

WATER QUALITY AT MISCELLANEOUS SITES

DELAWARE RIVER BASIN NATIONAL WATER-QUALITY ASSESSMENT PROGRAM, FISH COLLECTION RESULTS,
JULY-AUGUST 1998 AND JUNE-AUGUST 1999

Fish-community surveys were conducted at 6 stream sites in the Delaware River basin during 1999. Sites were located in New Jersey and Pennsylvania. Fish were collected by electrofishing with pulsed-DC current in a representative 157 to 300 meter long reach at each stream site. Two electrofishing passes were conducted at each reach, except for stations 01440000 and 01464907, at which one pass was conducted. Kick seining was done briefly in riffles after completion of electrofishing. One-quarter inch mesh was used for the kick seine and the dip nets. Fish were identified, measured, weighed, and checked for anomalies such as parasites, lesions, and skeletal deformities. Most individuals were returned to the stream after processing. More details regarding collection methods can be found in Meador and others, 1993, Methods for sampling fish communities as part of the National Water-Quality Assessment program: U.S. Geological Survey Open-File Report 93-104, 40 p. Additional surface-water and/or water-quality data for these sites can be found in the continuous record station section of this report. Family names are in uppercase, scientific names are in italics, and common names follow. Minimum and maximum total lengths (in mm) are in parenthesis below abundance.

List of stations and collection dates

Station ID	Station name	Collection Date
01440000	FLAT BROOK NEAR FLATBROOKVILLE, NJ	07-22-99
01451800	JORDAN CREEK NEAR SCHNECKSVILLE, PA	07-16-99
01464907	LITTLE NESHAMINY C AT VALLEY ROAD NR NESHAMINY, PA	07-13-99
01470779	TULPEHOCKEN CR NR BERNVILLE, PA.	07-21-99
01472157	FRENCH CREEK NEAR PHOENIXVILLE, PA.	07-20-99
01477120	RACCOON CREEK NEAR SWEDESBORO, NJ	07-15-99

Fish species, numbers, minimum and maximum total lengths (in mm), collected during 1999

	01440000	01451800	01464907	01470779	01472157	01477120
PETROMYZONTIDAE						
<i>Lampetra appendix</i> , American brook lamprey	0	0	0	0	0	58 (94-182)
<i>Petromyzon marinus</i> , sea lamprey	2 (110-115)	0	0	0	0	3 (146-161)
ANGUILLIDAE						
<i>Anguilla rostrata</i> , American eel	132 (135-580)	16 (180-720)	22 (83-650)	0	4 (375-820)	50 (99-760)
CLUPEIDAE						
<i>Alosa sapidissima</i> , American shad	0	0	0	0	0	4 (55-62)
ESOCIDAE						
<i>Esox americanus</i> , redbfin pickerel	0	0	0	0	0	1 (79-79)
<i>E. niger</i> , chain pickerel	0	0	0	0	0	1 (52-52)
CYPRINIDAE						
<i>Cyprinella analostana</i> , satinfin shiner	0	31 (45-73)	172 (51-101)	0	14 (46-76)	16 (52-92)
<i>C. spiloptera</i> , spotfin shiner	0	0	44 (45-95)	5 (61-91)	0	0
<i>Cyprinus carpio</i> , common carp	0	0	0	73 (299-603)	0	0
<i>Exoglossum maxillingua</i> , cutlips minnow	160 (49-125)	85 (28-109)	0	97 (66-129)	171 (23-138)	0
<i>Luxilus cornutus</i> , common shiner	13 (27-73)	57 (27-65)	5 (75-127)	0	28 (29-83)	22 (68-116)
<i>Notemigonus crysoleucas</i> , golden shiner	0	0	6 (78-180)	0	0	2 (88-164)
<i>Notropis amoenus</i> , comely shiner	0	0	0	0	0	1 (34-34)
<i>N. hudsonius</i> , spottail shiner	0	0	431 (35-105)	28 (35-112)	17 (32-93)	0
<i>N. procne</i> , swallowtail shiner	6 (45-62)	0	1594 (49-72)	0	1 (39-39)	0
<i>Pimephales notatus</i> , bluntnose minnow	0	70 (21-73)	0	22 (43-71)	0	0
<i>Rhinichthys atratulus</i> , blacknose dace	590 (27-68)	284 (32-77)	2 (36-67)	146 (32-82)	54 (28-73)	0
<i>R. cataractae</i> , longnose dace	49 (32-126)	75 (28-88)	0	136 (36-119)	46 (30-100)	0
<i>Semotilus atromaculatus</i> , creek chub	0	0	2 (93-100)	9 (44-162)	0	0
<i>S. corporalis</i> , fallfish	0	0	0	0	119 (42-302)	74 (31-220)

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CATOSTOMIDAE						
<i>Catostomus commersoni</i> , white sucker	97 (32-152)	1975 (34-406)	229 (30-264)	472 (35-332)	140 (32-443)	56 (45-387)
<i>Hypentelium nigricans</i> , northern hog sucker	7 (75-187)	0	0	0	0	0
ICTALURIDAE						
<i>Ameiurus natalis</i> , yellow bullhead	0	0	2 (30-32)	0	1 (146-146)	0
<i>A. nebulosus</i> , brown bullhead	0	0	1 (201-201)	3 (266-292)	0	2
<i>Ictalurus catus</i> , white catfish	0	0	0	0	0	1 (288-288)
<i>I. punctatus</i> , channel catfish	0	0	0	2 (429-597)	0	0
<i>Noturus insignis</i> , margined madtom	1 (80-80)	204 (28-137)	0	0	28 (71-151)	0
APHREDODERIDAE						
<i>Aphredoderus sayanus</i> , pirate perch	0	0	0	0	0	4 (79-99)
CYPRINODONTIDAE						
<i>Fundulus diaphanus</i> , banded killifish	0	23 (57-83)	845 (17-86)	0	0	0
PERCICHTHYIDAE						
<i>Morone americana</i> , white perch	0	0	0	0	0	1 (158-158)
<i>M. saxatilis</i> , striped bass	0	0	0	0	0	2 (136-158)
CENTRARCHIDAE						
<i>Ambloplites rupestris</i> , rock bass	1 (162-162)	41 (25-163)	9 (130-160)	34 (66-223)	85 (21-200)	0
<i>Lepomis sp.</i>	0	1 (22-22)	0	0	0	0
<i>L. auritis</i> , redbreast sunfish	0	28 (70-137)	325 (51-182)	0	3 (60-120)	12 (70-131)
<i>L. cyanellus</i> , green sunfish	0	0	2 (106-120)	12 (64-135)	16 (69-160)	0
<i>L. gibbosus</i> , pumpkinseed	0	0	1 (102-102)	4 (95-110)	1 (102-102)	18 (50-130)
<i>L. macrochirus</i> , bluegill	0	0	3 (72-79)	2 (117-144)	0	7 (50-90)
<i>Micropterus dolomieu</i> , smallmouth bass	2 (50-50)	56 (48-192)	0	0	86 (35-419)	0
<i>M. salmoides</i> , largemouth bass	0	0	4 (61-69)	2 (70-70)	0	1 (120-120)
<i>Pomoxis nigromaculatus</i> , black crappie	0	0	1 (160-160)	0	0	0
PERCIDAE						
<i>Etheostoma olmstedi</i> , tessellated darter	61 (26-72)	18 (24-65)	54 (30-70)	46 (30-80)	44 (27-75)	34 (35-74)
<i>Percina peltata</i> , shield darter	29 (47-86)	0	0	0	33 (47-93)	0