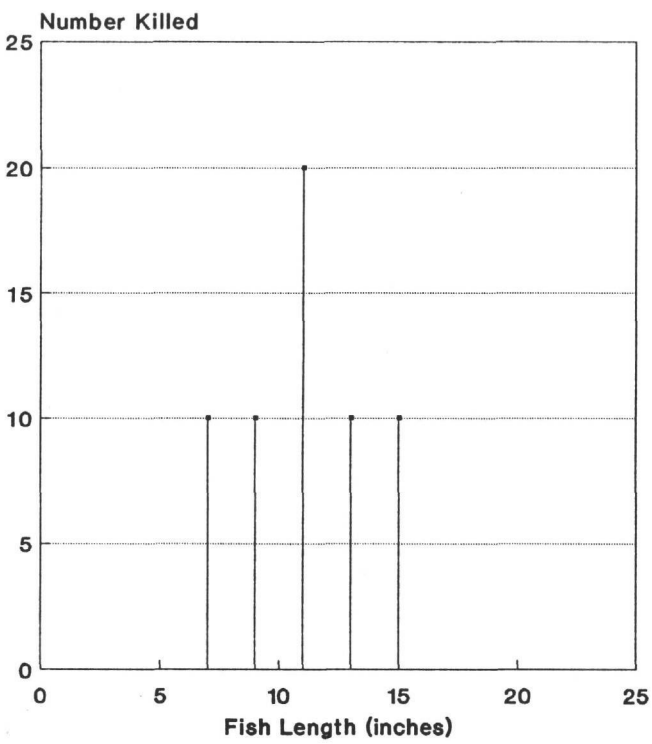
Atlantic Croaker
(Micropogonias undulatus)



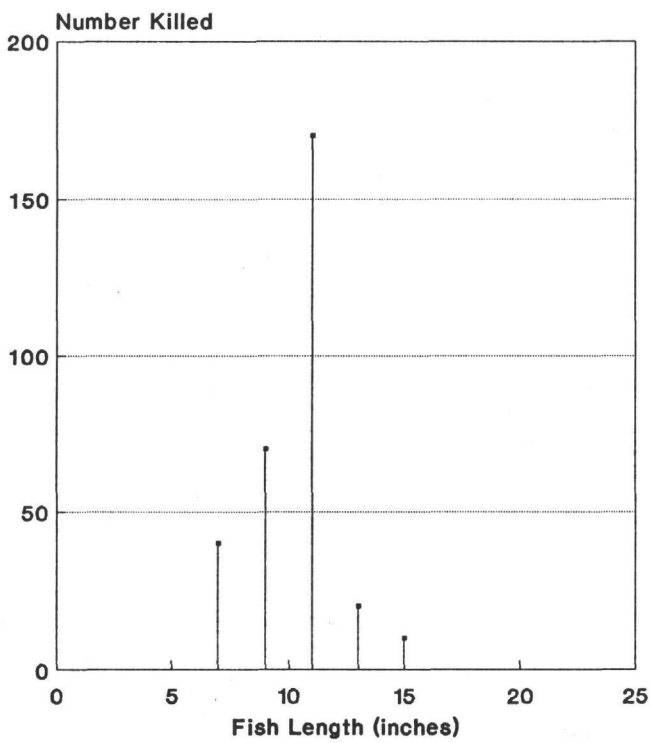
Gulf Menhaden
(Brevoortia patronus)



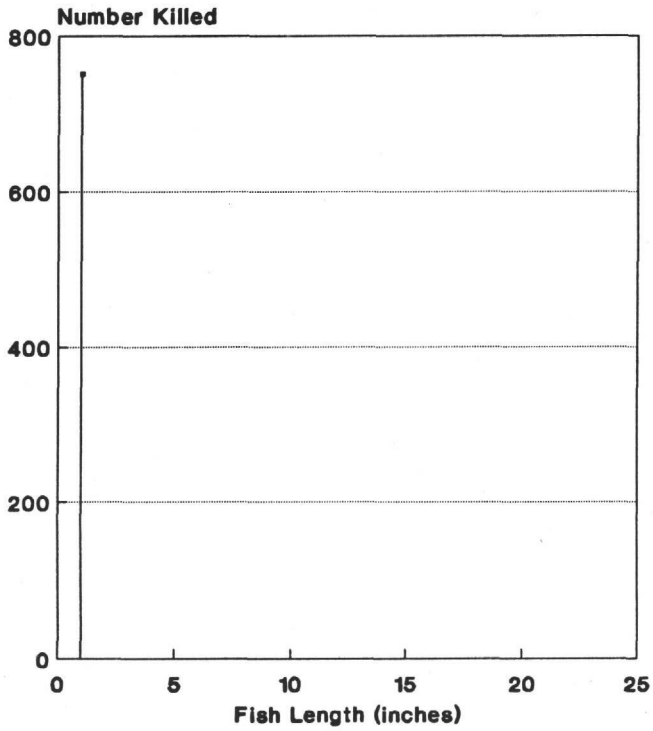
Hardhead Catfish
(Arius felis)



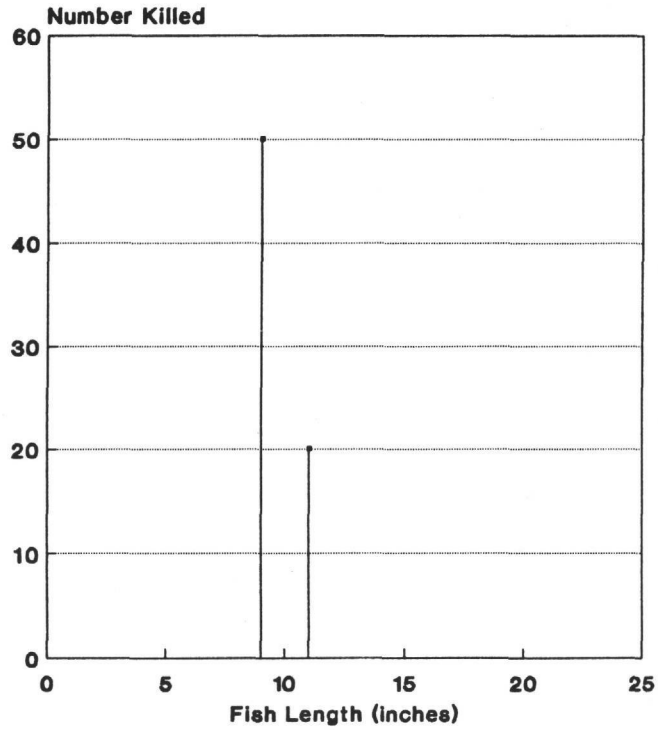
Red Drum
(Sciaenops ocellatus)



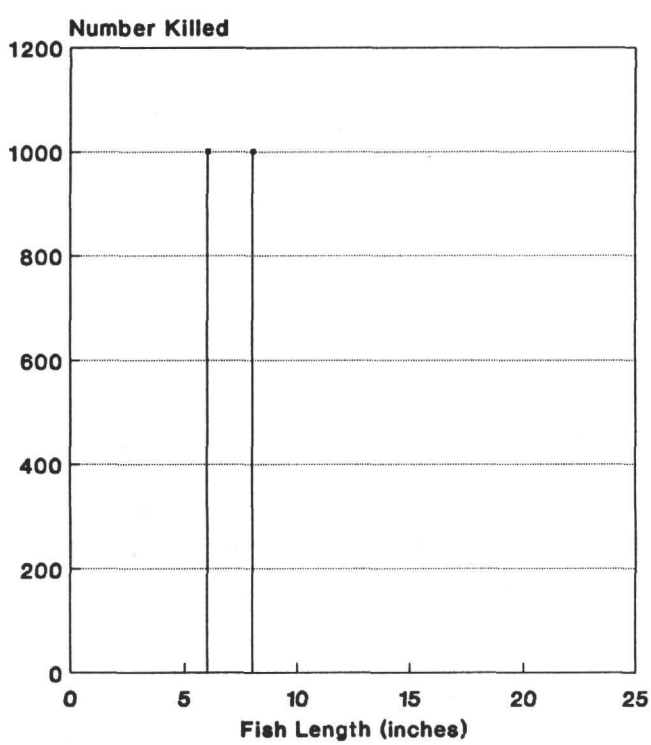
Sheepshead Minnow (Cyprinodon variegatus)



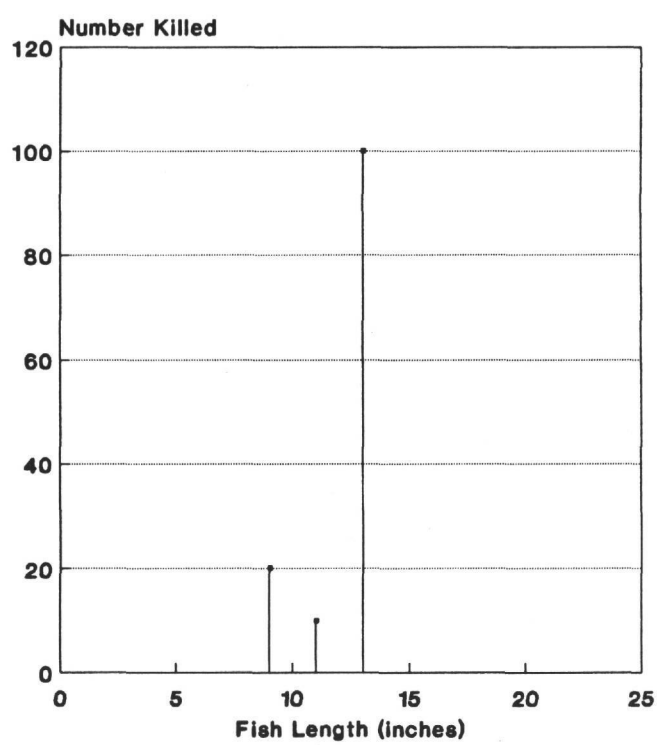
Southern Flounder (Paralichthys lethostigma)



Striped Bass (Morone saxatilis)



Striped Mullet (Mugil cephalus)

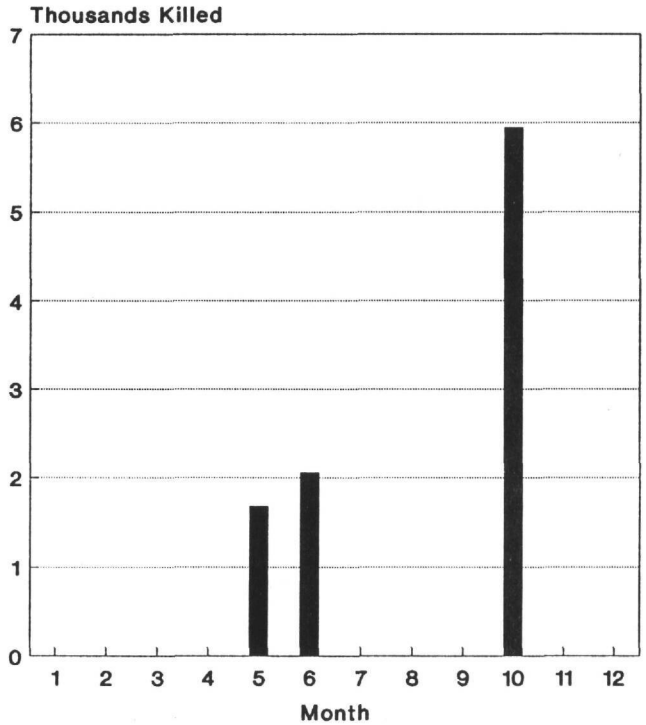


APPENDIX I

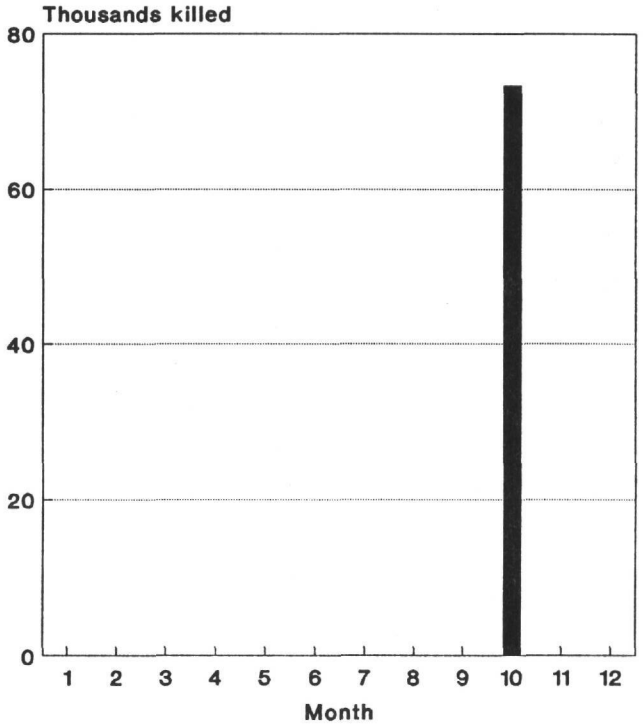
SEASONAL SPECIES MORTALITY

POINT SOURCE FISH KILLS

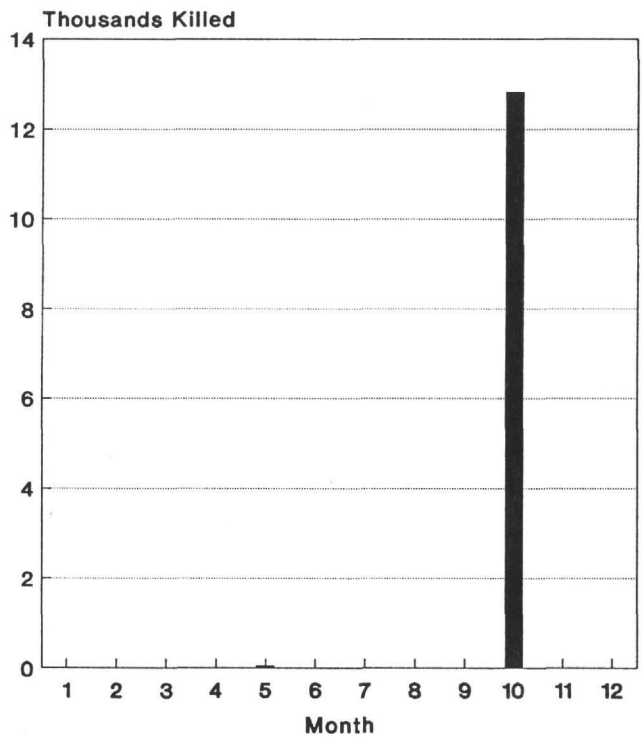
Atlantic Croaker
(Micropogonias undulatus)



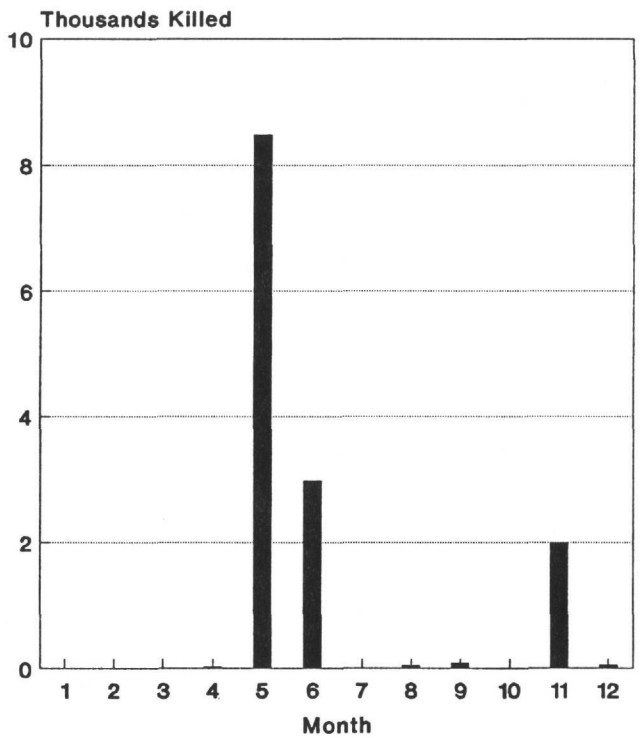
Bay Anchovy
(Anchoa mitchilli)



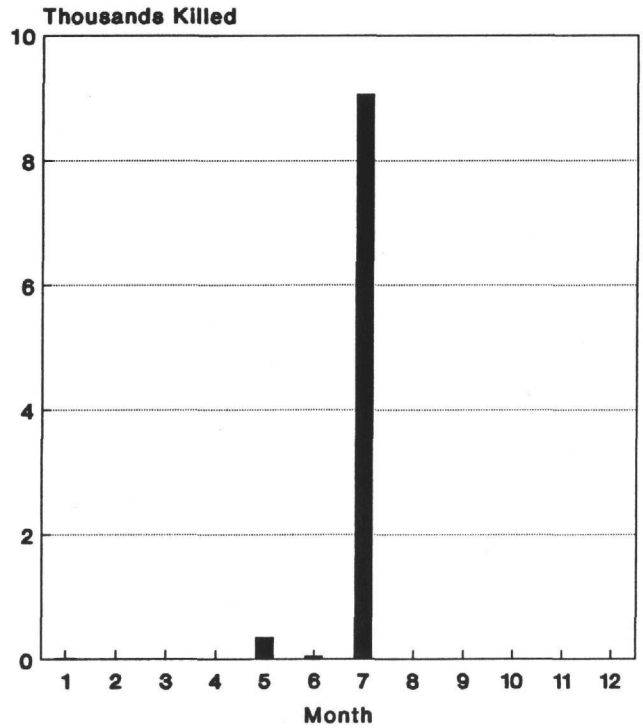
Black Drum
(Pogonias cromis)



