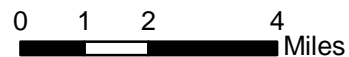


Sidney Brook - FIBI008a



- (FIBI Sampling Location
- Small Streams (1st and 2nd Order)
- Large Streams (3rd Order and Larger)

- IBI Ratings**
- Excellent
 - Good
 - Fair
 - Poor



SUMMARY OF RESULTS – FIBI008a



1. Stream Name:	Sidney Brook
2. Sampling Date:	7/27/2005
3. Sampling Location:	Sidney Rd. (CR 617)
4. Municipality:	Franklin Twp.
5. County:	Hunterdon
6. Watershed Management Area:	8
7. Contributing Drainage Area (Sq. Mi.):	5.2
8. Electrofishing Gear:	2 Backpacks
9. FIBI Score and Rating:	Round 1 Excellent (46); Round 2 Good (44)
10. Habitat Score Rating:	Round 1 Optimal (164); Round 2 Optimal (160)
11. Fishable Species Present:	Yes
12. Relevant AMNET ¹ Station Data:	
Proximity of FIBI station to AMNET station:	AN0324a
AMNET Rating:	2004 – Non-Impaired
13. Stream Chemistries:	
Dissolved Oxygen (mg/l)	7.24
Temperature °C.	22.8
pH	7.70
Conductivity (µmhos/cm)	275
14. Length of Stream Sampled:	150m
15. Water Clarity:	Clear
16. Average Open Forest Canopy:	27.3%
17. Discharge:	1.6 cfs
18. Substrate:	39% Gravel/Sand, 45% Cobble, 5% Boulder, 10% Silt, 1% Concrete
19. Habitat:	35% Riffle, 40% Run, 25% Pool
20. Snags:	Yes
21. Periphyton:	Moderate
22. Submerged Aquatic Vegetation	Yes
23. Outfalls:	None
24. Number of Fish Species Identified:	17
25. Total Number of Fish Collected:	1179
26. Number of Fish With Anomalies:	5
27. Other Observations:	

¹ AMNET is the acronym for the DEP's ambient benthic macroinvertebrate monitoring network – a series of 820 monitoring stations located throughout the state's waterways that collects data on the health of bottom dwelling stream fauna which in turn is used to assess general water quality

FIBI008A
SIDNEY BROOK
SIDNEY ROAD (CR 617)
FRANKLIN TWP., HUNTERDON COUNTY



Legend

- FIBI Start
- FIBI End
- Direction of Flow
- FIBI Reach
- Mowed Grass

FIBI008a-Sidney Brook @ Sidney Rd
Date Sampled - 7/27/2005

Excellent **Good** Fair Poor

	Score
# of Fish Species	5
# of Benthic Insectivorous Species (BI) (excluding White Suckers and Bullheads)	5
# of Trout and Centrarchid Species (excluding Green Sunfish and Bluegill)	5
# of Intolerant Species (IS)	5
Proportion of Tolerant Individuals	3
Proportion of Individuals as Generalists	3
Proportion of Individuals as Insectivorous Cyprinids	5
Proportion of Individuals as Trout OR Proportion of Individuals as Piscivores (excluding American Eel)*	*whichever gives better score 3
# of Individuals in Sample (excluding Tolerant Species)	5
Proportion of Individuals w/disease/anomalies (excluding blackspot)	5
Total	44

Stream Rating	
45-50	Excellent
37-44	Good
29-36	Fair
10-28	Poor

	Condition Category			
	Optimal	Suboptimal	Marginal	Poor
1. Epifaunal Substrate /Available Cover Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are <u>not</u> new fall and not transient). SCORE 18	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
2. Embeddedness Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. Layering of cobble provides diversity of niche space SCORE 11	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
3. Velocity/Depth Regimes All 4 velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (slow is <0.3 m/s, deep is >0.5 m) SCORE 15	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
4. Sediment Deposition Little or no enlargement of islands or point bars and less than 5% (<20% for low-gradient streams) of the bottom affected by sediment deposition. SCORE 13	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
5. Channel Flow Status Water reaches base of both lower banks, and minimal amount of channel substrate is exposed. SCORE 18	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
6. Channel Alteration Channelization or dredging absent or minimal; stream with normal pattern. SCORE 19	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
7. Frequency of Riffles (or bends) Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important. SCORE 18	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
8. Bank Stability (score each bank) Note: determine left or right side by facing downstream. SCORE 7 (LB) SCORE 8 (RB)	Left 10 9 Right 10 9	8 7 6 8 7 6	5 4 3 5 4 3	2 1 0 2 1 0
9. Bank Vegetative Protection (score each bank) SCORE 10 (LB) SCORE 9 (RB)	Left 10 9 Right 10 9	8 7 6 8 7 6	5 4 3 5 4 3	2 1 0 2 1 0
10. Riparian Vegetative Zone Width (score each bank riparian zone) SCORE 10 (LB) SCORE 4 (RB)	Left 10 9 Right 10 9	8 7 6 8 7 6	5 4 3 5 4 3	2 1 0 2 1 0

