Belleayre Mountain Ski Center UMP-DEIS

Appendix AC
Electrofishing Survey Data

New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
Bureau of Fisheries, Region 3
21 South Putt Corners Road, New Paltz, New York 12561-1696
Phone: (914) 256-3161 • **FAX:** (914) 255-4659
Website: www.dec.state.ny.us

John P. Cahill
Commissioner

3864 Mills

8 November 2000

NOV 13 2000

Kevin J. Franke
The LA Group, P.C.
40 Long Alley
Saratoga Springs, NY 12866

Dear Mr. Franke:

I have collected all the survey data that we have in our files for the streams you requested in Ulster County. Over the years the format that the Bureau of Fisheries has used to record this information has evolved, as has our method of storing and retrieving this data. Therefore, you will see that the attached information has been provided in a variety of different forms. If this is hard for you to follow, please give me a call and I will help clarify the information. The most recent data has been coded on standard forms that are then entered into a statewide database. The database is not fully functional at this point and there is a backlog of data yet to be entered. For the data that has not yet been entered into the database, I have included the raw data forms. To understand the codes that are used, please check the back of the forms. I have included photocopies of the USGS quadrangle maps that show the stream numbering system our Department uses and the sites sampled this last September.

The enclosed stream surveys, and the year(s) they were conducted, are listed below:
Lost Clove Brook (H-171-53): 1936, 1957 and 2000
Birch Creek (H-171-52): 1936, 1956, 1980, 1988, 1989, 1993 and 1996
Giggle Hollow (H-171-52-3): 2000
Crystal Spring Brook (H-171-52-4): 2000
Woodchuck Hollow (H-171-52-4-1): 2000
Cathedral Glen Brook (H-171-52-4-1A): 2000

You will see that all of these streams contain adult and fingerling trout and therefore protection should be given to these streams to ensure that trout and trout spawning habitat is not degraded.

Sincerely,

Michael J. Flaherty
Senior Aquatic Biologist
Region 3 Bureau of Fisheries

cc w/o enclosures: A.. Ciesluk (Div. of Environmental Permits, Region 3)
W. Elliot (Bureau of Fisheries Region 3)
J. Isaacs (Bureau of Habitat Region 3)
D. Popp (Bureau of Habitat Region 4)
Records Access Office , Region 3 (FOIL #668-3/00)
E. Zicca (Div. of Water, Region 3)

MJF:mjf File:LAGroup.wpd

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FISH COLLECTION OR SMALL STREAM SURVEY

Survey Delaware Date 7/30/76 Authority W. Adriance

Name and key Emory Br. (70-80-12) Quad West Kill (7½')

Station location 0.3 bel. T7 County Delaware

Length ____ Width ____ Depth ____ Acres 0.02

Flow ____ Temp: A ____ W ____ Time (EST) ____

Gear 230V DC Georator Efficiency (yg trout) 10%

Young trout per acre (adjusted total) 4,500

Factors: W NSA N 3 H 1 F 1 Total NSA

General notes:

This station begins at the bridge crossing 0.3 mi. below Trib. 7 and proceeds 150' downstream. The stream is heavily shaded by shrubs and alders.

There is an abundance of small trout in this stream, many more than indicated by the collection. Growth rates are poor and food limited.

Stocking policy:

573.2

94-14-7 (5/76)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FISH COLLECTION OR SMALL STREAM SURVEY

Survey Delaware Date 7/30/76 Authority W. Adriance

Name and key Emory Br. (D-70-80-12) Quad Fleischmanns (7½')

Station location 0.2 abv. Mth. County Delaware

Length ____ Width ____ Depth ____ Acres 0.03

Flow ____ Temp: A 70 W 57 Time (EST) ____

Gear 230V DC Georator Efficiency (yg trout) 25%

Young trout per acre (adjusted total) 1,067

Factors: W NSA N 3 H 1 F 1 Total NSA

General notes:

This station is located adjacent to the school in Flieschmanns beginning 100' below the bridge and proceeding 80' downstream.

This section is located in the Village of Flieschmanns.

Stocking policy:

573.1

94-14-7 (5/76)
Formerly FW-88

Name of species	Abundance	Number and description
alvelinus fontinalis	A	yg: 9(2.2-3.1") yr: 14(3.5-4.5") older: 7(4.9-5.5")
ottus sp.	C	

Name of species	Abundance	Number and description
Salmo trutta	C+	yg: 8(2.2-2.9") yr: 17(6.0-7.4") older: 4(8.1-11.3")
Salvelinus fontinalis	C	yg: - yr: = older: 1(7.0")
Cottus sp.	C	

Recommendations: Fishing rights, improvement, spearing, commercial bait, set lines or other:

Posting Notes

Miscellaneous:

The upper portion of the stream is in undeveloped woods, the middle in a rural housed area, and the lower section in the Village of Fleischmanns.