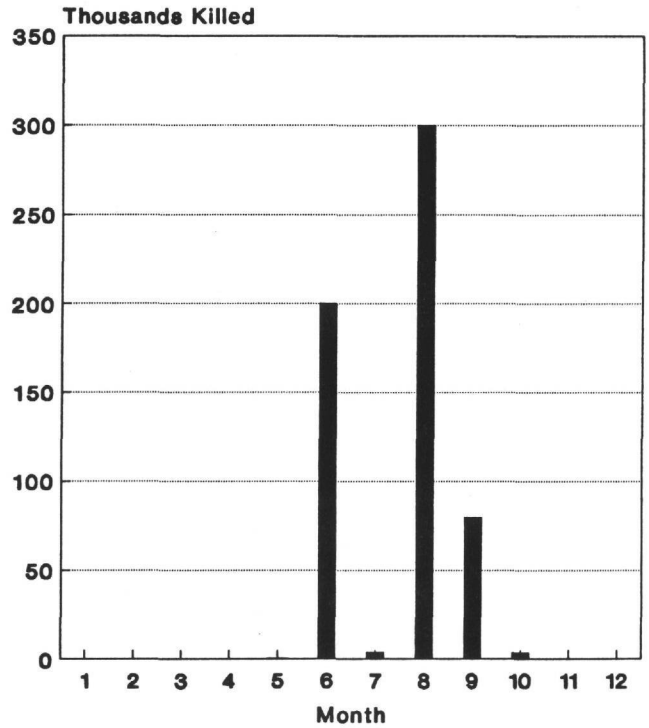
Game Fish
(Unclassified)



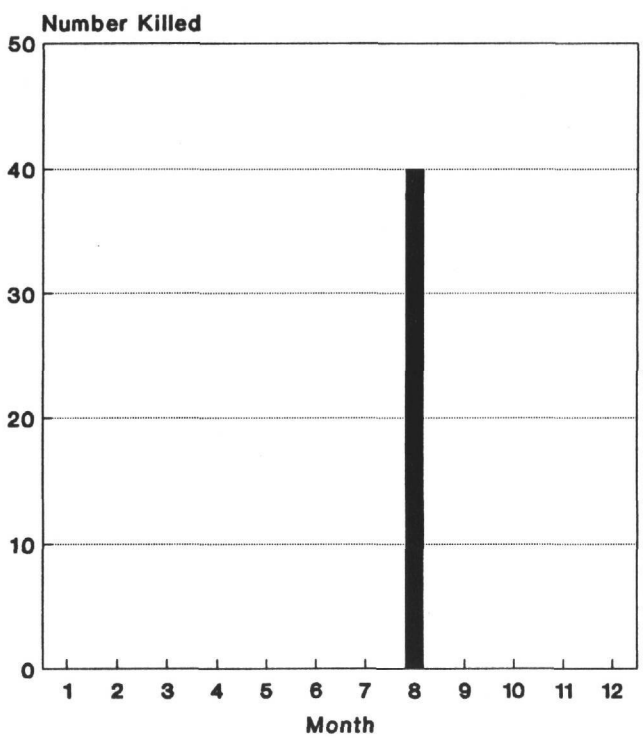
Gizzard Shad
(Dorosoma cepedianum)



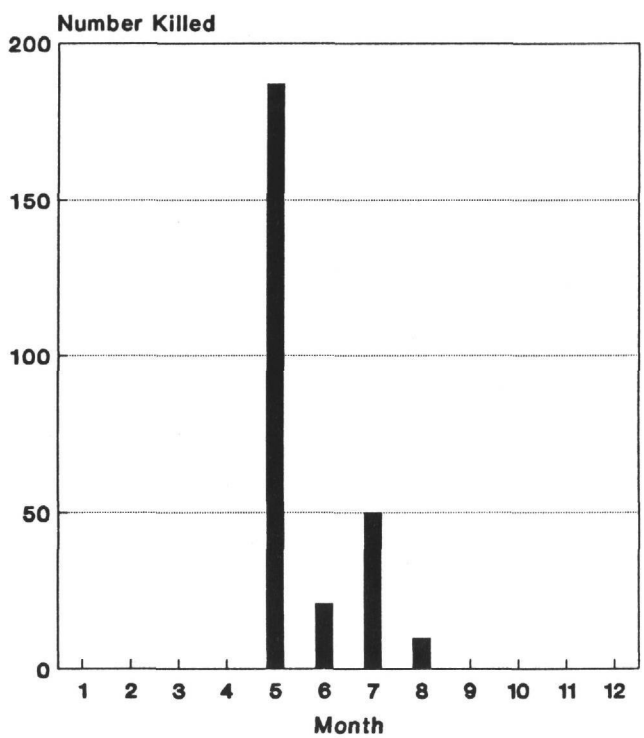
Gulf Menhaden
(Brevoortia patronus)



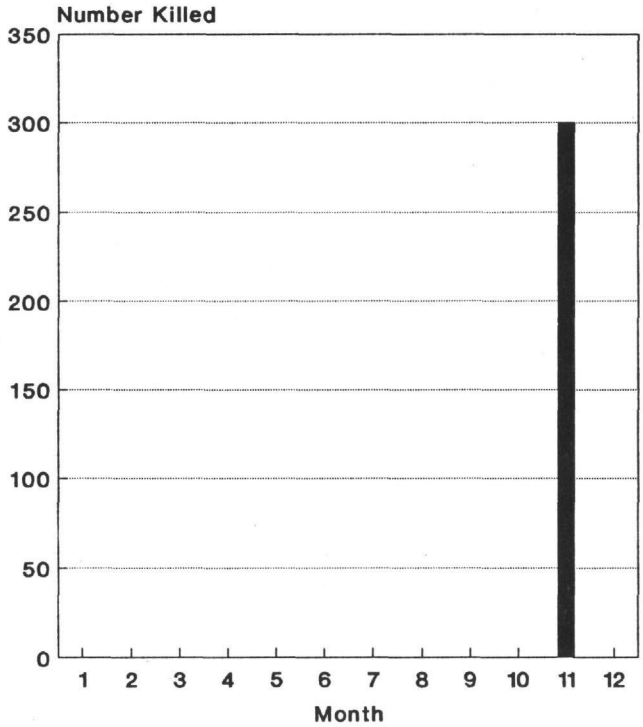
Gulf Toadfish
(Opsanus beta)



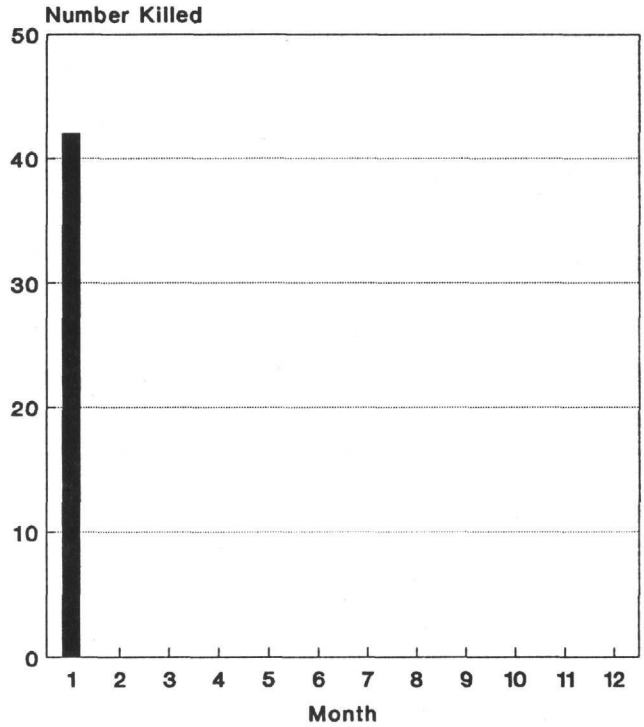
Hardhead Catfish
(Arius felis)



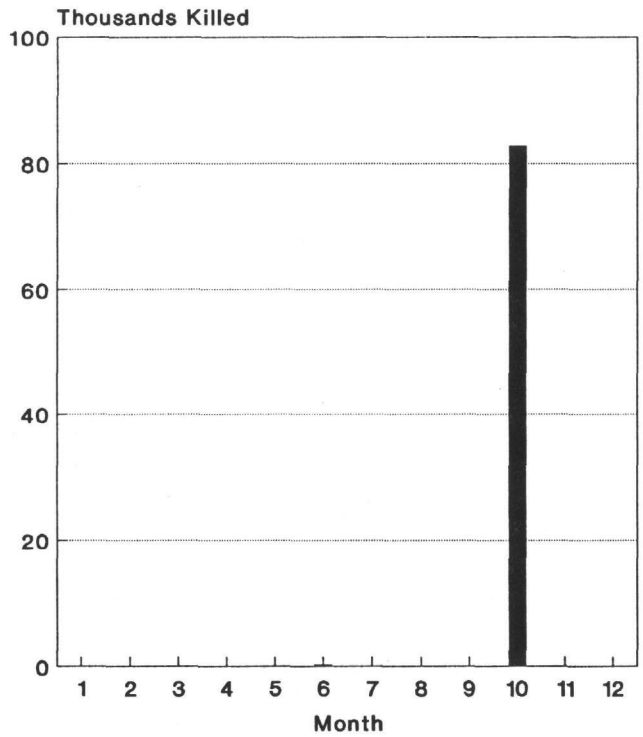
Killifish (Cyprinodontidae)



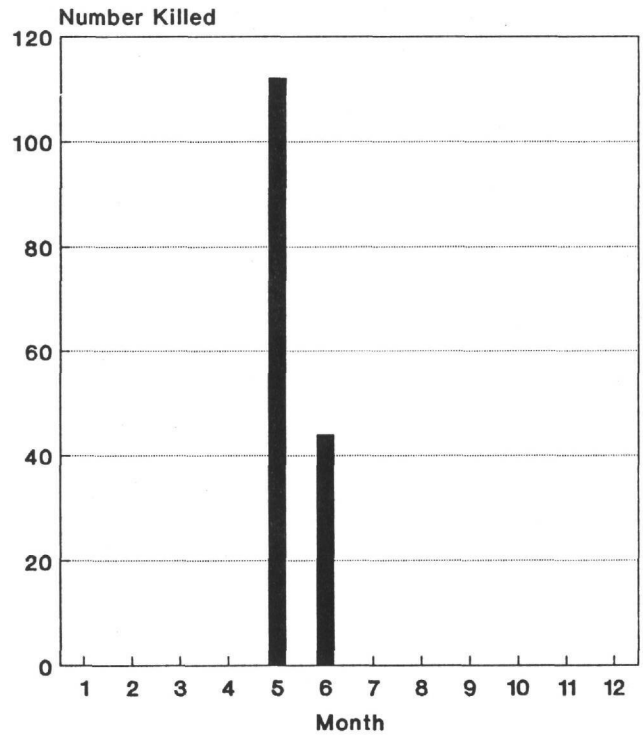
Mosquitofish (Gambusia affinis)



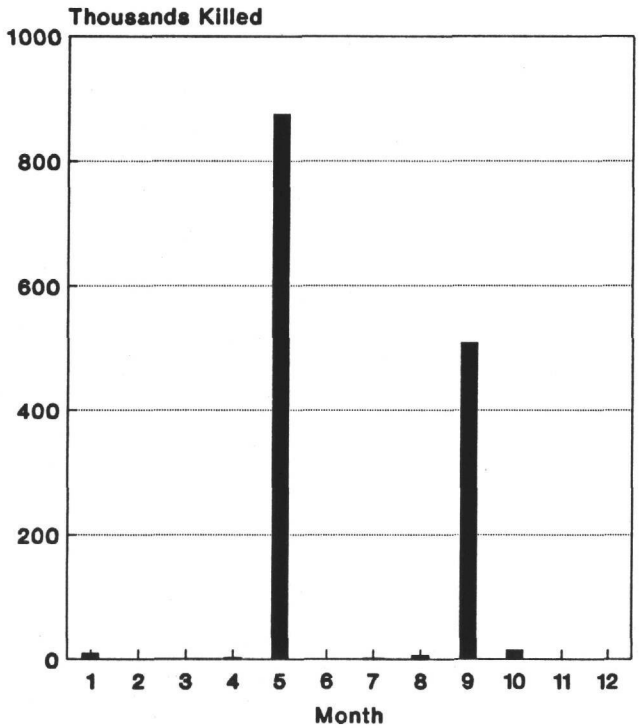
Pinfish (Lagodon rhomboides)



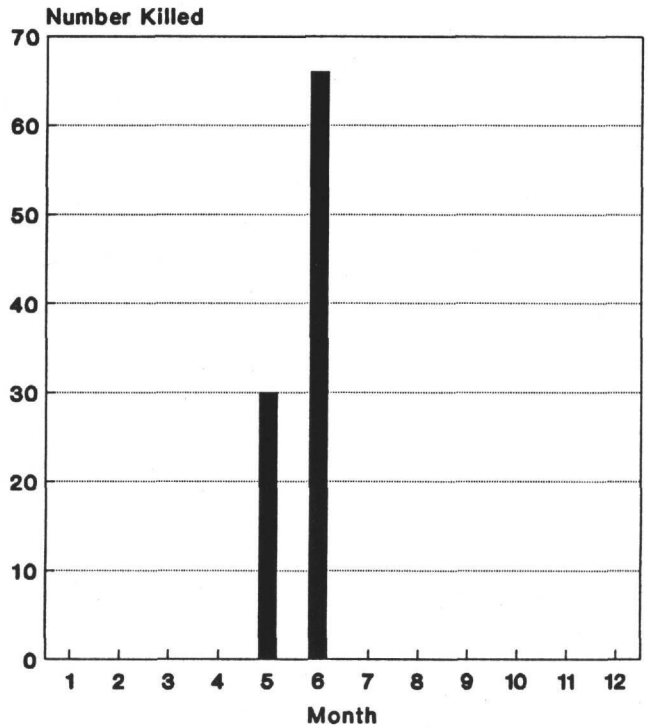
Red Drum (Sciaenops ocellatus)



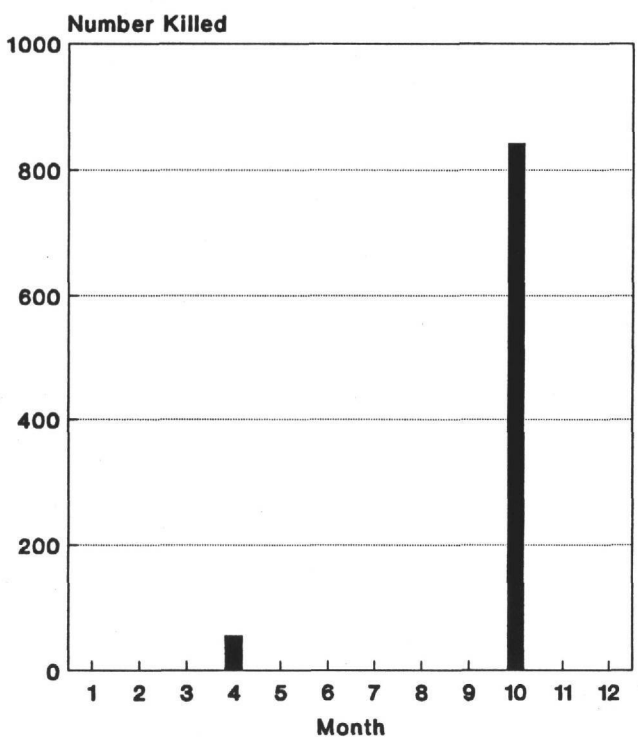
Rough Fish (Unclassified)



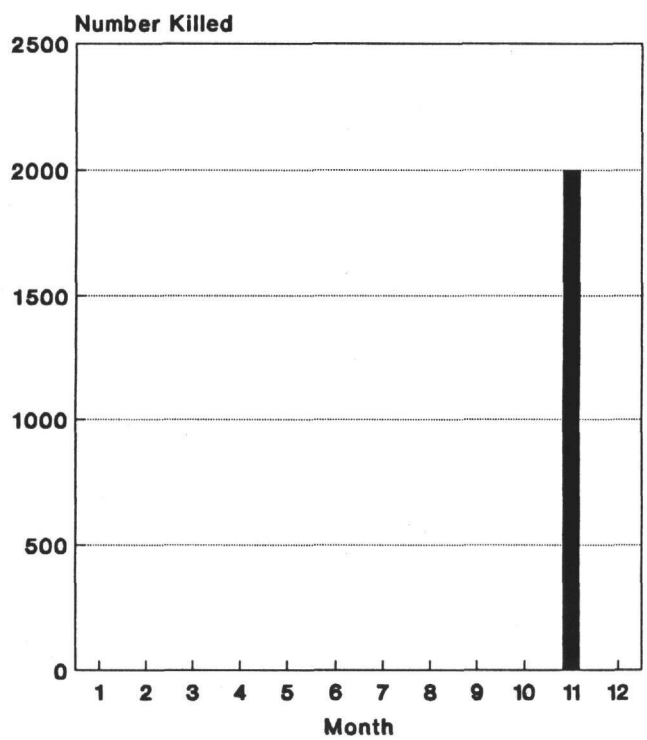
Sand Seatrout (Cynoscion arenarius)



