APPENDIX A

RESULTS OF FISHERY SAMPLING ON THE STUDY PORTION OF THE POTOMAC RIVER

Fish Species Collected in the Potomac River. 1975.

Scientific Names	Common Names	3	4	5	6	7	8	9	10	11	12	13	14	15	16a	16b	17	18
Amia calva	Bowfin																	
Anguilla rostrata	American Eel									x						x		
Dorosoma cepedianum	Gizzard Shad						x	x	x	x							x	
Esox niger	Chain Pickerel				x			x								x	x	x
Campostoma anomalum	Stoneroller			x	x		x		x		x							
Carassius auratus	Goldfish															x	x	x
Cyprinus carpio	Carp				x					x		x		x		x	x	
Erimyzon oblongus	Silverjaw			x	x											x	x	
Exoglossum maxillingua	Cutlips Minnow			x														
Hybognathus nuchalis	Silvery Minnow																	
Nocomis micropogon	River Chub				x	x	x	x	x	x	x	x		x	x	x	x	x
Notemigonus crysoleucas	Golden Shiner	x		x			x											
Notropis amoenus	Comely Shiner						x	x	x	x	x	x	x		x	x	x	x
Notropis cornutus	Common Shiner			x	x		x	x						x				x
Notropis hudsonius	Spottail Shiner			x	x		x		x	x	x	x	x	x		x		x
Notropis procne	Swallowtail Shiner				x			x		x						x	x	x
Notropis rubellus	Rosyface Shiner				x				x			x	x	x	x	x	x	x
Notropis spilopterus	Spotfin Shiner			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Pimephales notatus	Bluntnose Minnow		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Rhinichthys atratulus	Blacknose Dace		x													x		
Rhinichthys cataractae	Longnose Dace			x	x	x	x								x			
Semotilus atromaculatus	Creek Chub	x	x	x			x										x	x
Semotilus corporalis	Fallfish			x	x		x	x	x	x	x					x		
Catostomus commersoni	White Sucker	x		x	x		x	x	x									x
Erimyzon oblongus	Creek Chubsucker.						x	x										x

1.

Jenkins, Edward and Robert M. Davis. 1976. An investigation of the physical-chemical characteristics, macroinvertebrates, and fish populations of the Upper Potomac River Basin. Study title: Fish fauna studies. Maryland Fisheries Admin. Fed. Aid Proj. F-29-R-1. Job 3.

Fish Species Collected in the Potomac River. 1975.

Scientific Names	Common Names	3	4	5	6	7	8	9	10	11	12	13	14	15	16a	16b	17	1
Ivpentelium nigricans	Northern Hogsucker		x				x	x	x	x					x	x		
Moxostoma macrolepidot	Shorthead Redhorse			x			x	x	x	x			x	x	x	x	x	x
Ictalurus natalis	Yellow Bullhead			x	x		x	x	x			x		x	x	x	x	x
Ictalurus nebulosus	Brown Bullhead		x	x			x		x					x	x	x	x	x
Ictalurus punchatus	Channel Catfish			x					x	x		x		x		x	x	x
Noturus insignis	Margined Madtom						x											
Fundulus diaphanus	Banded Killifish															x		
Ambloplites rupestris	Rock Bass			x	x	x	x	x	x	x				x	x		x	x
Lepomis auritus	Redbreast Sunfish			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Lepomis cyanellus	Green Sunfish				x		x					x		x		x	x	x
Lepomis gibbosus	Pumpkinseed						x		x		x	x	x	x	x	x	x	x
Lepomis gulosus	Warmouth								x						x		x	
Lepomis macrochirus	Bluegill		x	x		x	x	x	x			x	x	x	x	x	x	x
Lepomis megalotis	Longear						x	x	x	x		x			x	x	x	x
Micropterus dolomieui	Smallmouth Bass			x	x	x	x	x	x	x	x	x	x	x				x
Micropterus salmoides	Largemouth Bass		x		x		x		x		x	x	x	x	x		x	x
Pomoxis annularis	White Crappie														x		x	
Pomoxis nigromaculatus	Black Crappie								x					x		x		x
Etheostoma blennioides	Greenside Darter						x			x		x						
Etheostoma flabellare	Fantail Darter						x											
Etheostoma olmsteidi	Tessellated Darter				x			x	x			x	x	x	x		x	
Perca flavescens	Yellow Perch														x			
Cottus bairdi	Mottled Sculpin						x											

Chamait and Davis. 1976.