Stocking Policy:

Entire; 5.0 miles, BT, ST, NSA

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STREAM SURVEY

Name & Key of Stream Emory Brook (D-70-80-12) Quality Classification C(t)

Section Entire Mileage (Section) 5.0 Mileage (Entire) 5.0

County(s) Delaware, Greene Town(s) Middletown, Halcott

Quadrangle(s) Margaretville (15'), Phoenicia (15'), Fleischmanns (7½'), West Kill (7½')

Watershed Delaware Date 7/30/76 Authority W. Adriance

Previous Stocking

Postage Mileage (Section) Posted Mileage (Entire)

Accessibility (Section) Accessibility (Entire)

Trout inhabited area (Section) 5.0 Trout inhabited area (Entire) 5.0

Special features (dams, falls, pollution, dredging, erosion, etc.)

FW-87

	0.3 bel. T7		0.2 abv Mth
Station Location	**Upper (3)**	**Middle (2)**	**Lower (1)**
Average Width (Actual)	6'(4.5-15')		15'(10-16')
(Normal)	6'(4.5-15')		15'(10-16')
Depth	1.5':0.1'		1.5':0.18'
Volume	.46 cfs		1.6 cfs
Velocity	mod-low		mod-low
Color	white		white
Turbidity	none		none
Altitude	2,020'		1,515'
Bottom	R, Gr, St,		G, R
Temperature	74 **A.** **W.** 58	**A.** **W.**	70 **A.** **W.** 5
Time-Weather	1:30-cloudy		12:00-cloud
Habitat	(1)		(1)
% Pool	15% **G.** 1	% **G.**	40 % **G.** 1
Shelter	1		1
Cover	3		1
Fertility	1		1
Forage	1		1
Soil Type	1		1
Wild Trout (F)	(9)		(8)
No. per Acre	450		266
Trout: Non-Trout	(3)		(3)
Estimate by Weight	50:1		15:1
Shocker Efficiency	10%		25%
Adjusted No. per Acre	4,500		1,067
Length of Shocker Section (feet)	150'		80'

Name of species	Abundance	Number and description
Salvelinus fontinalis		young: 26(0-4) older: 2(6-8) 2(8-10)
Salmo trutta		young: 16 (0-4) older: 6 (4-6) 3 (6-8) 1 (8-10) 4 (10-12) 1 (12-14)
Cottus sp.	C	
Catostomus commersoni	C	

FISH COLLECTION
or
SMALL STREAM SURVEY

Survey Delaware Date 8/3/65 Authority Fieldhouse

Name and key Emory Brook (12-80-70D) Quad Margaretville

Station location 0.5 abv. mouth County Delaware

Length 200' Width 12 (5-20) Depth 1.2:0.5 Acres 0.06

Flow 2 cfs. Temp: A 62 W 55 Time (EST) 5:00 PM.

Gear 110V-AC Back pack Efficiency (yg trout) 75%

Young trout per acre (adjusted total) BT=357, ST=577

Factors: W NSA N 3 H 2 F 1 Total NSA

General notes:

Stocking policy: No change from previous policy.
BT, ST; NSA

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STREAM SURVEY

Name & Key of Stream Emory Brook (D-70-80-12) Quality Classification C(t)

Section Entire Mileage (Section) 5.0 Mileage (Entire) 5.0

County(s) Delaware, Greene Town(s) Middletown, Halcott

Quadrangle(s) Margaretville (15'), Phoenicia (15'), Fleischmanns (7½'), West Kill (7½')

Watershed Delaware Date 7/30/76 Authority W. Adriance

Previous Stocking

Postage Mileage (Section) Posted Mileage (Entire)

Accessibility (Section) Accessibility (Entire)

Trout inhabited area (Section) 5.0 Trout inhabited area (Entire) 5.0

Special features (dams, falls, pollution, dredging, erosion, etc.)

FW-87

Name of species	Abundance	Number and description
alvelinus fontinalis	A	yg: 9(2.2-3.1") yr: 14(3.5-4.5") older: 7(4.9-5.5")
ottus sp.	C	

Name of species	Abundance	Number and description
Salmo trutta	C+	yg: 8(2.2-2.9") yr: 17(6.0-7.4") older: 4(8.1-11.3")
Salvelinus fontinalis	C	yg: - yr: = older: 1(7.0")
Cottus sp.	C	

SL STREAM SITE LOCATION RECORD

NYSDEC Bureau of Fisheries: Fisheries Data Base

Sheet ____ of ____ Revision Date: 4/95 Coded

SURVEY NUMBER: 396018 FILE NUMBER: 1593 MAP:

AUTHORITY: FLAHERTY SURVEY PURPOSE:

NAME OF WATER: BIRCH CREEK

P/S: S WSHED: LH WATERSHED INDEX NUMBER (from Biological Survey overlay): H-171-52

SITE # 1

DATE (MM/DD/YY): 9/16/96 COMMENTS: TOWN/CITY (Prefix city names with an "*".): SHANDAKEN COUNTY: ULST WATER CLASS: B(T)

QUADRANGLE: SHANDAKEN EDITION: 60 QUAD TYPE: USGS

SITE DESCRIPTION: 0.35 BELOW T1

ALTITUDE: 1240 RMI: . RMI UP: . NYTME: O NYTMN:

SITE # 2

DATE (MM/DD/YY): 9/16/96 COMMENTS: TOWN/CITY (Prefix city names with an "*".): SHANDAKEN COUNTY: ULST WATER CLASS: B(T)

QUADRANGLE: SHADAKEN EDITION: 60 QUAD TYPE:

SITE DESCRIPTION: JUST ABOVE T2 AND UP 210 FEET

ALTITUDE: 1330 RMI: . RMI UP: . NYTME: O NYTMN:

SITE # 3

DATE (MM/DD/YY): 9/16/96 COMMENTS: TOWN/CITY (Prefix city names with an "*".): SHANDAKEN COUNTY: ULST WATER CLASS: B(T)

QUADRANGLE: WEST KILL EDITION: 60 QUAD TYPE: USGS

SITE DESCRIPTION: JUST UP FROM P858C TO SMALL INSTREAM DAM

ALTITUDE: 1430 RMI: . RMI UP: . NYTME: O NYTMN:

STREAM SITE LOCATION RECORD

Coding Instructions. See Data Dictionary for detailed information.

Ed: 4/95

1. **SURVEY NUMBER** - Enter the region, year, and survey serial number. Take caution not to use survey serial numbers more than **once!**
2. **FILE NUMBER** - Enter the applicable file number for this water or water segment from the watershed files.
3. MAP - Record a "Y" in this field if a detailed map associated to the survey is going to be kept on file in the region.
4. **AUTHORITY** - Record the last name only of the biologist or technician that is in charge of the survey.
5. **SURVEY PURPOSE** - Enter the appropriate code from the list below.
6. **NAME** - Enter the name of the water. Spell out the name in full, including terms such as lake, river, creek, etc. Do **not** use abbreviations unless absolutely necessary. Do **not** use names like: "T12 OF WATKINS CREEK". If the water is unnamed, leave blank or enter "UNNAMED WATER".
7. P/S (Pond/Stream) - Enter a "S" for all stream surveys. If a person wishes to record pond data using this form then "P" must be entered in this space.
8. **WSHED** - Enter the appropriate watershed code from the list below.
9. **WIN** (Watershed Index Number) - For streams, enter the complete watershed index number. Use watershed index numbers as indicated on Biological Survey Unit map overlays.
10. **SITE NUMBER** - Site numbers are assigned consecutively by the survey party to indicate the location of a sampling effort. Do not record a leading zero with a site number (1, not 01).
11. **DATE** - Enter the month, day and year (MM/DD/YY) data on this form was collected. (Use a leading 0 for days and months less than 10.)
12. COMMENTS - Record a "Y" if a comment record (Rectype CO) relating to a SL record for this survey, date, and site has been recorded. General survey comments are related to a SL record site 0, where the SITE DESCRIPTION is ENTIRE SURVEY or ENTIRE WATER or verbally describes the entire section surveyed.
13. **TOWN/CITY** - Enter the town or city in which the survey site was located. Spell out the name in full. Prefix city names with an "*". If the site crosses a town or city boundary, record the town or city name of the downstream most point of the survey section.
14. **COUNTY** - Enter the first four letters of the county in which the site is located. If a stream study section crosses more than one county, record the county of the downstream most point of the survey section.
15. WATER CLASS - Enter the classification standard for the stream as listed in the appropriate article of the NYCRR.
16. **QUADRANGLE** - Enter the map quadrangle name on which the survey site is located. If a stream study site crosses more than one quad, record the quadrangle name of the downstream most point of the survey section.
17. EDITION - Record the last two digits of the year the map was printed.
18. **QUAD TYPE** - Enter the appropriate code from the list below.
19. **SITE DESCRIPTION** - Describe the site as completely and accurately as possible. Reference map locations or prominent landmarks.
20. **ALTITUDE** - Record the altitude in feet above sea level. Determine the altitude from topographic maps. Convert metric altitudes to feet.
21. **RMI** (River Mile Index) - *Streams only*. Enter the distance in miles of the downstream most point of the stream study site from the mouth of the stream.
22. RMI UP - *Streams only*. If a stream study site is greater than 0.1 miles in length, enter the distance in miles of the upstream most point of the stream study site from the mouth of the stream.
23. **NYTME, NYTMN** - Determine the New York Transverse Mercator Projection easting and northing coordinates from NYDOT map quadrangles or Biological Survey overlays.

SURVEY PURPOSE CODES

Brood stock monitoring	- 1	Rare/endangered species	- 13
Centrarchid sampling plan	- 2	Reclassification	- 14
CROTS survey	- 3	Special regs evaluation	- 15
Egg take	- 4	Stream protection (Art 15)	- 16
Esocid sampling plan	- 5	Trap and transfer	- 17
Fish kill investigation	- 6	TSMP collection	- 18
Fish salvage operation	- 7	Post-reclamation survey	- 19
General biological survey	- 8	Pre-liming survey	- 20
Percid sampling plan	- 9	Post-liming survey	- 21
Pre-reclamation survey	- 10	Radiation sampling	- 22
Population estimate:		Monitoring of tournaments	- 23
Delury	- 11	Evaluate exp. stocking water	- 24
Petersen	- 12	Whirling disease sampling	- 25
		Other, explain in **COMMENTS**	- 99