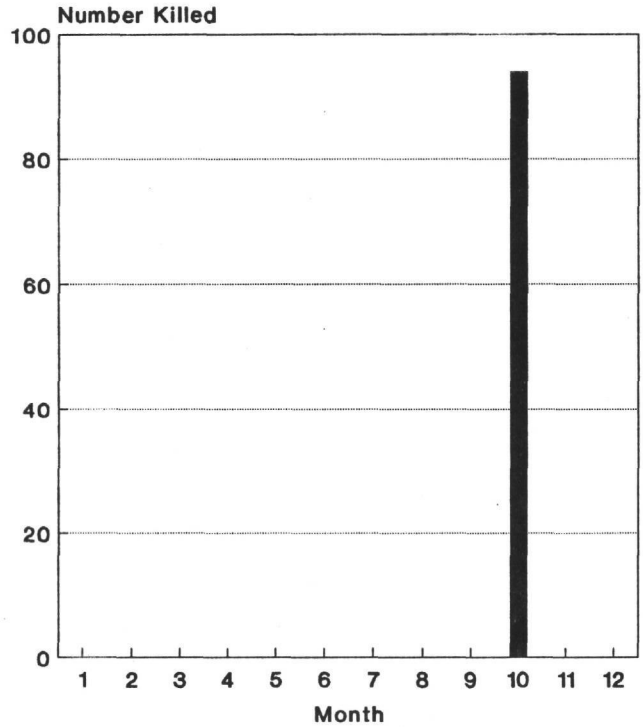
Sheepshead (Archosargus probatocephalus)



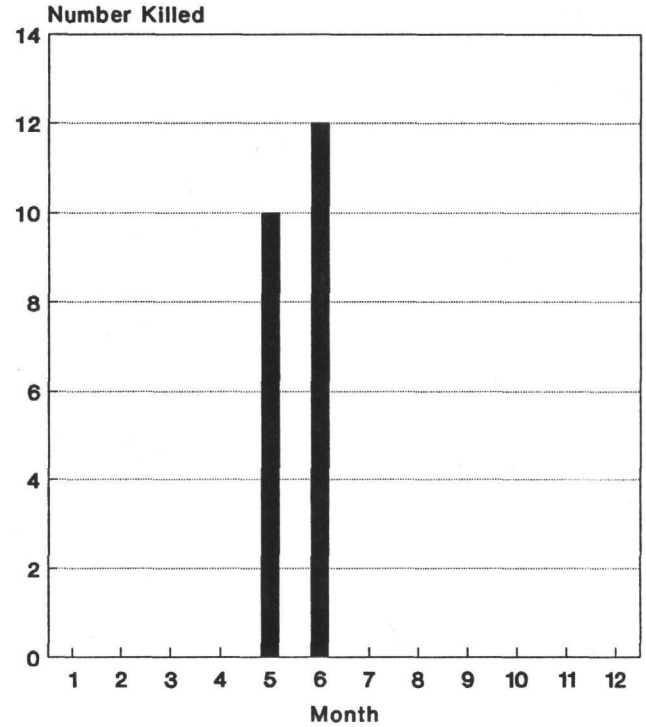
Sheepshead Minnow (Cyprinodon variegatus)



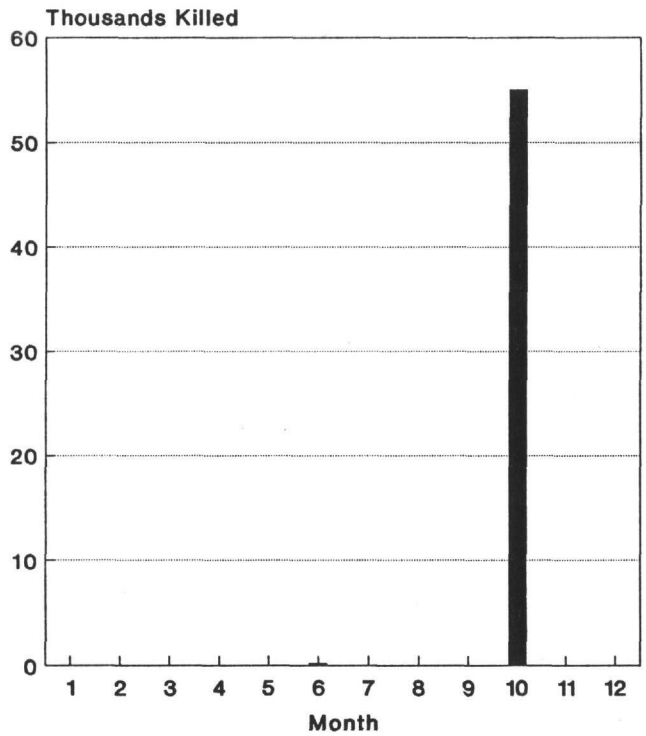
Silver Perch
(Bairdiella chrysoura)



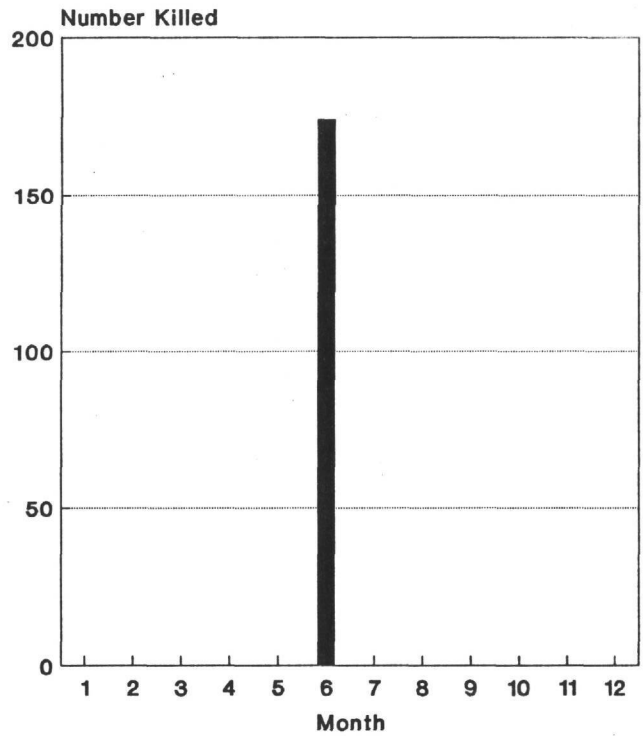
Southern Flounder
(Paralichthys lethostigma)



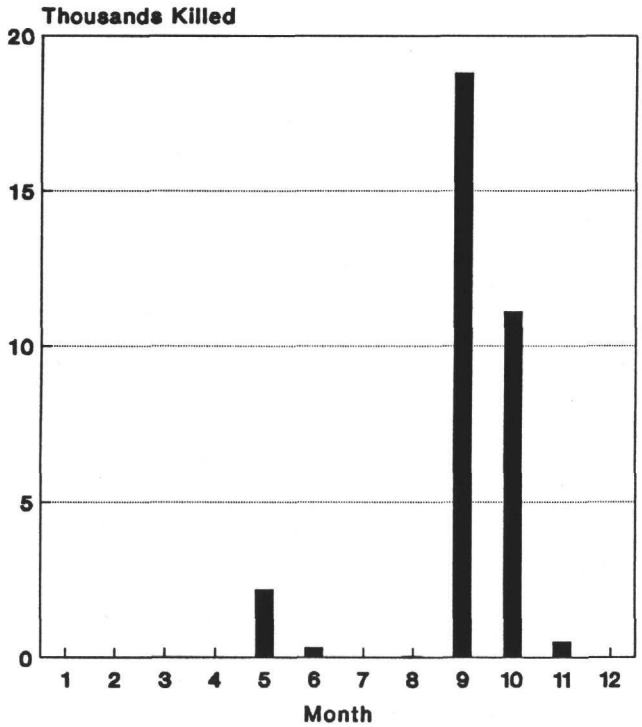
Spot
(Leiostomus xanthurus)



Spotted Seatrout
(Cynoscion nebulosus)



Striped Mullet
(Mugil cephalus)

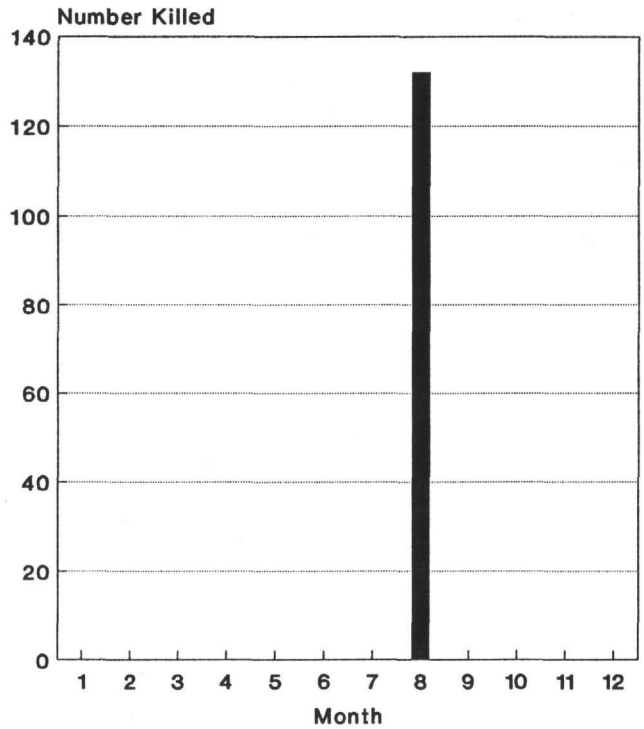


APPENDIX J

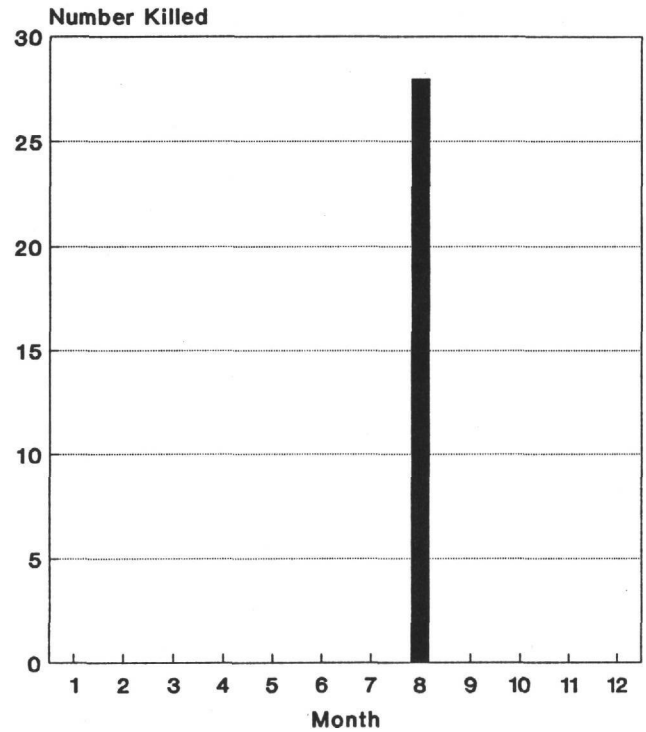
SEASONAL MORTALITY PATTERNS BY SPECIES

NONPOINT SOURCE FISH KILLS

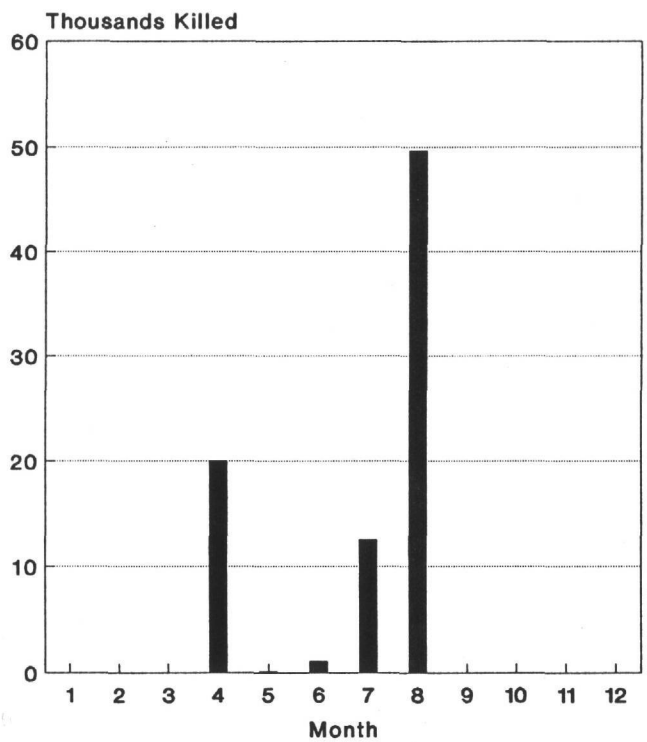
Atlantic Croaker (Micropogonias undulatus)



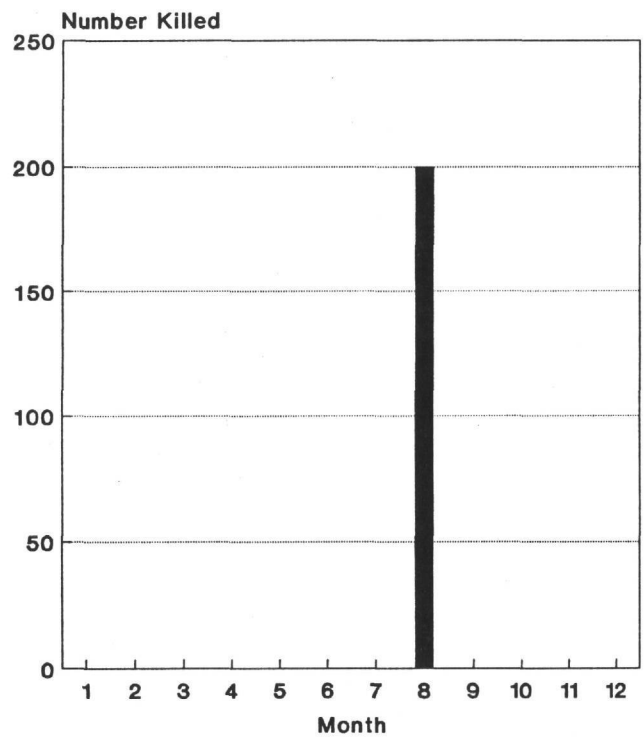
Bay Anchovy (Anchoa mitchilli)



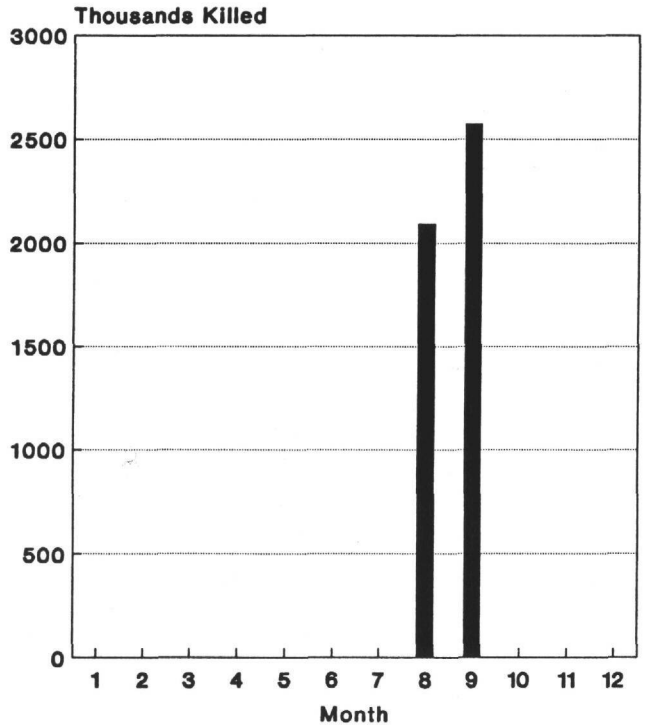
Game Fish (Unclassified)



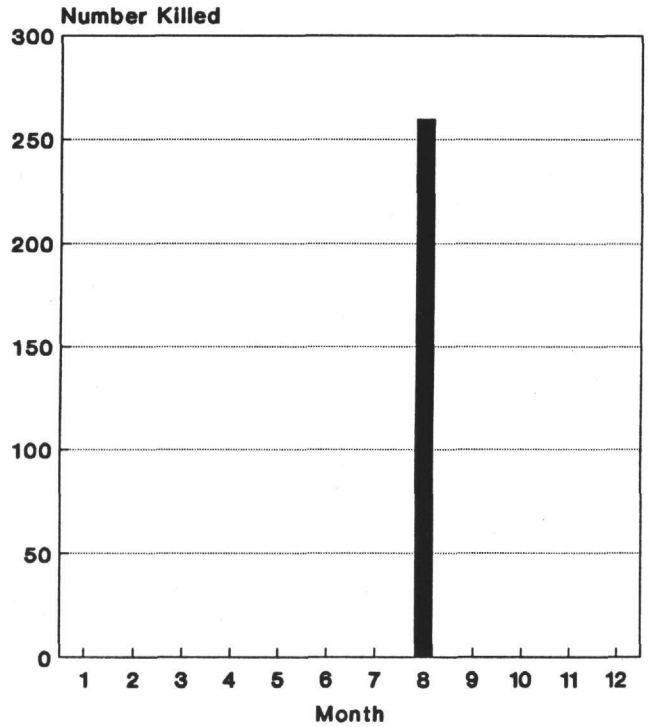
Gulf Flounder (Paralicthys albigutta)