RESULTS OF FISH COLLECTIONS FROM THE POTOMAC RIVER BELOW GREAT FALLS ON JULY 6-7, 1976

The three mile scenic canyon of the Potomac River below Great Falls is known as Mather Gorge. It is characterized by roaring white water and long deep pools, with steep rock cliffs on each riverbank.

Because of the high average velocity and the deep gorge streambed, the area forms a unique fish habitat uncharacteristic of the majority of the Potomac River.

On July 6-7, 1976, the Maryland Department of Natural Resources conducted a fisheries investigation of the River in the vicinity of Cropely (Old Anglers Inn) near the confluence of Difficult Run (Va.) with the Potomac River. A combination of one 100 yard gill net; two 3X3X6 foot wire "D" fish traps (placed over-night at a depth of 40 feet); one 20 ft. haul seine; and hook and line were used to collect specimens. A total of nineteen species and 278 specimens were collected.

Depth soundings were conducted in the long deep pool in the Potomac River immediately downstream from the Difficult Run confluence. Depths averaged about 30 ft., however a drop-off was located about 100 yards downstream from this confluence which averaged 40 ft. in depth with one sounding reaching 48 ft. During this measurement, the flow in the Potomac River was at slightly below "normal" water stage levels. A temperature profile of the deep pool revealed a uniform temperature gradient from surface to bottom and side to side of 71 to 73°F. The cool waters of Difficult Run (64°F.) mixed and sloped downward along the bottom of the pool. Walleye, Stizostedion vitreum, have been reportedly caught by fishermen in this pool, however sampling with traps and gill net yeilded no specimens of this species. A beaver and an otter were observed near this pool on the morning of July 7. An additional sampling trip is planned in August for this area.

List of Fishes Collected from the Potomac River Below Great Falls on July 6-7, 1976*

	No. of Specimens	Weight in pounds
ANGUILLIDAE		
American Eel *Anguilla rostrata*	3	.2
CYPRINIDAE		
Longnose dace *Rhinichthys cataractae*	8	.1
Swallowtail shiner *Notropis procne*	75	.3
Satinfin shiner *Notropis analostanus*	75	.5
Bluntnose minnow *Pimephales notatus*	3	.1
River chub *Nocomus micropogon*	5	.1
Goldfish *Carassius auratus*	2	1.0
Carp *Cyprinus carpio*	12	24.0
CATOSTOMIDAE		
White sucker *Catostomus commersoni*	2	2.1
Redhorse *Moxostoma macrolepidotum*	15	17.0
CLUPEIDAE		
Gizzard shad *Dorosoma cepedianum*	16	16.0
ICTALURIDAE		
Margined madtom *Noturus insignis*	1	.01
Yellow bullhead *Ictalurus natalis*	2	2.0
Channel catfish *Ictalurus punctatus*	14	21.0
CENTRARCHIDAE		
Smallmouth bass *Micropterus dolomieu*	4	3.5
Redbreast sunfish *Lepomis auritus*	1	.5
White crappie *Pomoxis annularis*	1	.8
PERCIDAE		
Tessellated darter *Etheostoma olmstedi*	35	.3
Shield darter *Percina peltata*	1	.01
TOTALS		
19 Species	278 specimens	89.51 pounds

*By gill net variable mesh

ADDITONAL RESULTS OF FISH COLLECTIONS FROM THE POTOMAC RIVER IN THE AREA NEAR MATHER GORGE

On November 18-19, 1976, the Department of Natural Resources sampled a backwater of the Potomac River north of Sherwin Island, near Cropley, Montgomery County, Maryland. Approximately 100 yards of two inch stretched gill net (six feet deep) was set overnite in water varying from five to fifteen feet in depth. The net was set near a deep hole known to be a wintering area for fish.