WATERSHED CODES

Allegheny	- A	Mohawk	- M
Black	- B	Ontario	- O
Champlain	- C	Oswego	- OS
Chemung	- CM	Oswegatchie	- OW
Delaware	- D	Raquette	- R
Erie-Niagara	- EN	Susquehanna	- S
Genesee	- G	St. Lawrence	- SL
Lower Hudson	- LH	St. Lawrence, Can	- SC
Long Island	- LI	Upper Hudson	- UH

QUAD TYPE CODES

NY Dept of Transportation 7.5' topographic or planimetric mapsheet.	- NYDT
US Geological Survey 7.5' topograpphic mapsheet.	- USGS
US Geological Survey 15' topographic mapsheet.	- US15
US Geological survey 7.5' X 15' topographic mapsheet.	- 7X15
NY Bureau of Fisheries 7.5' mylar overlays.	- NYBF

NOTES: _____

GE GEAR, ELECTROFISHING RECORD

NYSDEC Bureau of Fisheries: Fisheries Data Base

Act Falk
Tom Bardonza
Erica Leonardi

Sheet ____ of ____ Revision Date: 4/95 Coded

WATERSHED CODE LH POND NUMBER ____

NAME OF WATER Birch Creek

WATERSHED INDEX NUMBER (STREAMS ONLY) H-171-52

SURVEY NUMBER 396018 DATE (MM/DD/YY) 9/16/96

Site 1

SITE #	NET/RUN #	GEAR CODE	INVENTORY NUMBER	WEATHER	RAIN 48	LENGTH of SHORELINE SHOCKED	COMMENTS
1		57		CLDY			

TEMPERATURE:

TIME START	TIME STOP	ON-TIME	WATER	AIR	TEMP UNITS	CONDUCTIVITY	METHOD
1045	1125	.75	60.	70.	F	105	B

SECCHI DEPTH	BOTTOM	AC/DC	WAVEFORM	PULSE RATE	AMPERAGE	VOLTAGE	UNITS	BRAIL LENGTH	DC WANDS
.		DC			.	325	2		

FLOW	TARGET	FINGERLING EFFICIENCY	YEARLING EFFICIENCY	OLDER TROUT EFFICIENCY	SCAPPERS	ZERO CATCH	DAMAGE/BIAS
A	A ½	60	80	80	1		

BOTTOM COMPOSITION AND ABUNDANCE

BOTTOM 1	ABD 1	BOTTOM 2	ABD 2	BOTTOM 3	ABD 3
RO	2	CO	2	SD	2

VEGETATION COMPOSITION AND ABUNDANCE - PONDS ONLY

SUBMERGED	EMERGENT	FLOATING

Site 2

SITE #	NET/RUN #	GEAR CODE	INVENTORY NUMBER	WEATHER	RAIN 48	LENGTH of SHORELINE SHOCKED	COMMENTS
2		57		CLDY			

TEMPERATURE:

TIME START	TIME STOP	ON-TIME	WATER	AIR	TEMP UNITS	CONDUCTIVITY	METHOD
1309	1333	.	59.	72.		120	B

SECCHI DEPTH	BOTTOM	AC/DC	WAVEFORM	PULSE RATE	AMPERAGE	VOLTAGE	UNITS	BRAIL LENGTH	DC WANDS
.		DC			.	325	2		

FLOW	TARGET	FINGERLING EFFICIENCY	YEARLING EFFICIENCY	OLDER TROUT EFFICIENCY	SCAPPERS	ZERO CATCH	DAMAGE/BIAS
A	A	70	80	80	1		

BOTTOM COMPOSITION AND ABUNDANCE

BOTTOM 1	ABD 1	BOTTOM 2	ABD 2	BOTTOM 3	ABD 3
CO	2	BO	2	GR	2

VEGETATION COMPOSITION AND ABUNDANCE - PONDS ONLY

SUBMERGED	EMERGENT	FLOATING

ELECTROFISHING GEAR RECORD

Coding Instructions. See Data Dictionary for detailed information.