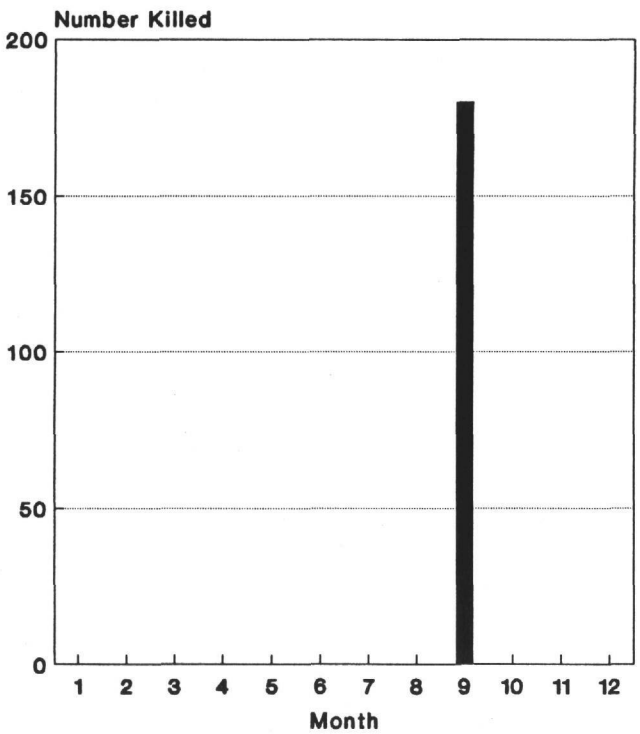
Gulf Menhaden
(Brevoortia patronus)



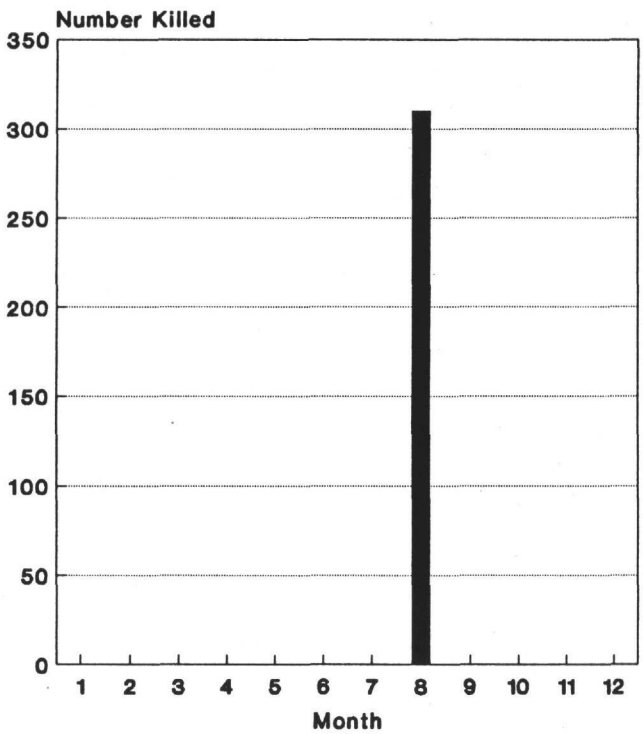
Hardhead Catfish
(Arius felis)



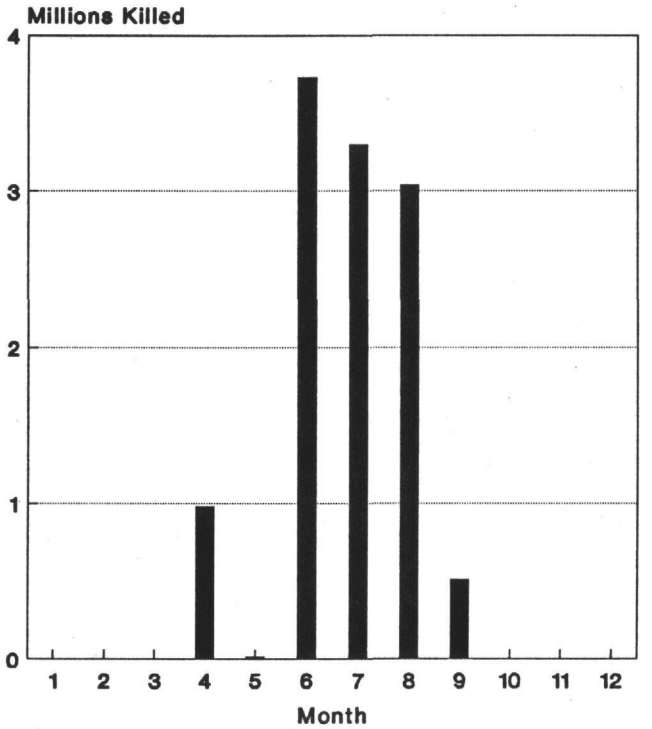
Inland Silverside
(Menidia beryllina)



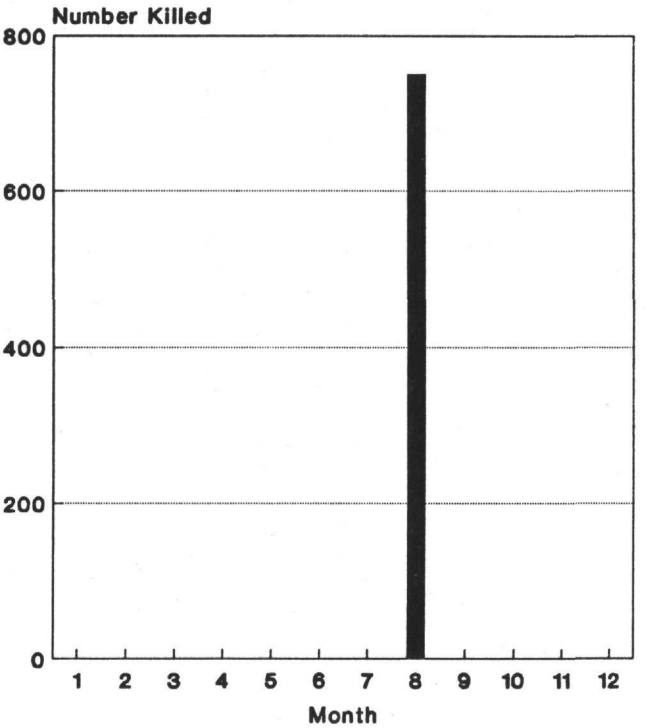
Red Drum
(Sciaenops ocellatus)



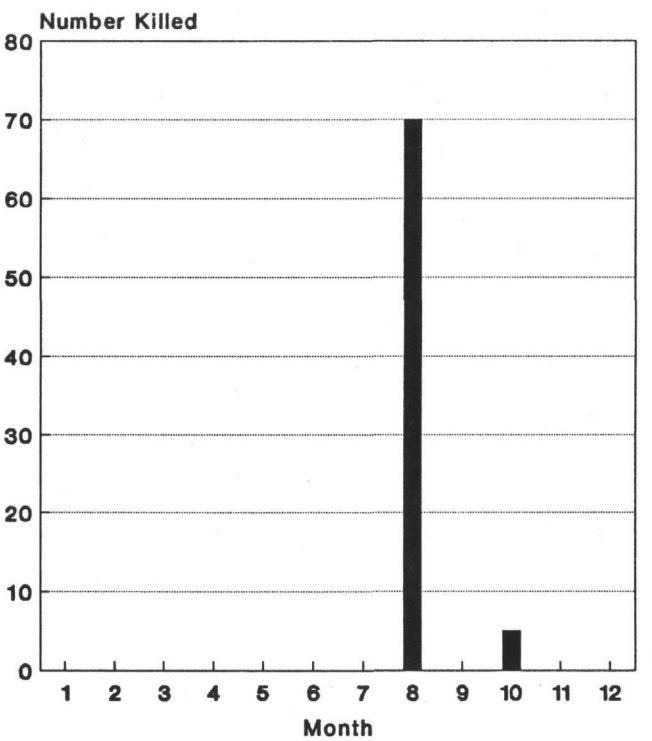
Rough Fish (Unclassified)



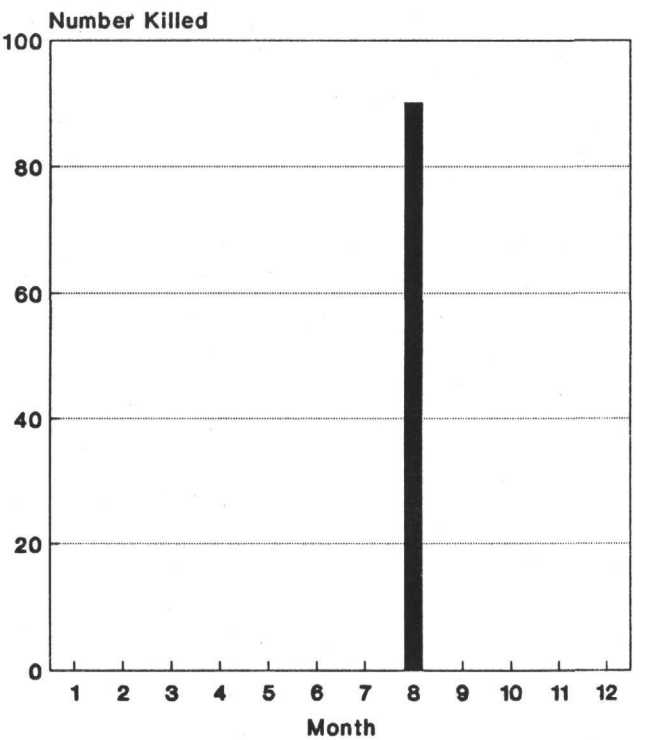
Sheepshead Minnow (Cyprinodon variegatus)



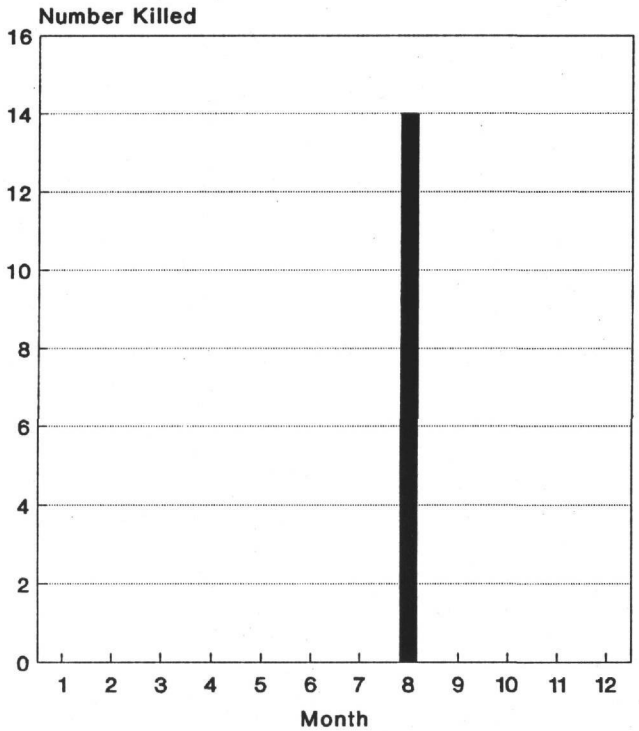
Southern Flounder (Paralichthys lethostigma)



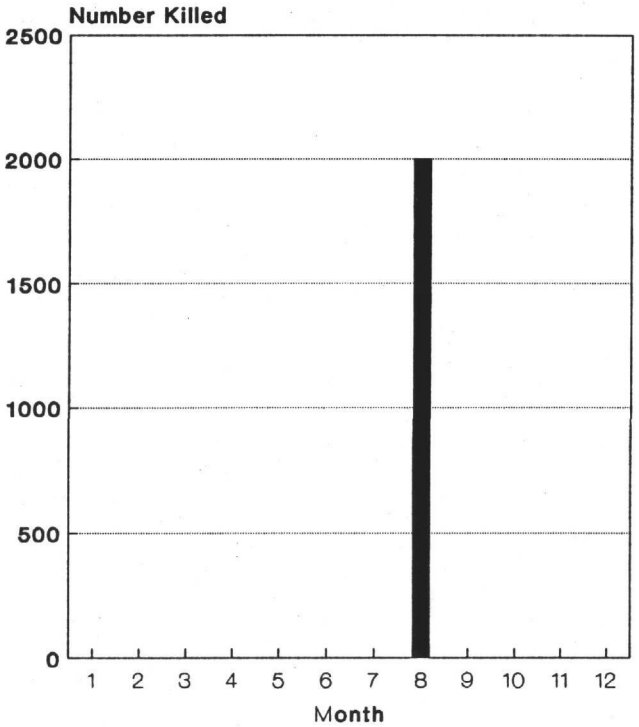
Spot (Leiostomus xanthurus)



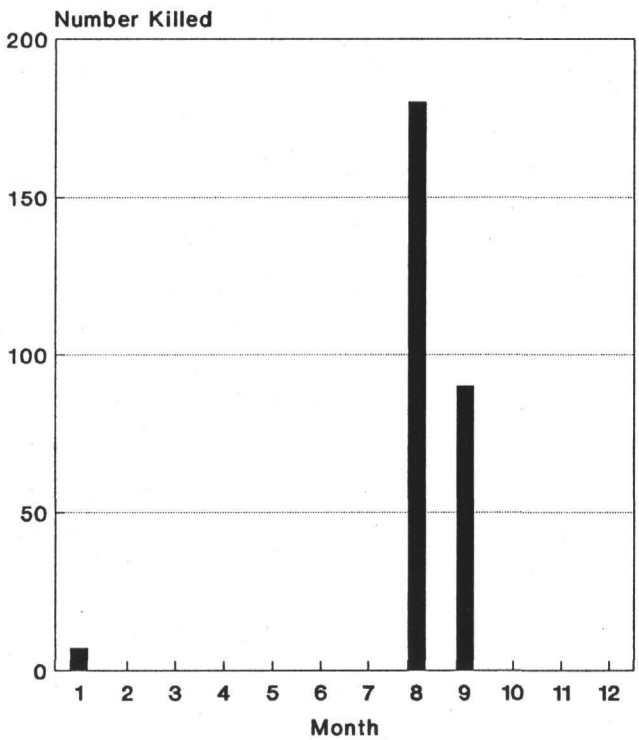
Spotted Seatrout
(Cynoscion nebulosus)



Striped Bass
(Morone saxatilis)



Striped Mullet
(Mugil cephalus)



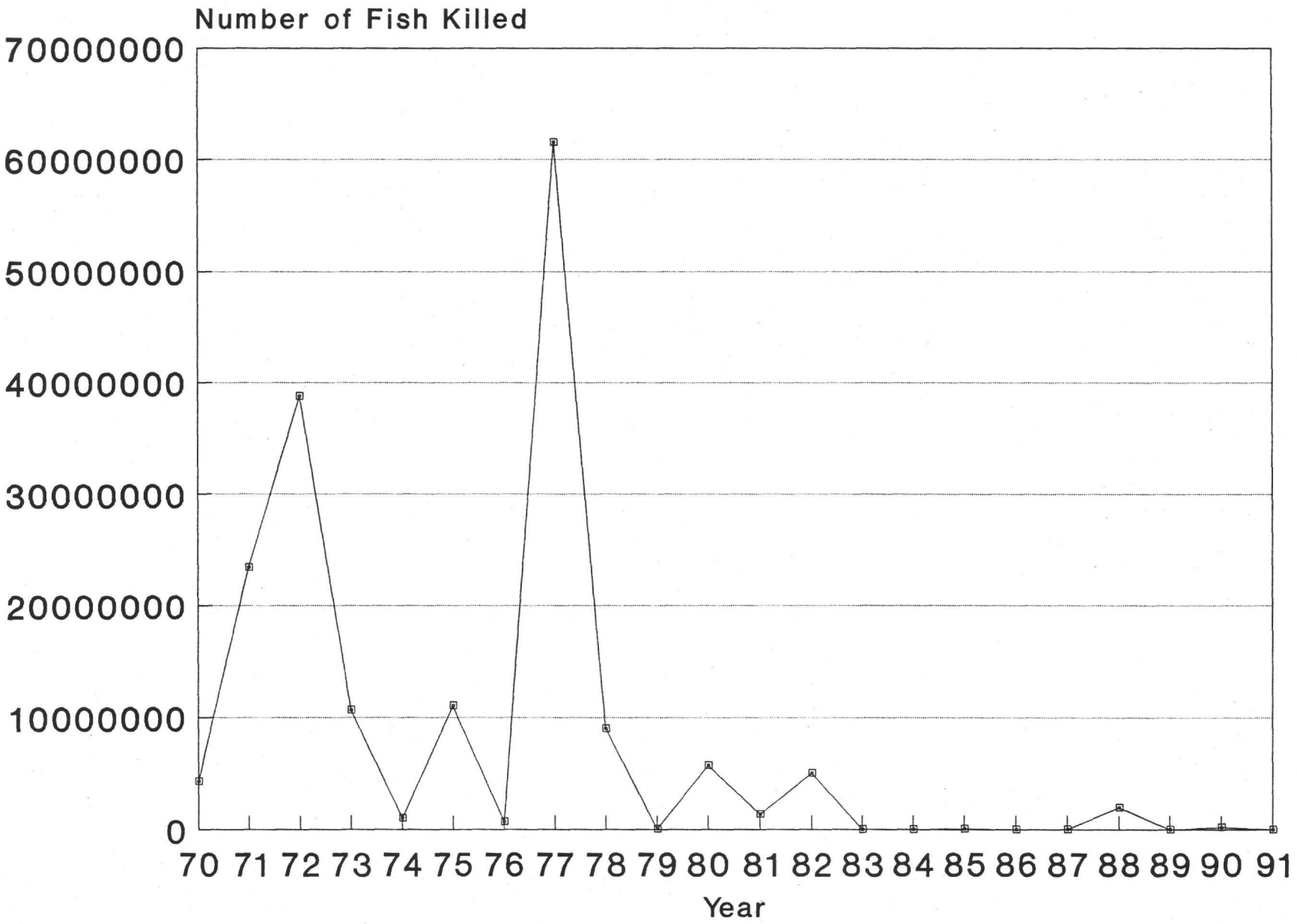
APPENDIX K

NUMBER OF FISH KILLS AND NUMBER OF FISH KILLED FROM 1970 THROUGH 1991

NUMBERS OF INCIDENTS AND FISH KILLED AS REPORTED TO AGENCIES FROM 1970 TO 1991

Year	Number of Incidents	Number Killed	Mean Number of Fish Killed Per Incident
1970	7	4,310,000	615,714
1971	29	23,436,800	808,166
1972	22	38,782,159	1,762,825
1973	16	10,643,724	665,233
1974	9	1,036,728	115,192
1975	9	11,047,700	1,227,522
1976	8	707,987	88,498
1977	6	61,568,867	10,261,478
1978	14	9,018,284	644,163
1979	4	55,038	13,760
1980	10	5,748,980	574,898
1981	9	1,400,831	155,648
1982	34	5,044,442	148,366
1983	12	43,626	3,636
1984	1	7	7
1985	8	85,456	10,682
1986	2	354	177
1987	0	0	0
1988	10	2,006,533	200,653
1989	1	800	800
1990	8	257,104	32,138
1991	1	178	178
Total	220	175,195,598	796,344