Two species, the largemouth bass, and the brown bullhead, were collected during this date but not previously recorded on the July 6-7 survey of this general area. The addition of these two species brings the new total for this area of the Potomac River to 21 species.

All fish collected were quite active and in excellent condition. The water temperature was 41°F. in the backwater and 39°F. in the mainstream Potomac River. Water clarity was excellent, over four feet visability, more than could ever be recalled for this part of the Potomac River in many years. This unsual clarity was probably due to snow melt condtions in the upper Potomac River watershed.

LIST OF FISHES COLLECTED NOV. 18-19, 1976, IN THE BACKWATER NORTH OF SHERWIN ISLAND IN THE POTOMAC RIVER BELOW GREAT FALLS AT A LOCATION NEAR CROPLEY, MD.

	No. of Specimens	Weight in lbs.
CYPRINIDAE		
Carp *Cyprinus carpio*	2	13.
CATOSTOMIDAE		
White Sucker *Catostomus commersoni*	1	1.5
Redhorse *Moxostoma macrolepidotum*	33	40.0
CLUPEIDAE		
Gizzard Shad *Dorosoma cepedianum*	1	1.0
ICTALURIDAE		
Brown Bullhead *Ictalurus nebulosus*	1	.25
Channel Catifish *Ictalurus punctatus*	2	2.0
CENTRARCHIDAE		
White crappie *Pomoxis annularis*	4	2.5
Largemouth Bass *M. salmoides*	3	2.5
TOTALS Eight Species	47	62.75

POTOMAC RIVER FISH SAMPLES

SITE: Potomac R. b/w Little Falls & Brookmont Dam
DATE: 3-5 October 1970
SAMPLING METHOD: AIR

SPECIES	NUMBER	% of TOTAL	WEIGHT (lbs)	% of TOTAL	$\bar{X}$ CONDITION FACTOR (LENGTH GROUP)
Anguilla rostrata	1	1.85	0.25	0.59	
Catostomus commersoni	1	1.85	0.44	1.04	
Carpiodes cyprinus	1	1.85	2.25	5.30	
Cyprinus carpio	3	5.56	16.25	38.27	
Dorosoma cepedianum	3	5.56	1.5	3.53	
Ictalurus punctatus	5	9.26	2.13	5.02	
Lepomis auritus	16	29.63	3.57	8.41	10.02 (6-6.9")
L. gibbosus	1	1.85	0.19	0.45	
Micropterus salmoides	1	1.85	0.19	0.45	
Moxostoma macrolepidotum	11	20.37	14.76	34.76	
Nocomis micropogon	3	5.56	0.62	1.46	
Notropis hudsonius	7	12.96	0.28	0.66	
N. procne	1	1.85	0.03	0.07	
	54	100	42.46	100	

Note: 37 additional fish were caught which are not included in this table.

POTOMAC RIVER FISH SAMPLES

SITE: Carderock, Potomac R.
DATE: 10-12 October 1978
SAMPLING METHOD: All

SPECIES	NUMBER	% of TOTAL	WEIGHT (lbs)	% of TOTAL	$\bar{X}$ CONDITION FACTOR (LENGTH GROUP)
Anguilla rostrata	5	4.27	0.57	0.50	
Carpiodes cyprinus	1	0.85	1.81	1.59	
Catostomus commersoni	1	0.85	1.06	0.93	
Cyprinus carpio	7	5.98	35.06	30.87	
Hypentelium nigricans	1	0.85	0.81	0.71	
Ictalurus catus	1	0.85	2.19	1.93	
I. natalis	1	0.85	0.31	0.27	
I. punctatus	23	19.66	7.87	6.93	3.3([illegible])
Lepomis auritus	19	16.24	3.85	3.39	7.9([illegible])
Micropterus dolomieui	3	2.56	1.29	1.14	
Moxostoma macrolepidotum	47	40.17	58.42	51.43	3.9([illegible])
Notropis hudsonius	7	5.98	0.29	0.26	
Noturus insignis	1	0.85	0.06	0.05	
	117	100	113.59	100	