Ed: 4/95

1. SURVEY NUMBER - Enter the region, year, and survey serial number. Take caution not to use survey serial numbers more than **once!**
2. DATE - Enter the month, day and year the data on this form was collected. (Use a leading zero for days and months less than 10. ie. 03/06/92).
3. SITE NUMBER - Enter the number that corresponds to the description of the location of the sampling effort.
4. NET/RUN NUMBER - If a piece of gear was used at the same site on the same day then assign each separate collection effort a sequential net/run number.
5. GEAR CODE - Enter the appropriate code from the list below.
6. INVENTORY NUMBER - Record the inventory number of the gear used. This number is assigned on a Gear Description Record (Rectype GD).
7. WEATHER - Enter the appropriate code from the list below.
8. RAIN 48 - Enter "Y" if significant rain, that could bias the data, has fallen at the site during the previous 48 hours.
9. LENGTH of SHORELINE SHOCKED - Enter the length of shoreline that was fished per run to the nearest yard.
10. COMMENTS - Record a "Y" if a comment record, (Rectype CO) relating to a GE record for this collection effort (survey, date, site, and net/run) has been completed.
11. TIME START - Record the time that the electrofishing run began. Use 24 format, i.e. 3:30 PM = 1530. Record times in Eastern Standard or Daylight Savings time, whichever is in effect when the survey was done. For the AM hours before 10:00 record a leading zero, i.e. 7:30 AM = 0730.
12. TIME STOP - Record the time that the electrofishing run ended. Use 24 format, i.e. 3:30 PM = 1530. Record times in Eastern Standard or Daylight Savings time, whichever is in effect when the survey was done. For the AM hours before 10:00 record a leading zero, i.e. 7:30 AM = 0730.
13. ON-TIME - Record the time, in hours and hundredths of hours that the electrofishing gear was actually applying current to the water and actively fishing. This can be either determined from meters on the generator or control box, or estimated,as for backpack shockers.
14. WATER TEMPERATURE - Record the water temperature in degrees Fahrenheit or Celsius, as accurately as equipment allows.
15. AIR TEMPERATURE - Record the air temperature in degrees Fahrenheit or Celsius, as accurately as equipment allows.
16. TEMP UNITS - Record "F" if temperature readings are recorded in Fahrenheit or "C" if they are recorded in Celsius. All temperature readings recorded on this sheet should be in the same units.
17. CONDUCTIVITY - Record the conductivity of the water to the nearest μmho/cm^3.
18. CONDUCTIVITY METHOD - Enter the appropriate code from the list below.
19. SECCHI DEPTH - Record the secchi depth, or the bottom depth, if the secchi depth and the bottom depth would be equal, to the nearest tenth of a foot.
20. BOTTOM - Enter "Y" if the secchi depth equals the bottom depth.
21. AC/DC - Enter "AC" for alternating current or "DC" for direct current electrofishing systems.
22. WAVEFORM - Enter the appropriate code from the list below
23. PULSE RATE - For AC systems enter the frequency, for DC systems enter the number of DC pulses per second.
24. AMPERAGE - Record the amperage applied to the water, this must come from a meter on the the equipment. If <1 amp, record a decimal followed by the number of milliamps.
25. VOLTAGE - Record the voltage applied to the water, this can come from a meter or equipment specifications. Record to the nearest whole volt.
26. UNITS - Enter the number of electroshocking units used in conjunction with each other for this collection effort.
27. BRAIL LENGTH - Record the length of the brail to the nearest whole foot.
28. DC WANDS - Record the number of DC wands used with an electroshocking system.
29. FLOW - Enter the appropriate code from the list below.
30. TARGET - Enter the appropriate code from the list below.
31. FINGERLING EFFICIENCY - Enter the estimate of electroshocking efficiency as it relates to trout fingerlings (0+) only.
32. YEARLING EFFICIENCY - Enter the estimate of electroshocking efficiency as it relates to trout yearlings (1+) only.
33. OLDER TROUT EFFICIENCY - Enter the estimate of electrofishing efficiency as it relates to older trout (2+ and older). If the efficiency estimate is not broken down into fingerling, yearling, and older groups, then record the composite efficiency here, and leave the others blank. If efficiency is estimated for any species other than trout, enter that efficiency here.
34. SCAPPERS - Record the number of scappers.
35. ZERO CATCH - Record "Y" if no fish are captured during the electrofishing effort.
36. BIAS - Enter "Y" if the electrofishing effort was biased, or the equipment damaged. Explain in comments (Rectype CO).
37. BOTTOM 1, 2, 3 - Enter the appropriate code from the list below.
38. ABUNDANCE (ABD) 1, 2, 3 - Enter the appropriate code.
39. SUBMERGED, EMERGENT, FLOATING - Enter the appropriate code that best describes the abundance of each type of vegetation.

WEATHER CODES

Clear	- CLR
Cloudy	- CLDY
Hazy	- HAZY
Partly cloudy	- PCDY
Raining	- RAIN
Snowing	- SNOW

ELECTROFISHING GEAR CODES

Backpack shocker; DC	- 57
Backpack shocker; Coffelt, AC	- 58
Electric shocker; Boat, AC	- 61
Electric shocker; Boat, DC	- 62
Electric shocker; AC generator	- 63
Electric shocker; DC generator	- 64

TARGET CODES

All fish	- A
Bass species	- B
Esocids	- E
Gamefish only	- G
Percids	- P
Trout, all	- T
Trout, fingerlings	- F
Trout, yearlings	- Y
Other, see Comments	- 9

BOTTOM TYPE CODES

Plant debris	- PD	Boulder	- BO
Vegetated	- VG	Cobble	- CO
Unknown	- UN	Gravel	- GR
Concrete	- CT	Sand	- SD
Bedrock	- BR	Silt	- ST
Clay	- CL	Marl	- ML
		Mud	- MD

CONDUCTIVITY METHOD CODES

Chemtrix type 700	- A
Presto-tek model DP 03	- B
Poly Pram model DP 30-39	- C
Cole Parmer 1481 - 55	- E
Presto-tek model DSPH - 3	- F
DSPH - 3 Pocket Pal	- G
Whatman CDM510	- H
Cole Parmer 1491 - 62	- I
Hanna HI 8033	- J
Cole Parmer 1500 - 20	- K
Cole Parmer TDS pocket meter	- M
Lab analyzed, identify in comments	- L
ALSC lab in Ray Brook	- R
See comments for make/model of meter	- Z
See comments for method	- 9