NUMBER OF FISH KILLED



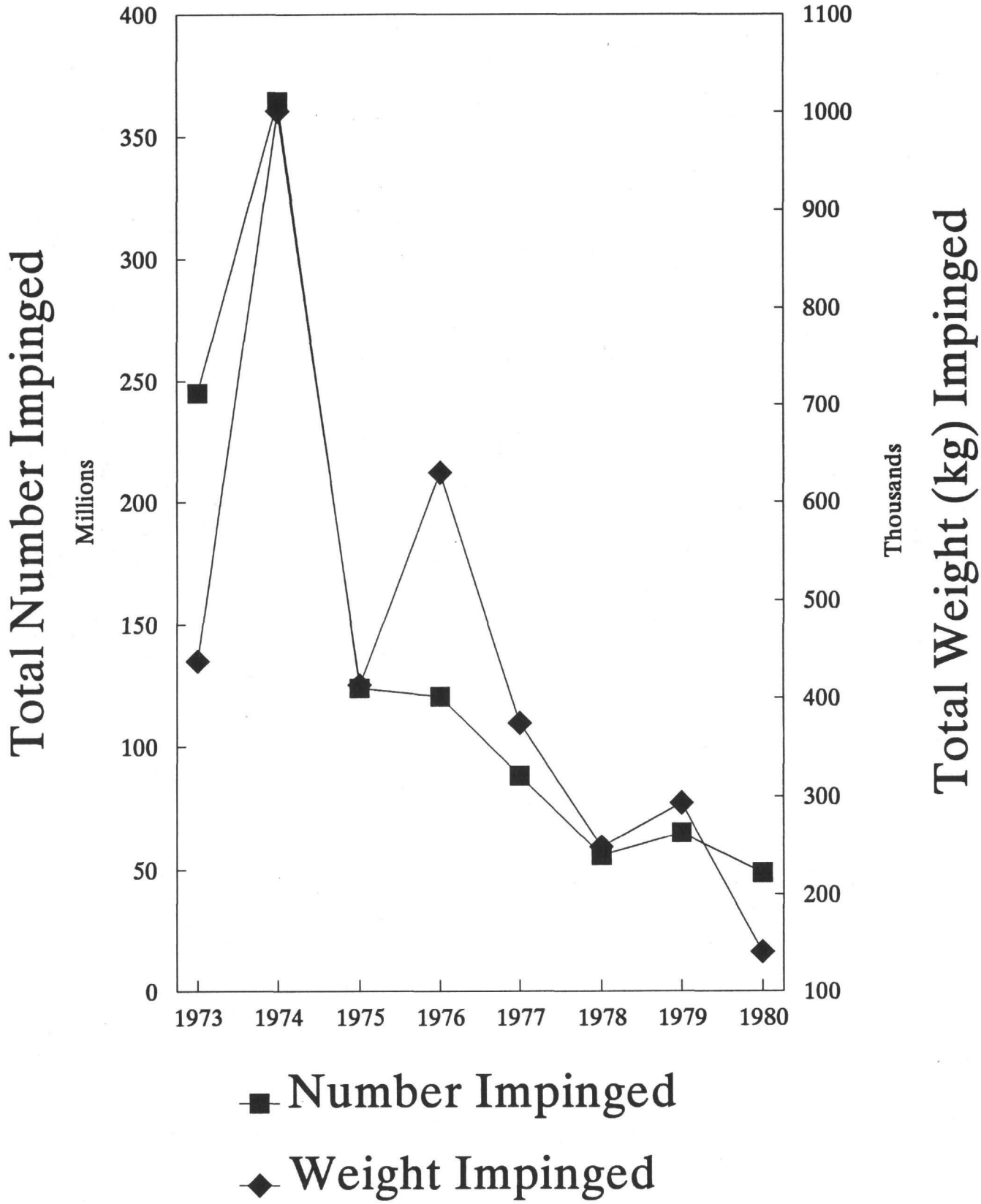
HUMAN INDUCED FISH KILLS REPORTED

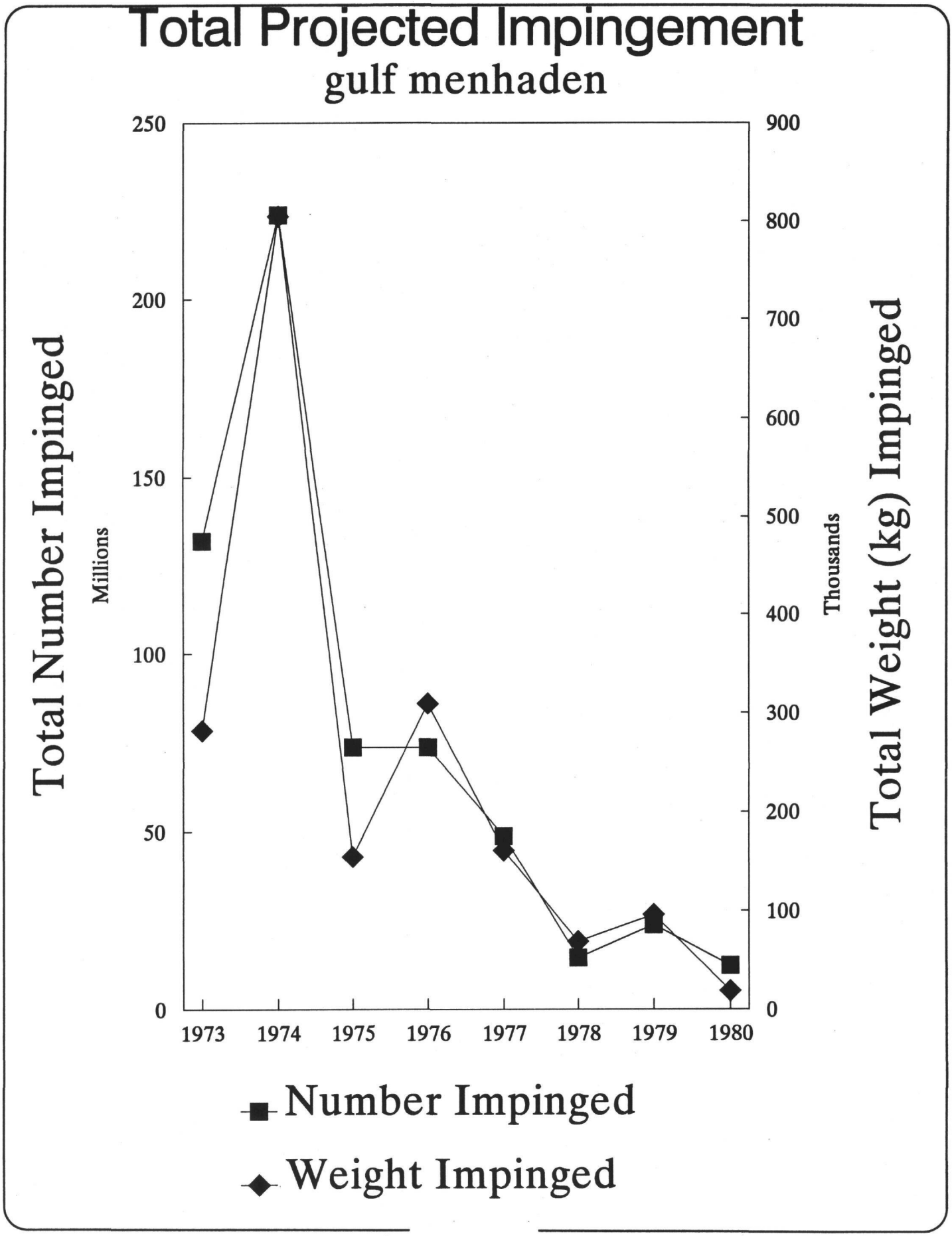
APPENDIX L

GRAPHICAL PRESENTATION OF ESTIMATED NUMBERS AND WEIGHTS OF ORGANISMS OF INTEREST AT THE CEDAR BAYOU STATION (SRI UNPUBLISHED)

Total Projected Impingement

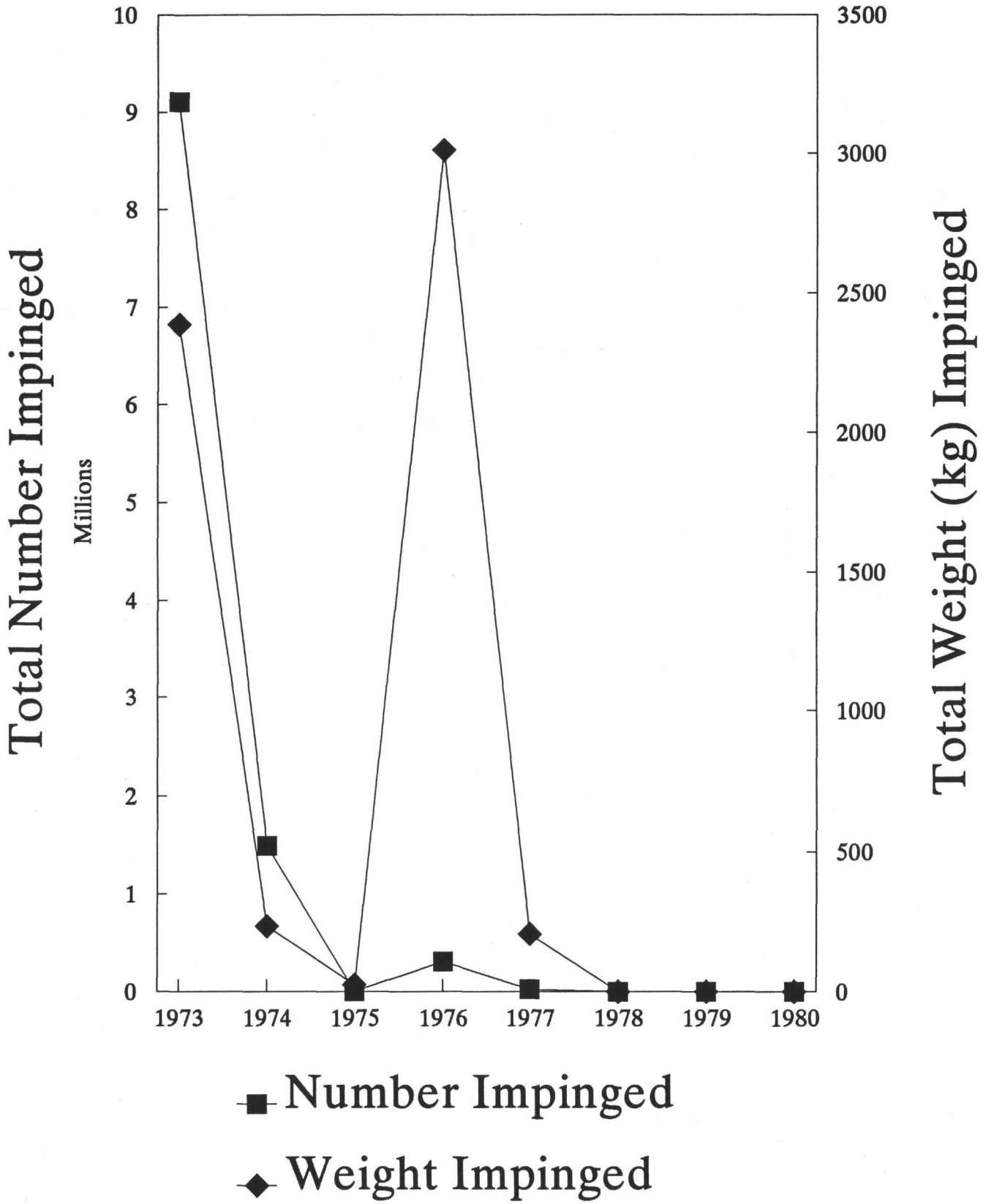
Total of Species of Interest

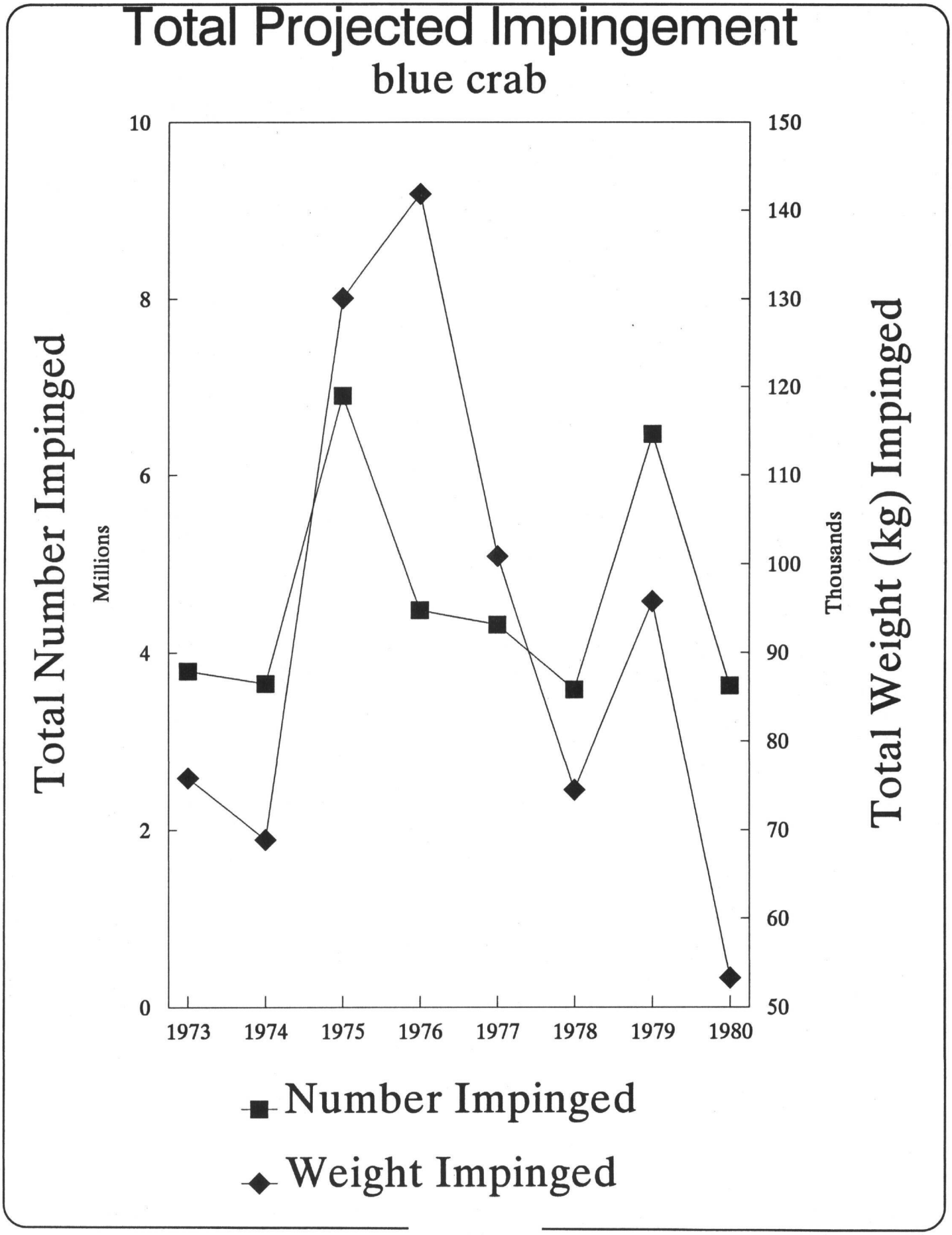



Total Projected Impingement
gulf menhaden
Total Number Impinged
Millions
Total Weight (kg) Impinged
Thousands
250
200
150
100
50
0
900
800
700
600
500
400
300
200
100
0
1973
1974
1975
1976
1977
1978
1979
1980
Number Impinged
Weight Impinged