HABITAT SCORE

160

HABITAT SCORES	VALUE
OPTIMAL	160 – 200
SUB-OPTIMAL	110 – 159
MARGINAL	60 – 109
POOR	< 60

FIBI008a-R2

Sidney Brook (Grandin Stream)

07/27/2005

Common Name	Scientific Name	Abundance	Size Range (inches)
White Sucker	<i>Catostomus commersoni</i>	250	-
Blacknose Dace	<i>Rhinichthys atratulus</i>	236	-
Common Shiner	<i>Luxilus cornutus</i>	158	-
Longnose Dace	<i>Rhinichthys cataractae</i>	152	-
Fallfish	<i>Semotilus corporalis</i>	101	-
Tessellated Darter	<i>Etheostoma olmstedii</i>	96	-
Spottail Shiner	<i>Notropis hudsonius</i>	45	-
Creek Chub	<i>Semotilus atromaculatus</i>	35	-
Green Sunfish	<i>Lepomis cyanellus</i>	30	2.1 - 4.9
Largemouth Bass	<i>Micropterus salmoides</i>	23	1.8 - 6.7
Bluegill	<i>Lepomis macrochirus</i>	18	1.5 - 3.2
American Eel	<i>Anguilla rostrata</i>	15	-
Redbreast Sunfish	<i>Lepomis auritus</i>	8	2.0 - 4.8
Margined Madtom	<i>Noturus insignis</i>	4	-
Brown Trout	<i>Salmo trutta</i>	4	8.1 - 9.1
Pumpkinseed	<i>Lepomis gibbosus</i>	3	3.2 - 3.6
Satinfin Shiner	<i>Cyprinella analostana</i>	1	-

* indicates stocked fish

Species Identified at Sidney Brook (FIBI008a)
(Not to Scale)



White Sucker



Longnose Dace



Brown Trout



Creek Chub



Common Shiner



Blacknose Dace

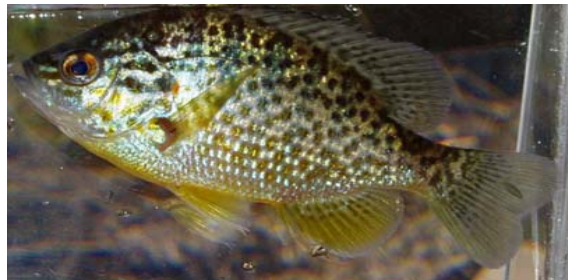
Species Identified at Sidney Brook (FIBI008a)
(Not to Scale)



Bluegill Sunfish



Satinfin Shiner



Pumpkinseed Sunfish



American Eel

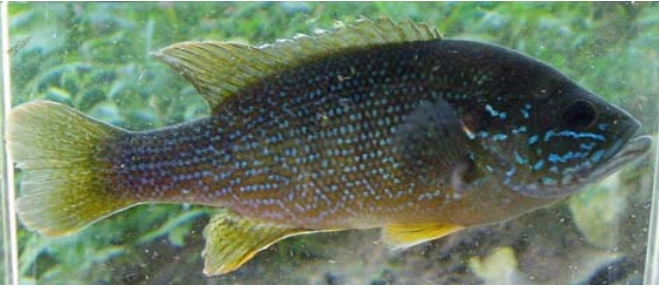


Fallfish



Largemouth Bass

Species Identified at Sidney Brook (FIBI008a)
(Not to Scale)



Green Sunfish



Tessellated Darter



Spottail Shiner



Redbreast Sunfish



Margined Madtom