FLOW CODES

Gear employed against the current	- A
Gear employed with the current	- W
Gear employed both directions	- B

WAVEFORM CODES

½ wave (pulsed DC)	- 1
¾ wave	- 2
Full wave	- 3
Other, see Comments	- 9

ABUNDANCE CODES - 0 = 1-5%
1 = 6-25%; 2 = 26-50%
3 = 51-90%; 4 = > 90%

NOTES:

GE GEAR, ELECTROFISHING RECORD

NYSDEC Bureau of Fisheries: Fisheries Data Base

WATERSHED CODE LH POND NUMBER

NAME OF WATER Birch Creek

WATERSHED INDEX NUMBER (STREAMS ONLY) H-171-52

Sheet ____ of ____ Revision Date: 4/95 Coded

SURVEY NUMBER 396018 DATE (MM/DD/YY) 9/16/96

Record 1

SITE #	NET/RUN #	GEAR CODE	INVENTORY NUMBER	WEATHER	RAIN 48	LENGTH of SHORELINE SHOCKED	COMMENTS
3		57		CLDY			

TIME START	TIME STOP	ON-TIME	TEMPERATURE: WATER	AIR	TEMP UNITS	CONDUCTIVITY	METHOD
1430	1450	0.33	58.5	72.	F	100	B

SECCHI DEPTH	BOTTOM	AC/DC	WAVEFORM	PULSE RATE	AMPERAGE	VOLTAGE	UNITS	BRAIL LENGTH	DC WANDS
.		DC			.	325	2		

FLOW	TARGET	FINGERLING EFFICIENCY	YEARLING EFFICIENCY	OLDER TROUT EFFICIENCY	SCAPPERS	ZERO CATCH	DAMAGE/BIAS
A	A	70	75	75	1		

BOTTOM COMPOSITION AND ABUNDANCE

BOTTOM 1	ABD 1	BOTTOM 2	ABD 2	BOTTOM 3	ABD 3
CO	2	GR	2	BO	2

VEGETATION COMPOSITION AND ABUNDANCE - PONDS ONLY

SUBMERGED	EMERGENT	FLOATING

Record 2

SITE #	NET/RUN #	GEAR CODE	INVENTORY NUMBER	WEATHER	RAIN 48	LENGTH of SHORELINE SHOCKED	COMMENTS

TIME START	TIME STOP	ON-TIME	TEMPERATURE: WATER	AIR	TEMP UNITS	CONDUCTIVITY	METHOD
		.	.	.			

SECCHI DEPTH	BOTTOM	AC/DC	WAVEFORM	PULSE RATE	AMPERAGE	VOLTAGE	UNITS	BRAIL LENGTH	DC WANDS
.					.				

FLOW	TARGET	FINGERLING EFFICIENCY	YEARLING EFFICIENCY	OLDER TROUT EFFICIENCY	SCAPPERS	ZERO CATCH	DAMAGE/BIAS

BOTTOM COMPOSITION AND ABUNDANCE

BOTTOM 1	ABD 1	BOTTOM 2	ABD 2	BOTTOM 3	ABD 3

VEGETATION COMPOSITION AND ABUNDANCE - PONDS ONLY

SUBMERGED	EMERGENT	FLOATING

ELECTROFISHING GEAR RECORD

Coding Instructions. See Data Dictionary for detailed information.