Total Projected Impingement

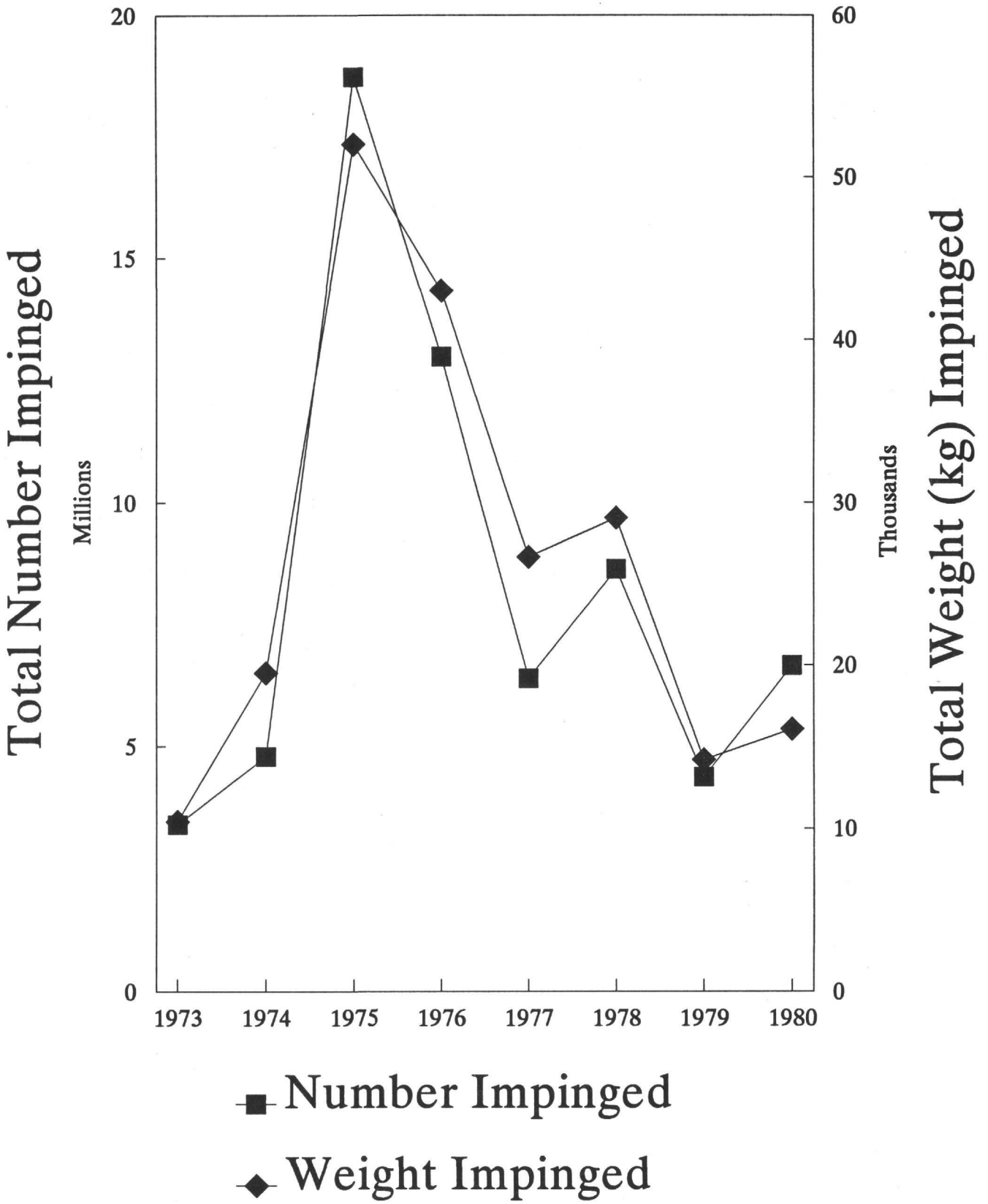
Atlantic threadfin




Total Projected Impingement
blue crab
Total Number Impinged
Millions
Total Weight (kg) Impinged
Thousands
10
8
6
4
2
0
150
140
130
120
110
100
90
80
70
60
50
1973
1974
1975
1976
1977
1978
1979
1980
Number Impinged
Weight Impinged