POTOMAC RIVER FISH SAMPLES

SITE: Potomac R. at Anglers Inn
DATE: 16-17 October 1978
SAMPLING METHOD: All

SPECIES	NUMBER	% of TOTAL	WEIGHT (lbs.)	% of TOTAL	$\bar{X}$ CONDITION FACTOR (LENGTH GROUP)
Carpiodes cyprinus	19	11.24	30.26	25.30	4.6 (14-14.9")
Catostomus commersoni	2	1.18	1.40	1.17	
Cyprinus carpio	3	1.78	10.32	8.63	
Dorosoma cepedianum	3	1.78	1.28	1.07	
Hypentelium nigicans	2	1.18	1.16	0.97	
Ictalurus natalis	7	4.14	2.04	1.71	
I. punctatus	16	9.47	6.26	5.23	3.0 (9-9.9")
Lepomis auritus	29	17.16	3.33	2.78	9.9 (4-4.9")
L. gibbosus	6	3.55	0.78	0.65	7.1 (6-6.9")
L. macrochirus	5	2.96	0.76	0.64	
Micropterus dolomieui	3	1.78	0.40	0.33	
M. salmoides	1	0.59	0.44	0.37	
Moxostoma macrolepidotum	69	40.83	60.68	50.74	3.9 (14-14.9")
Nocomis micropogon	3	1.78	0.38	0.32	
Notropis hudsonius	5	2.96	0.20	0.17	
Pomoxis sps.	2	1.18	0.69	0.58	
	169	100	119.60	100	

POTOMAC RIVER FISH SAMPLES

SITE: Seneca, Potomac R.
DATE: Oct. 20, 1978
SAMPLING METHOD: All (electroshock, gill net, D-trap)

SPECIES	NUMBER	% of TOTAL	WEIGHT	% of TOTAL	$\bar{X}$ CONDITION FACTOR (LENGTH GROUP)
Carassius auratus	1	0.58	1.38	0.71	
Catostomus commersoni	5	2.89	4.95	2.56	
Cyprinus carpio	10	5.78	43.45	22.45	
Hypentelium nigricans	4	2.31	3.17	1.64	
Ictalurus natalis	1	0.58	0.25	0.13	
Ictalurus punctatus	12	6.94	12.52	6.47	2.2 (11-11.9")
Lepomis auritus	28	16.18	4.81	2.49	2.5 (6-6.9")
Lepomis gibbosus	8	4.62	0.85	0.44	
Lepomis macrochirus	10	5.78	1.57	0.81	
Micropterus dolomieui	14	8.09	15.65	8.09	
Micropterus salmoides	5	2.89	3.23	1.67	
Moxostoma macrolepidotum	60	34.68	98.97	51.14	
Nocomis micropogon	3	1.73	-	-	
Notropis hudsonius	8	4.62	0.33	0.17	
Pomoxis annularis	2	1.16	1.44	0.74	
Pomoxis nigromaculatus	2	1.16	0.94	0.49	
	173	100.00	193.51	100.00	

Comparison of percentage composition of Potomac fish population. Sanderson[1] 1955 and collections made in October 1973.

Species	Percent by number 1955	Percent by number 1973	Percent by weight 1955	Percent by weight 1973
Ambloplites rupestris	3.5	0	1.2	0
Anguilla rostrata	0	1.15	0	0.17
Carassius auratus	0	0.19	0	0.29
Carpiodes cyprinus	0	4.04	0	7.64
Catostomus commersoni	7.5	1.73	11.6	1.67
Cyprinus carpio	0.5	4.43	7.0	22.33
Dorosoma cepedianum	0	1.15	0	0.58
Hypentelium nigricans	10.2	1.34	9.8	1.09
Ictalurus catus		0.19		0.47
(Sanderson-I. furcatus?)	1.9		9.0	
Ictalurus natalis	1.0	1.73	1.0	0.55
Ictalurus punctatus	5.2	10.78	9.8	6.12
Lepomis auritus	13.3	17.72	4.2	3.31
Lepomis gibbosus	2.4	2.89	0.7	0.39
Lepomis macrochirus	4.0	2.89	1.5	0.50
Micropterus dolomieui	13.7	3.85	8.2	3.69
Micropterus salmoides	1.0	1.34	1.7	0.82
Moxostoma macrolepidotum	7.6	36.03	28.9	49.48
Nocomis micropogon	0	1.73	0	--
Notropis hudsonius	0	5.20	0	0.23
oturus insignis	0	0.19	0	0.01
Pomoxis annularis	0	0.77	0	0.45
Pomoxis nigromaculatus	0.3	0.38	0.1	0.20
Semotilus atromaculatus	6.1	0	1.82	
Semotilus corporalis	2.8	0	1.8	0
Notemigonus crysoleucas	2.8	0	0.8	0
Notropis procne	0	0.19	0	0.01