Ed: 4/95

1. SURVEY NUMBER - Enter the region, year, and survey serial number. Take caution not to use survey serial numbers more than **once!**
2. DATE - Enter the month, day and year the data on this form was collected. (Use a leading zero for days and months less than 10. ie. 03/06/92).
3. SITE NUMBER - Enter the number that corresponds to the description of the location of the sampling effort.
4. NET/RUN NUMBER - If a piece of gear was used at the same site on the same day then assign each separate collection effort a sequential net/run number.
5. GEAR CODE - Enter the appropriate code from the list below.
6. INVENTORY NUMBER - Record the inventory number of the gear used. This number is assigned on a Gear Description Record (Rectype GD).
7. WEATHER - Enter the appropriate code from the list below.
8. RAIN 48 - Enter "Y" if significant rain, that could bias the data, has fallen at the site during the previous 48 hours.
9. LENGTH of SHORELINE SHOCKED - Enter the length of shoreline that was fished per run to the nearest yard.
10. COMMENTS - Record a "Y" if a comment record, (Rectype CO) relating to a GE record for this collection effort (survey, date, site, and net/run) has been completed.
11. TIME START - Record the time that the electrofishing run began. Use 24 format, i.e. 3:30 PM = 1530. Record times in Eastern Standard or Daylight Savings time, whichever is in effect when the survey was done. For the AM hours before 10:00 record a leading zero, i.e. 7:30 AM = 0730.
12. TIME STOP - Record the time that the electrofishing run ended. Use 24 format, i.e. 3:30 PM = 1530. Record times in Eastern Standard or Daylight Savings time, whichever is in effect when the survey was done. For the AM hours before 10:00 record a leading zero, i.e. 7:30 AM = 0730.
13. ON-TIME - Record the time, in hours and hundredths of hours that the electrofishing gear was actually applying current to the water and actively fishing. This can be either determined from meters on the generator or control box, or estimated,as for backpack shockers.
14. WATER TEMPERATURE - Record the water temperature in degrees Fahrenheit or Celsius, as accurately as equipment allows.
15. AIR TEMPERATURE - Record the air temperature in degrees Fahrenheit or Celsius, as accurately as equipment allows.
16. TEMP UNITS - Record "F" if temperature readings are recorded in Fahrenheit or "C" if they are recorded in Celsius. All temperature readings recorded on this sheet should be in the same units.
17. CONDUCTIVITY - Record the conductivity of the water to the nearest μmho/cm^3.
18. CONDUCTIVITY METHOD - Enter the appropriate code from the list below.
19. SECCHI DEPTH - Record the secchi depth, or the bottom depth, if the secchi depth and the bottom depth would be equal, to the nearest tenth of a foot.
20. BOTTOM - Enter "Y" if the secchi depth equals the bottom depth.
21. AC/DC - Enter "AC" for alternating current or "DC" for direct current electrofishing systems.
22. WAVEFORM - Enter the appropriate code from the list below
23. PULSE RATE - For AC systems enter the frequency, for DC systems enter the number of DC pulses per second.
24. AMPERAGE - Record the amperage applied to the water, this must come from a meter on the the equipment. If <1 amp, record a decimal followed by the number of milliamps.
25. VOLTAGE - Record the voltage applied to the water, this can come from a meter or equipment specifications. Record to the nearest whole volt.
26. UNITS - Enter the number of electroshocking units used in conjunction with each other for this collection effort.
27. BRAIL LENGTH - Record the length of the brail to the nearest whole foot.
28. DC WANDS - Record the number of DC wands used with an electroshocking system.
29. FLOW - Enter the appropriate code from the list below.
30. TARGET - Enter the appropriate code from the list below.
31. FINGERLING EFFICIENCY - Enter the estimate of electroshocking efficiency as it relates to trout fingerlings (0+) only.
32. YEARLING EFFICIENCY - Enter the estimate of electroshocking efficiency as it relates to trout yearlings (1+) only.
33. OLDER TROUT EFFICIENCY - Enter the estimate of electrofishing efficiency as it relates to older trout (2+ and older). If the efficiency estimate is not broken down into fingerling, yearling, and older groups, then record the composite efficiency here, and leave the others blank. If efficiency is estimated for any species other than trout, enter that efficiency here.
34. SCAPPERS - Record the number of scappers.
35. ZERO CATCH - Record "Y" if no fish are captured during the electrofishing effort.
36. BIAS - Enter "Y" if the electrofishing effort was biased, or the equipment damaged. Explain in comments (Rectype CO).
37. BOTTOM 1, 2, 3 - Enter the appropriate code from the list below.
38. ABUNDANCE (ABD) 1, 2, 3 - Enter the appropriate code.
39. SUBMERGED, EMERGENT, FLOATING - Enter the appropriate code that best describes the abundance of each type of vegetation.

WEATHER CODES

Clear	- CLR
Cloudy	- CLDY
Hazy	- HAZY
Partly cloudy	- PCDY
Raining	- RAIN
Snowing	- SNOW

ELECTROFISHING GEAR CODES

Backpack shocker; DC	- 57
Backpack shocker; Coffelt, AC	- 58
Electric shocker; Boat, AC	- 61
Electric shocker; Boat, DC	- 62
Electric shocker; AC generator	- 63
Electric shocker; DC generator	- 64

TARGET CODES

All fish	- A
Bass species	- B
Esocids	- E
Gamefish only	- G
Percids	- P
Trout, all	- T
Trout, fingerlings	- F
Trout, yearlings	- Y
Other, see Comments	- 9

BOTTOM TYPE CODES

Plant debris	- PD	Boulder	- BO
Vegetated	- VG	Cobble	- CO
Unknown	- UN	Gravel	- GR
Concrete	- CT	Sand	- SD
Bedrock	- BR	Silt	- ST
Clay	- CL	Marl	- ML
		Mud	- MD

NOTES:

CONDUCTIVITY METHOD CODES

Chemtrix type 700	- A
Presto-tek model DP 03	- B
Poly Pram model DP 30-39	- C
Cole Parmer 1481 - 55	- E
Presto-tek model DSPH - 3	- F
DSPH - 3 Pocket Pal	- G
Whatman CDM510	- H
Cole Parmer 1491 - 62	- I
Hanna HI 8033	- J
Cole Parmer 1500 - 20	- K
Cole Parmer TDS pocket meter	- M
Lab analyzed, identify in comments	- L
ALSC lab in Ray Brook	- R
See comments for make/model of meter	- Z
See comments for method	- 9

FLOW CODES

Gear employed against the current	- A
Gear employed with the current	- W
Gear employed both directions	- B