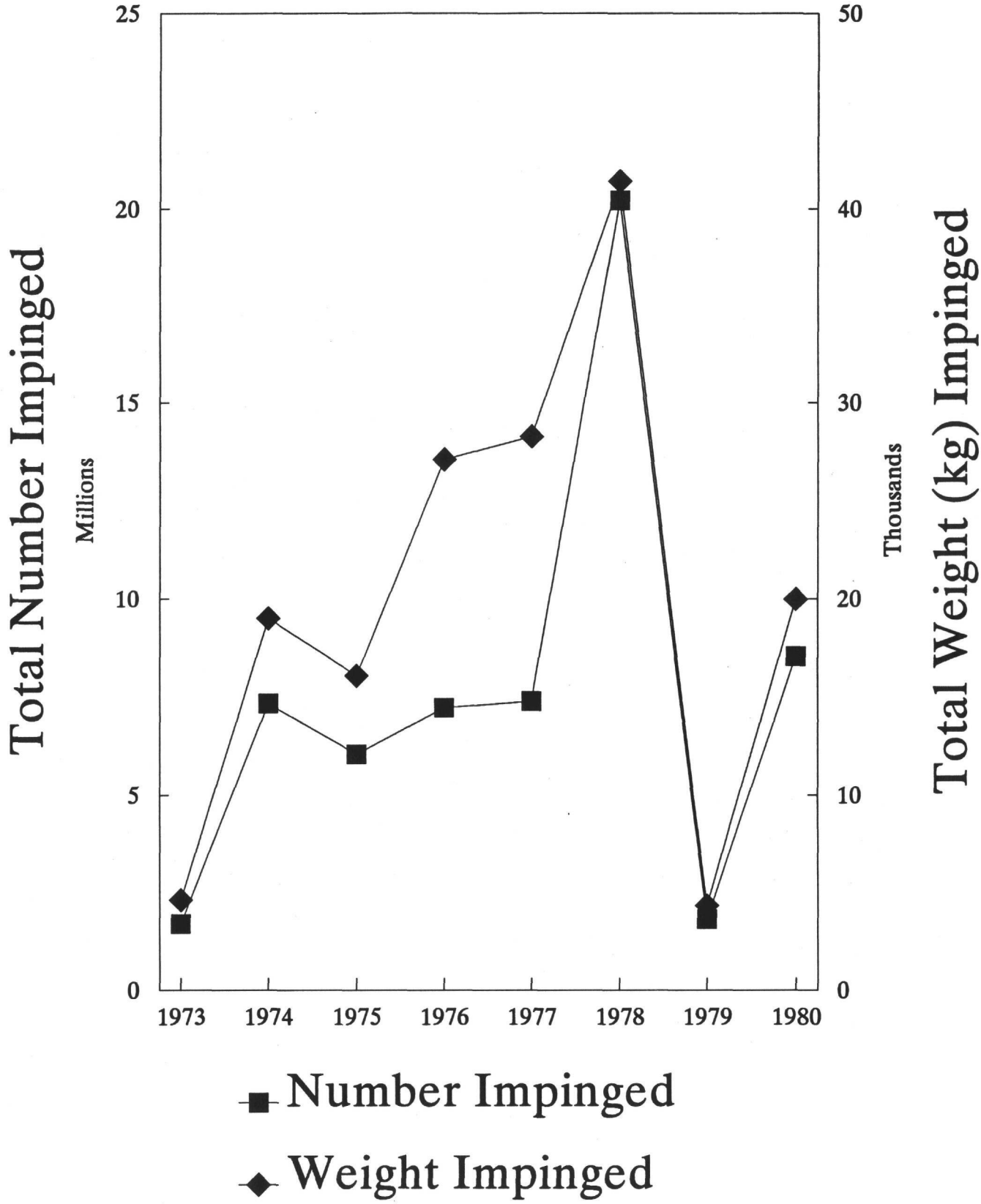
Total Projected Impingement

white shrimp



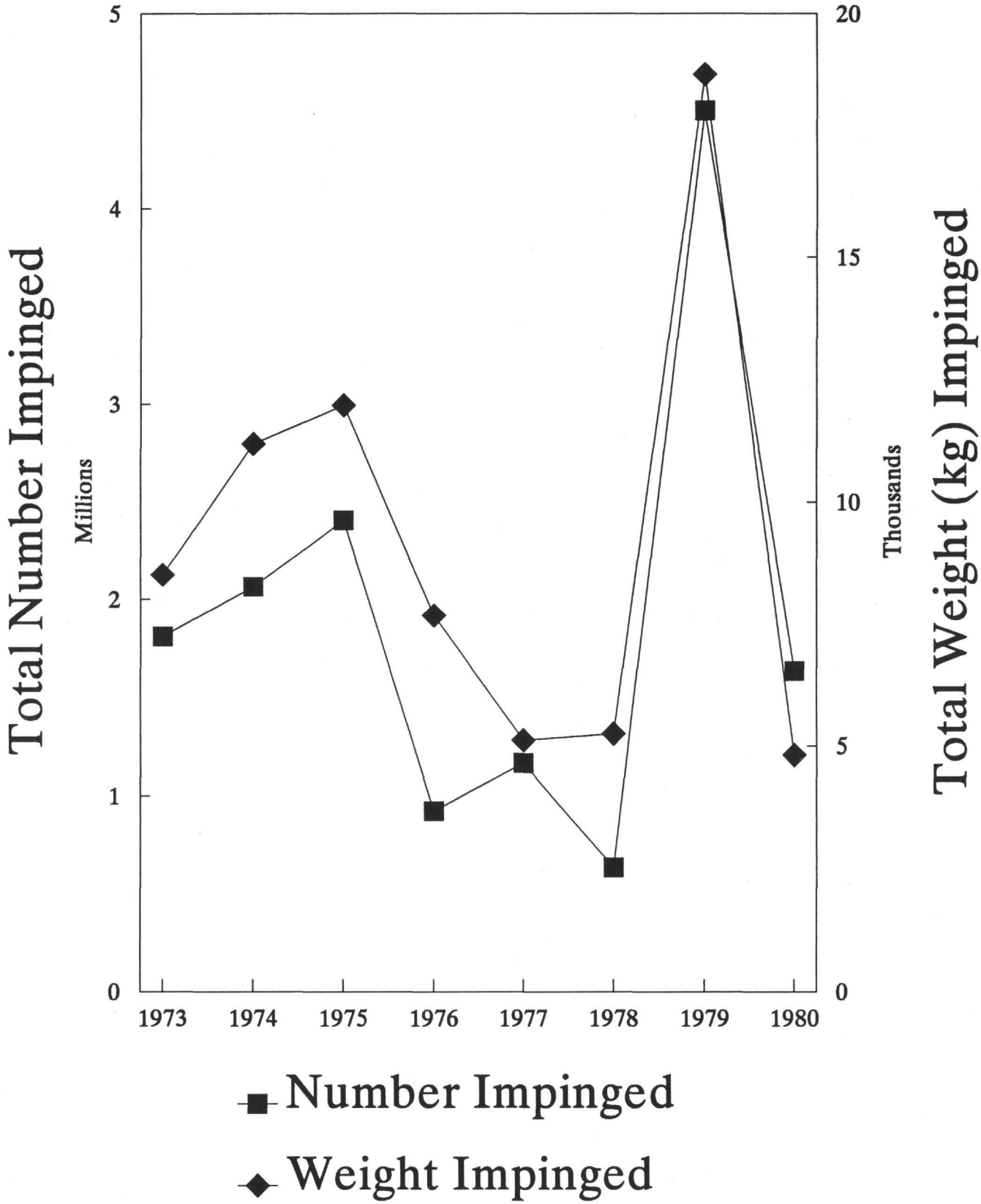
Total Projected Impingement

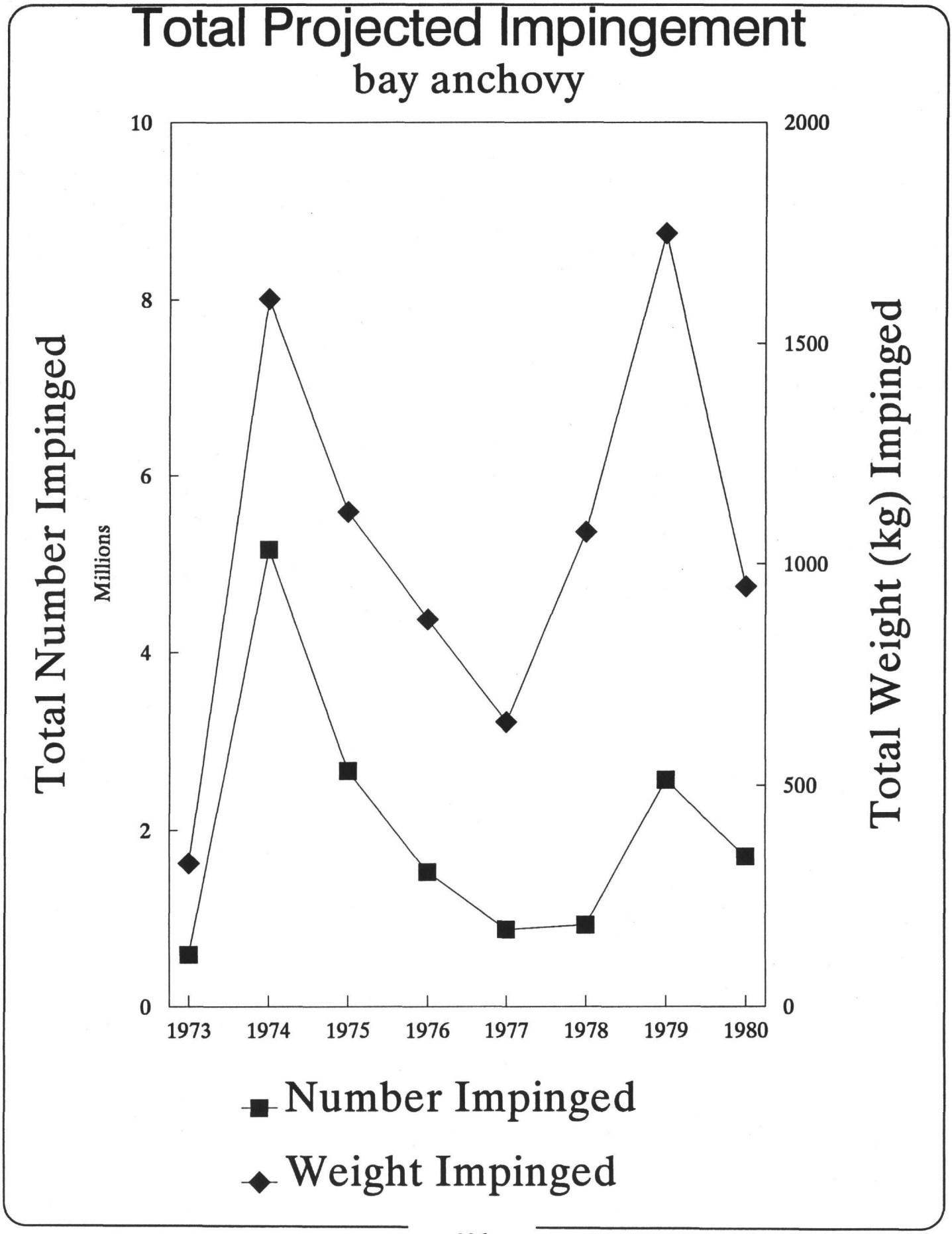
brown shrimp

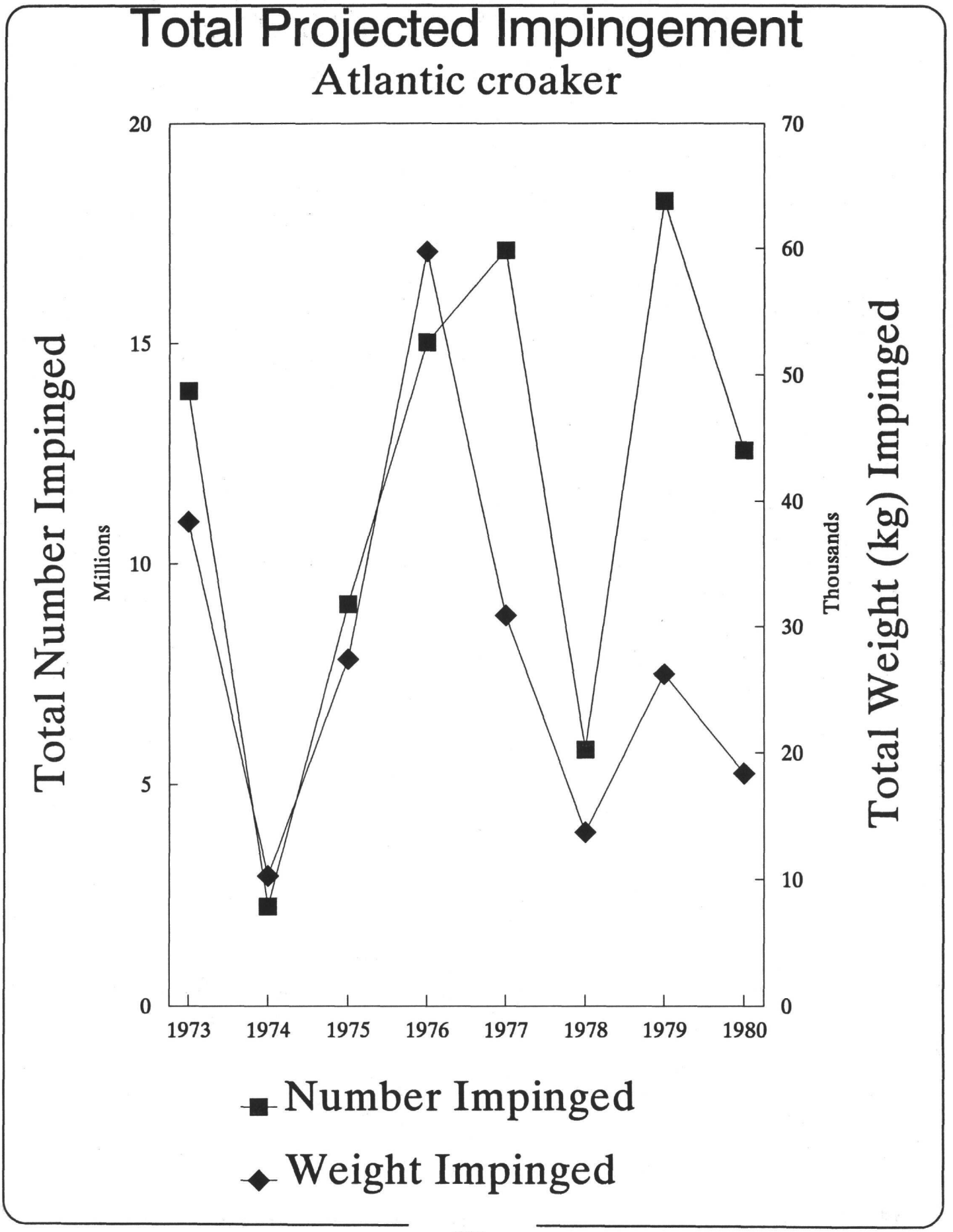


Total Projected Impingement

sand seatrout

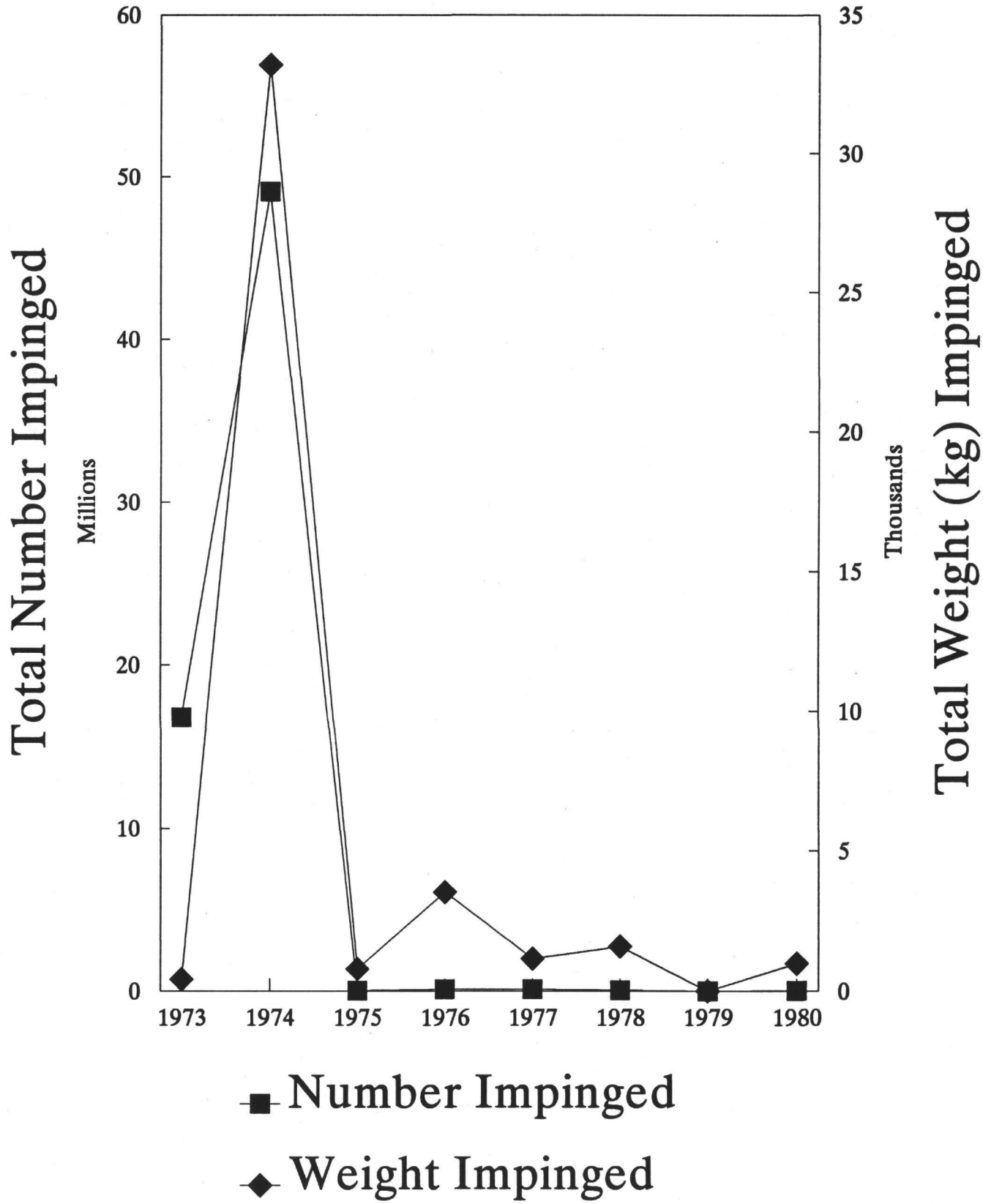


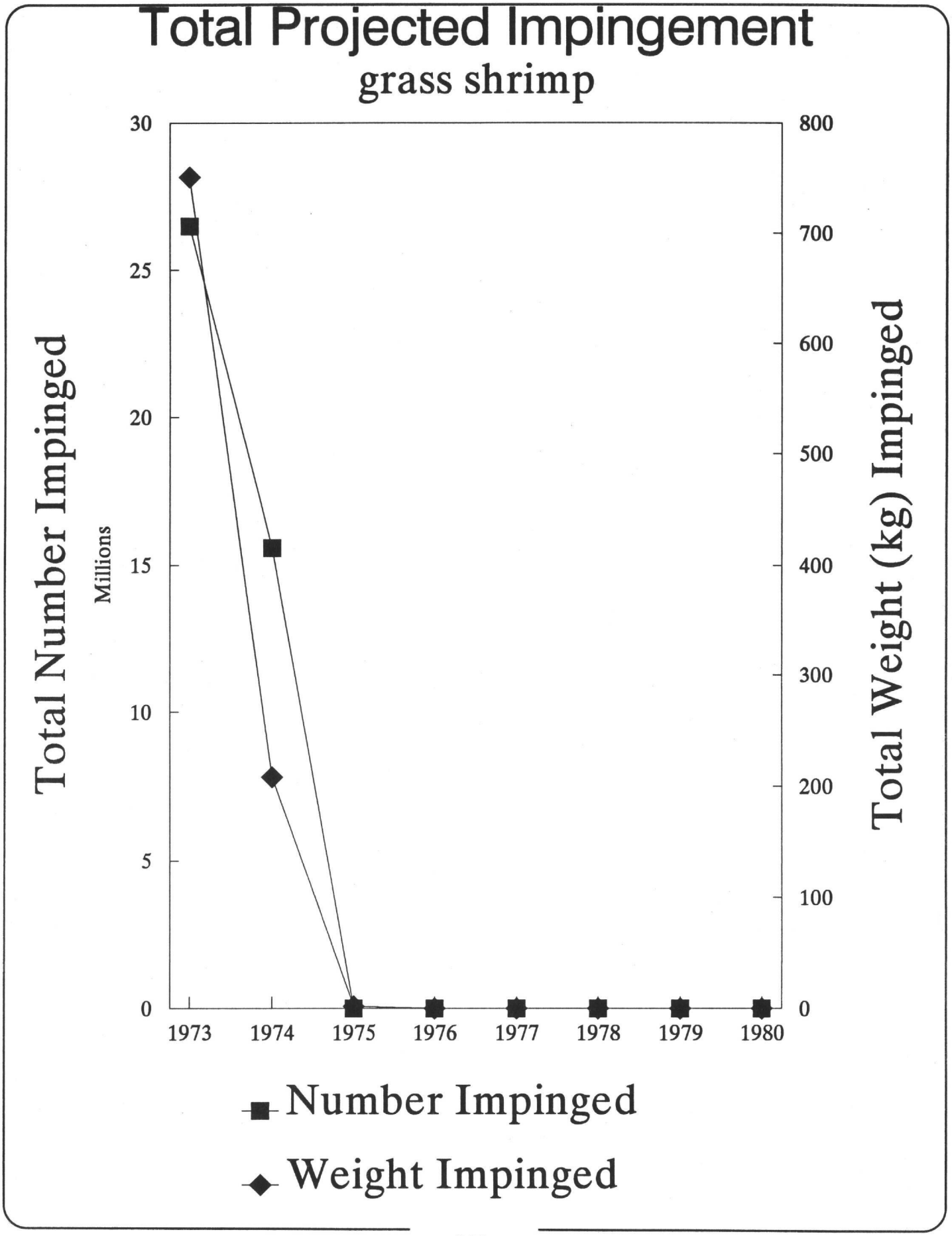

Total Projected Impingement
bay anchovy
Total Number Impinged
Millions
Total Weight (kg) Impinged
10
8
6
4
2
0
2000
1500
1000
500
0
1973
1974
1975
1976
1977
1978
1979
1980
Number Impinged
Weight Impinged

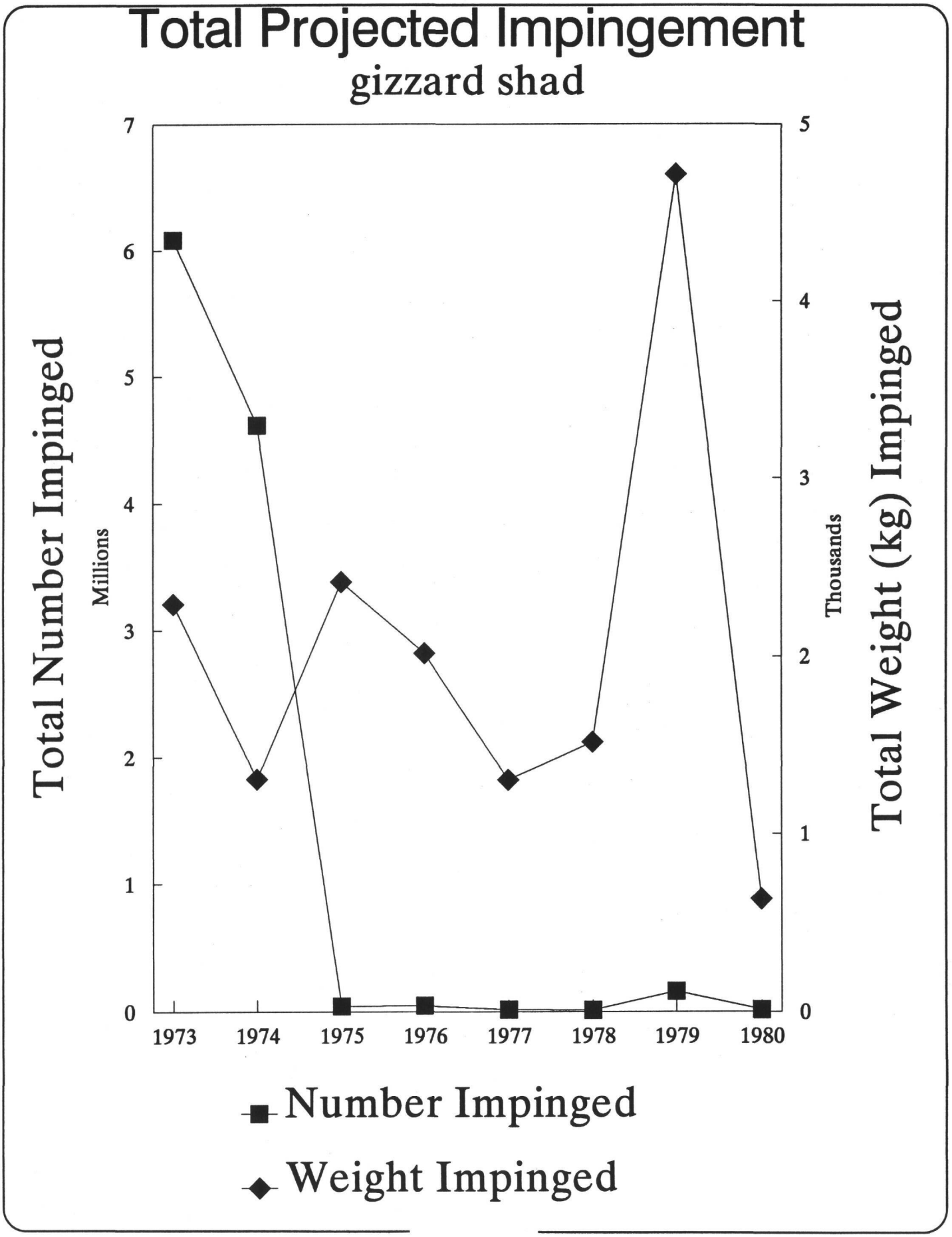

Total Projected Impingement
Atlantic croaker
Total Number Impinged
Millions
Total Weight (kg) Impinged
Thousands
20
15
10
5
0
70
60
50
40
30
20
10
0
1973
1974
1975
1976
1977
1978
1979
1980
Number Impinged
Weight Impinged

Total Projected Impingement

Atlantic cutlassfish

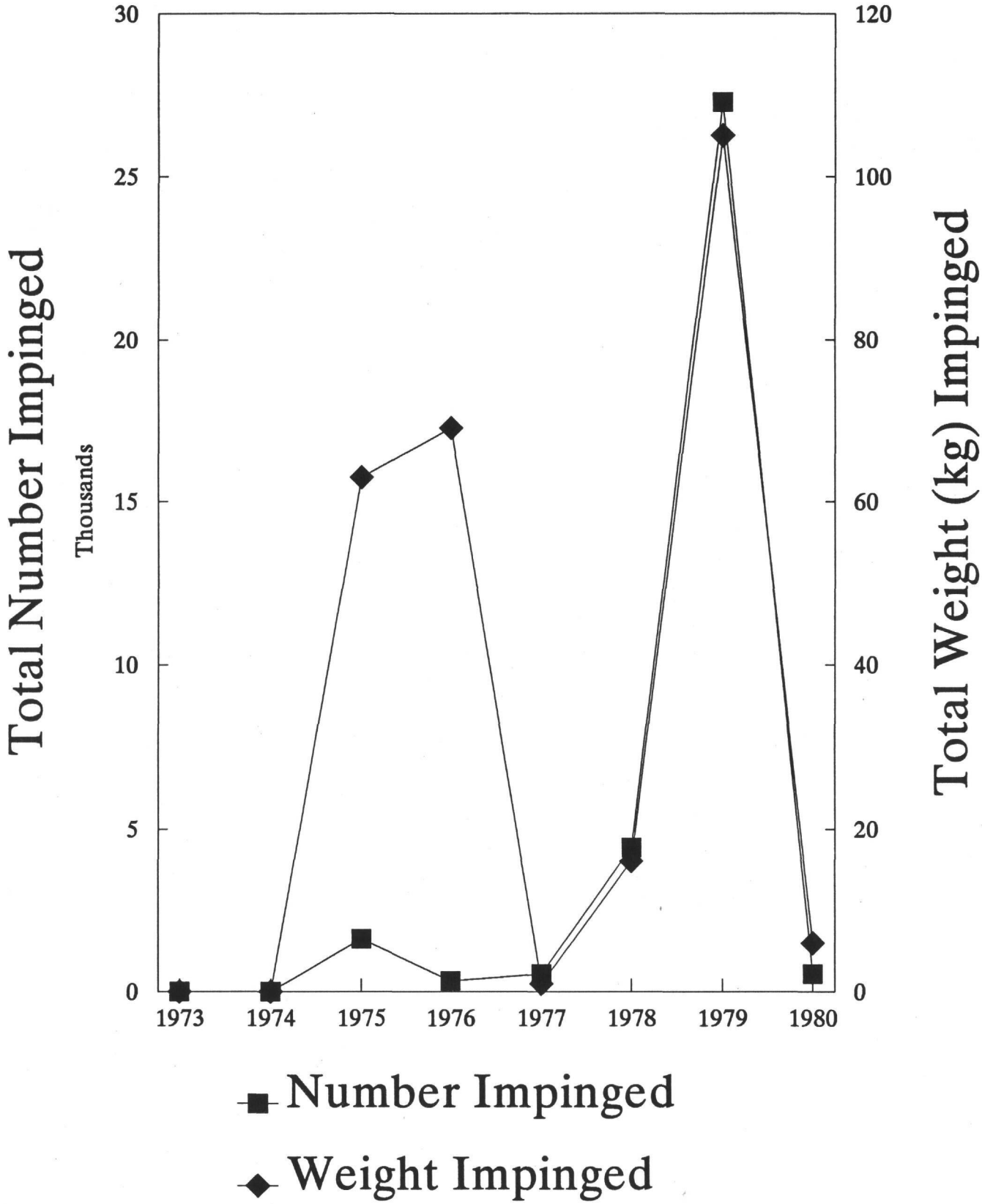



Total Projected Impingement
grass shrimp
Total Number Impinged
Millions
Total Weight (kg) Impinged
30
25
20
15
10
5
0
800
700
600
500
400
300
200
100
0
1973
1974
1975
1976
1977
1978
1979
1980
Number Impinged
Weight Impinged