1. Sanderson, Albert E. 1955. Summary of Potomac River investigations, 1955. Data report Maryland Game and Inland Fish Commission. Mimeo. n.p.

Ranking of fish species by poundage collected. Potomac River. Oct 1978

Species	Poundage rank by site (% of sample poundage) Little Falls	Carderock	Anglers Inn	Seneca
Anguilla rostrata	10(0.6%)	10(0.5%)		
Carassius auratus				11(0.7%)
Carpiodes cyprinus	4(5.3%)	6(1.6%)	2(25.3%)	
Catastomus commersoni	8(1.0%)	8(0.9%)	7(1.2%)	5(2.6%)
Cyprinus carpio	1(38.3%)	2(30.9%)	3(8.6%)	2(22.5%)
Dorosoma cepedianum	6(3.5%)		8(1.1%)	
Hypentelium nigricans		9(0.7%)	9(1.0%)	8(1.6%)
Ictalurus catus		5(1.9%)		
Ictalurus natalis		11(0.3%)	6(1.7%)	15(0.1%)
Ictalurus punctatus	5(5.0%)	3(6.9%)	4(5.2%)	4(6.5%)
Lepomis auritus	3(8.4%)	4(3.4%)	5(2.8%)	6(2.5%)
Lepomis gibbosus	11(0.5%)		10(0.7%)	13(0.4%)
Lepomis macrochirus			11(0.6%)	9(0.8%)
Micropterus dolomieui		7(1.1%)	14(0.3%)	3(8.1%)
Micropterus salmoides	12(0.5%)		13(0.4%)	7(1.7%)
Moxostoma macrolepidotum	2(34.8%)	1(51.4%)	1(50.7%)	1(51.1%)
Nocomis micropogon	7(1.5%)		15(0.3%)	
Notropis hudsonius	9(0.7%)	12(0.3%)	16(0.2%)	14(0.2%)
Notropis procne	13(0.1%)			
Noturus insignis		13(0.1%)		
Pomoxis annularis			12(0.6%)	10(0.7%)
Pomoxis nigromaculatus				12(0.5%)

Potomac River Low Flow Study - Fish Collection Data

Sampling Station Location - Potomac River backwater (just above Old Anglers Inn)
Sampling Date - 20 November 1980
River Length Sampled - 91.4 meters (300 feet)
Method of Sampling - Electrofishing with 120v AC shocker - representative collection obtained
Collectors - G. Harman, J. Allison, W. Butler, S. Goodbred, B. Folker, G. Ruddy

COMMON NAME/SCIENTIFIC NAME[1]	TOTAL COUNT	TOTAL WEIGHT (gms)*	TOTAL LENGTH (cm)
Rosyside dace/ *Clinostomus funduloides* Girard	1	0.9	5.3
Swallowtail shiner/ *Notropis procne* (Cope)	1	0.5	4.3
Spotfin shiner/ *Notropis spilopterus* (Cope)	272	510.2	3.3 - 9.4
Bluntnose minnow/ *Pimephales notatus* (Rafinesque)	60	127.6	3.0 - 8.1
Shorthead redhorse/ *Moxostoma macrolepidotum* (Lesueur)	1	12.9	10.9
Yellow bullhead/ *Ictalurus natalis* (Lesueur)	2	222.0	20.6 - 21.1
Redbreast sunfish/ *Lepomis auritus* (Linnaeus)	15	118.0	3.0 - 15.5
Pumpkinseed/ *Lepomis gibbosus* (Linnaeus)	16	31.2	3.3 - 6.1
Longear sunfish/ *Lepomis megalotis* (Rafinesque)	2	27.9	1.7 - 26.2
Bluegill/ *Lepomis macrochirus* (Rafinesque)	22	23.2	3.0 - 5.1
Largemouth bass/ *Micropterus salmoides* (Lacepede)	2	58.0	12.7 - 14.2