Total Projected Impingement
gizzard shad
Total Number Impinged
Millions
Total Weight (kg) Impinged
Thousands
0
1
2
3
4
5
6
7
0
1
2
3
4
5
1973
1974
1975
1976
1977
1978
1979
1980
Number Impinged
Weight Impinged

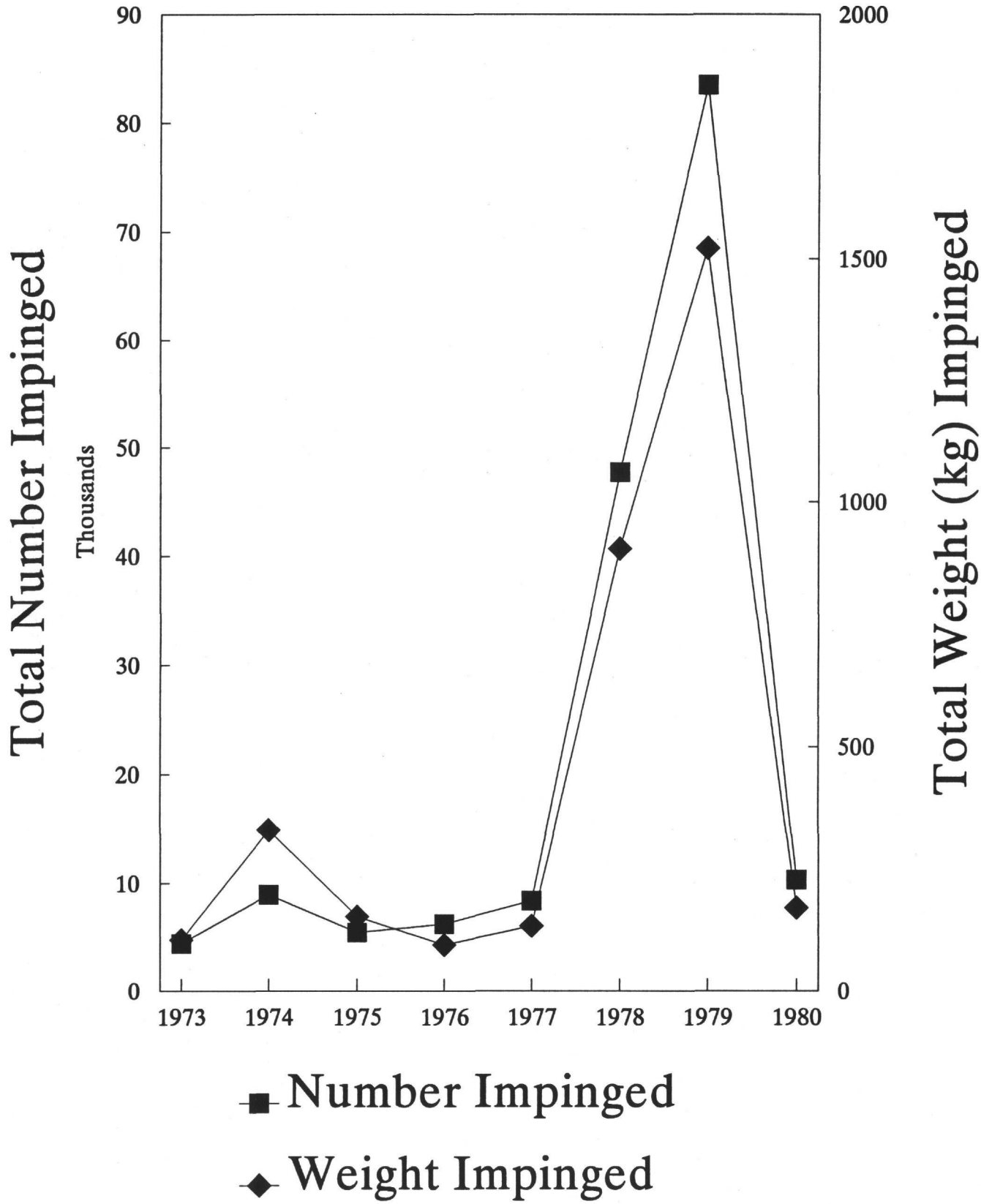
Total Projected Impingement

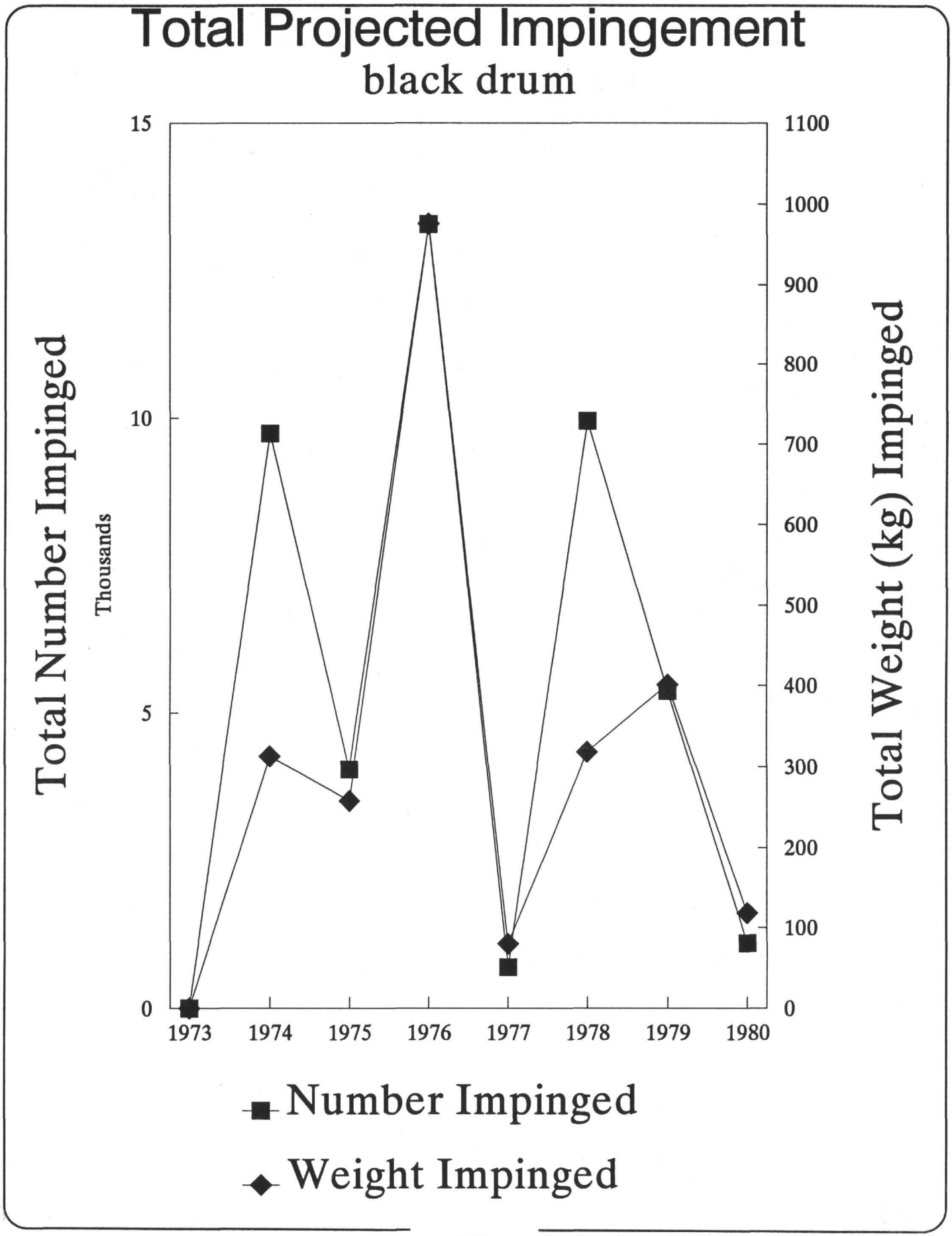
red drum

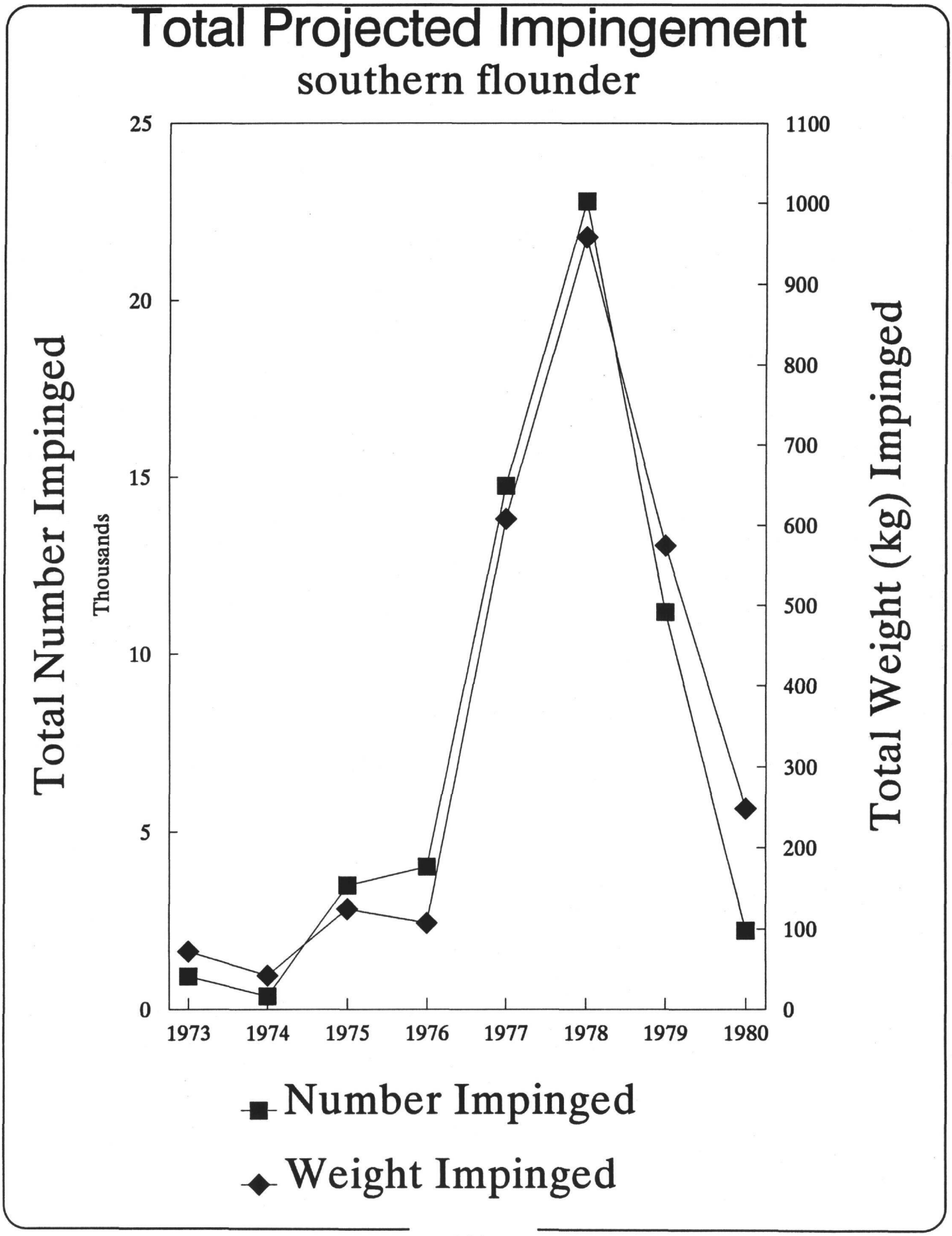


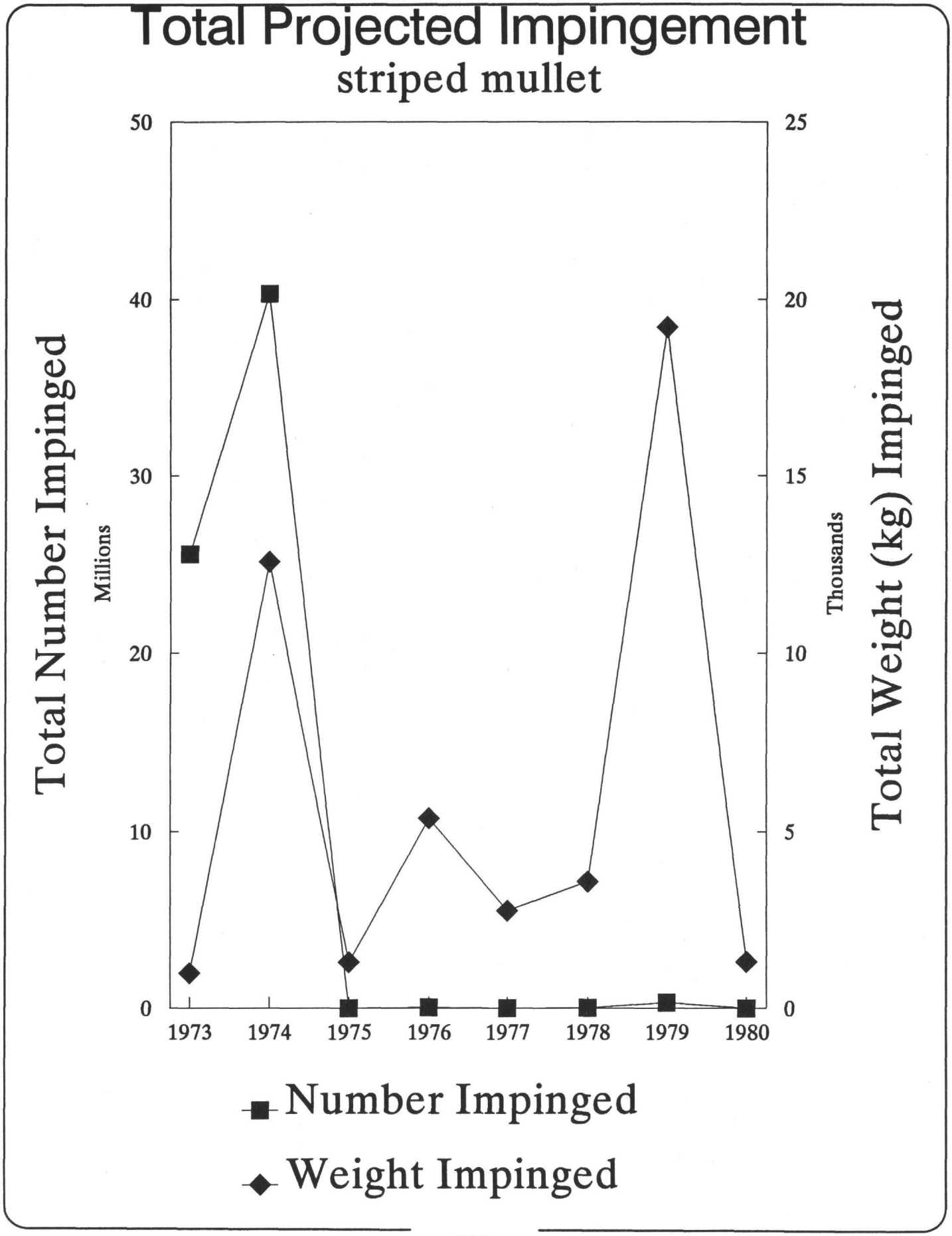
Total Projected Impingement

spotted seatrout




Total Projected Impingement
black drum
Total Number Impinged
Thousands
Total Weight (kg) Impinged
15
10
5
0
1100
1000
900
800
700
600
500
400
300
200
100
0
1973
1974
1975
1976
1977
1978
1979
1980
Number Impinged
Weight Impinged


Total Projected Impingement
southern flounder
Total Number Impinged
Thousands
Total Weight (kg) Impinged
25
20
15
10
5
0
1100
1000
900
800
700
600
500
400
300
200
100
0
1973
1974
1975
1976
1977
1978
1979
1980
Number Impinged
Weight Impinged


Total Projected Impingement
striped mullet
Total Number Impinged
Millions
Total Weight (kg) Impinged
Thousands
50
40
30
20
10
0
25
20
15
10
5
0
1973
1974
1975
1976
1977
1978
1979
1980
Number Impinged
Weight Impinged