1 - American Fisheries Society-Special Publication No. 6, Third Edition, 1970.
* - see attached page for length and weight distribution of more abundant species.

Potomac River Low Flow Study - Fish Collection Data

Sampling Station Location: Potomac River backwater just above Old Anglers Inn
Sampling Date: 20 November 1980

Length and weight distribution of more abundant species

Spotfin shiner-T.L.(cm)	<3.3	3.6-4.1	4.3-4.8	5.1-5.6	5.8-6.4	6.6-7.1	7.4-7.9	8.1-8.6	8.8-9.4
Count	6	41	76	49	30	29	25	13	3
T. weight (gms)	1.9	23.2	66.2	68.3	65.7	88.0	106.4	70.5	20.0
$\bar{x}$ weight (gms)	0.3	0.6	0.9	1.4	2.2	3.0	4.3	5.4	6.7

Bluntnose minnow T.L.(cm)	3.0	3.3-3.6	3.8-4.1	4.3-4.6	4.8-5.1	5.3-5.6	5.8-6.1	6.4-6.6	6.9-7.1	7.4-7.6	7.9-8.1
Count	1	2	4	5	5	15	10	5	8	4	1
T. weight (gms)	0.2	0.8	2.2	4.5	6.4	24.8	21.9	14.7	28.9	18.0	5.2
$\bar{x}$ weight (gms)	0.2	0.4	0.6	0.9	1.3	1.7	2.2	2.9	3.6	4.5	5.2

Redbreast sunfish T.L.(cm)	3.0	3.3	4.1	4.6	4.8	5.1	5.6	6.6	7.6	9.9	15.5
Count	2	3	2	1	1	1	1	1	1	1	1
T. weight (gms)	1.0	2.4	3.0	2.0	2.4	2.6	4.0	6.0	8.9	17.7	68.0
$\bar{x}$ weight (gms)	0.5	0.8	1.5	2.0	2.4	2.6	4.0	6.0	8.9	17.7	68.0

Pumpkinseed T.L.(cm)	3.3	4.1	4.3	4.6	4.8	5.1	5.3	5.8	6.1
Count	1	4	4	1	1	2	1	1	1
T. weight (gms)	0.7	4.9	5.6	2.1	2.3	4.8	3.0	3.5	4.3
$\bar{x}$ weight (gms)	0.7	1.2	1.4	2.1	2.3	2.4	3.0	3.5	4.3

Bluegill T.L.(cm)	3.0	3.3	3.6	3.8	4.1	4.3	4.6	4.8	5.1
Count	2	6	2	2	1	3	1	2	3
T. weight (gms)	0.5	3.3	1.3	1.7	1.2	3.8	1.5	3.6	6.3
$\bar{x}$ weight (gms)	0.25	0.55	0.65	0.85	1.2	1.3	1.5	1.8	2.1

$\bar{x}$ = average weight/fish

Potomac River Low Flow Study - Fish Collection Data

Sampling Station Location - Potomac River along northwest bank in the region northwest of Vasco Island
Sampling Date - 20 November 1980
River Length Sampled - 230 meters (755 feet)
Method of Sampling - Electrofishing with 120v AC shocker - representative collection obtained
Collectors - G. Harman, J. Allison, W. Butler, S. Goodbred, B. Folker, G. Ruddy

COMMON NAME/SCIENTIFIC NAME[1]	TOTAL COUNT	TOTAL WEIGHT (gms)*	TOTAL LENGTH (cm)
American eel/ *Anguilla rostrata* (Lesueur)	11	308.4	18.0 - 33.3
Rosyside dace/ *Clinostomus funduloides* Girard	1	1.5	5.6
River chub/ *Nocomis micropogon* (Cope)	2	14.9	7.6 - 9.1
Spottail shiner/ *Notropis hudsonius* (Clinton)	268	405.6	3.6 - 10.7
Rosyface shiner/ *Notropis rubellus* (Agassiz)	7	12.9	4.8 - 7.6
Spotfin shiner/ *Notropis spilopterus* (Cope)	841	1557.1	2.3 - 9.7
Bluntnose minnow/ *Pimephales notatus* (Rafinesque)	108	173.4	2.5 - 7.6
Northern hogsucker/ *Hypentelium nigricans* (Lesueur)	1	12.0	10.7
Redbreast sunfish/ *Lepomis auritus* (Linnaeus)	2	5.6	5.3 - 5.8
Pumpkinseed/ *Lepomis gibbosus* (Linnaeus)	1	1.7	5.1
Tesselated darter/ *Etheostoma olmstedi* Storer	2	4.3	6.1 - 7.1

1 - American Fisheries Society-Special Publication No. 6, Third Edition, 1970

* - see attached page for length and weight distribution of more abundant species.

POTOMAC RIVER LOW FLOW STUDY - FISH COLLECTION DATA

Sampling Station Location: Potomac River along northwest bank in the region northwest of Vasco Island
Sampling Date : 20 November 1980

Length and Weight Distribution of More Abundant Species

American eel											
T.L. (cm)	18.0	20.1	20.3	23.1	24.1	24.4	26.9	28.2	28.4	30.0	33.3
Count	1	1	1	1	1	1	1	1	1	1	1
T. weight (gms)	8.7	11.6	13.3	20.3	17.7	22.7	28.5	35.5	36.0	45.0	69.1

Spottail shiner										
T.L. (cm)	3.6	3.8-4.6	4.8-5.3	5.6-6.1	6.4-6.9	7.1-7.6	7.9-8.4	8.6-9.1	9.4-9.9	10.2-10.7
Count	1	66	113	33	28	16	9	1	-	1
T. weight (gms)	0.1	48.0	128.7	54.5	62.0	56.5	42.2	5.6	-	8.0
$\bar{x}$ weight (gms)	0.1	0.7	1.1	1.7	2.2	3.5	4.7	5.6	-	8.0

Rosyface shiner						
T.L. (cm)	4.8	5.8	6.4	6.6	6.9	7.6
Count	1	1	1	1	2	1
T. weight (gms)	0.5	1.4	1.7	1.8	4.6	2.9

Spotfin shiner												
T.L. (cm)	2.3-2.5	2.8-3.0	3.3-3.6	3.8-4.1	4.3-4.6	4.8-5.1	5.3-5.6	5.8-6.1	6.4-6.6	6.9-7.1	7.4-7.6	7.9-8.1
Count	2	8	30	36	84	119	146	163	91	77	46	20
T. weight (gms)	0.1	1.5	10.0	24.4	60.7	128.3	215.5	303.9	214.5	227.1	171.5	92.8
$\bar{x}$ weight (gms)	0.05	0.2	0.3	0.7	0.7	1.1	1.5	1.9	2.4	2.9	3.7	4.6

T.L. (cm)	8.4-8.6	8.9-9.1	9.4-9.7
Count	14	4	1
T. weight (gms)	74.0	25.5	7.3
$\bar{x}$ weight (gms)	5.3	6.4	7.3

Bluntnose minnow										
T.L. (cm)	2.5-2.8	3.0-3.3	3.6-3.8	4.1-4.3	4.6-4.8	5.1-5.3	5.6-5.8	6.1-6.4	6.6-6.9	7.1-7.6
Count	1	-	3	8	27	29	30	3	2	5
T. weight (gms)	0.3	-	1.5	5.5	28.2	41.2	59.6	8.3	7.0	21.8
$\bar{x}$ weight (gms)	0.3	-	0.5	0.7	1.0	1.4	2.0	2.8	3.5	4.4

$\bar{x}$ = average weight/fish