WAVEFORM CODES

½ wave (pulsed DC)	- 1
¾ wave	- 2
Full wave	- 3
Other, see Comments	- 9

ABUNDANCE CODES - 0 = 1-5%
1 = 6-25%; 2 = 26-50%
3 = 51-90%; 4 = > 90%

SC STREAM CHARACTERISTICS RECORD

NYSDEC Bureau of Fisheries: Fisheries Data Base

Sheet ___ of ___ Revision Date: 4/95 Coded

WATERSHED CODE LH NAME Birch Creek

WATERSHED INDEX NUMBER H-171-52

SURVEY NUMBER	DATE (MM/DD/YY)	SITE #
346018	09/16/96	1

TIME	STREAM WIDTH	CHANNEL WIDTH	MAX DEPTH	MEAN DEPTH	METHOD	GRADIENT	COMMENTS
1230	20	30	3.5	1.	8		

SECTION LENGTH	VELOCITY	METHOD	DISCHARGE	METHOD	POOL LENGTH	QUALITY	WATER TEMP	AIR TEMP	TEMP UNITS
300	.		12.	8	40	Y	60.	70.5	F

DISSOLVED OXYGEN	METHOD	pH	METHOD	TOTAL ALKALINITY	METHOD	CONDUCTIVITY	METHOD
10.0	4	7.2	4	41.0	4	105	B

SHELTER GRADE	SHELTER DESCRIPTION
3	BO AND ROCKS SOME UNDERCUT

COVER GRADE	COVER DESCRIPTION
2	OF BRANCHES SOME [illegible]

VEGETATION ABUND.	VEGETATION DESCRIPTION
N	

SHELTER GRADE CODE - Percentage of the stream study section that provides instream shelter (rocks, boulders, undercut banks, etc.): **1** = 0 - 20%; **2** = 21 - 40%; **3** = >40%

COVER GRADE CODE - Percentage of the stream study section covered by overhanging objects (brush, tree branches, bridges, etc.): **1** = 0 - 25%; **2** = 26 - 50%; **3** = >50%

VEGETATION ABUNDANCE - **N** = None; **0** = 1 - 5%; **1** = 6 - 25%; **2** = 26 - 50%; **3** = 51 - 90%; **4** = >90%; **Blank** = not evaluated

CROTS VARIABLES

Enter **Y** for present or **N** for not present, if evaluated. Enter the proper code, if evaluated: **H** = High; **M** = Moderate; **L** = Low; **N** = None

10 INSECT SPP?	SIMULIIDS & HYDROPSYCHIDS?	WATERCRESS COMPLEX?	INSECT FORAGE?	ALGAE ON ROCKS?	LEAVES PRESENT?	MINNOWS < 2.5"
Y		N	M	L		M

WEATHER

CLDY

Clear - CLR
Cloudy - CLDY
Hazy - HAZY
Partly Cloudy - PCDY
Raining - RAIN
Snowing - SNOW

RAIN 48 ___

STREAM CHARACTER CODES

WO FA

Dry - DY
Dry - Pools - DP
Fast - FA
Low - Flow - LF
Moderate - MD
Salty - SA
Slow - SL
Stagnant - SG
Swampy - SW
Tidal - TD
Torrent - TO

BANK DESCRIPTION CODES

DF

Agriculture - AG
Bog - BG
Coniferous - CF
Deciduous - DF
Industrial - IN
Pasture - PA
Meadow - MW
Mixed forest - MF
Marsh - MR
Lawn - LW
Road - RD
Scrub - SB
Stony - SN
Suburb - SU
Swamp - SW
Urban - UR

BOTTOM TYPE and ABUNDANCE CODES

Bottom 1	ABD 1	Bottom 2	ABD 2	Bottom 3	ABD 3
BO	2	CO	2	GR	2

Plant Debris - PD
Mud - MD
Silt - ST
Sand - SD
Gravel - GR
Cobble - CO
Boulder - BO
Bedrock - BR
Clay - CL
Concrete - CT
Marl - ML
Vegetated - VG
Unknown - UN

Abundance Codes (ABD)

N = None
0 = 1 - 5%
1 = 6 - 25%
2 = 26 - 50%
3 = 51 - 90%
4 = > 90%
Blank = not evaluated

STREAM CHARACTERISTICS RECORD
Coding Instructions. See Data Dictionary for detailed information.

Rev: 4/95

1. **SURVEY NUMBER** - Enter the region, year, and survey serial number. Take caution not to use survey serial numbers more than **once!**
2. **DATE** - Enter the month, day and year the data on this form was collected. (Use a leading zero for days and months less than 10. ie. 03/06/92).
3. **SITE NUMBER** - Enter the number that corresponds to the description of the location of the sampling effort.
4. TIME - Record the time that the data collection began. Use 24 format, i.e. 3:30 PM = 1530. Record times in Eastern Standard or Daylight Savings time, whichever is in effect when the survey was done. For the AM hours before 10:00 record a leading zero, i.e. 7:30 AM = 0730.
5. STREAM WIDTH - Record the average width of the stream study section from water's edge to water's edge to the nearest whole foot.
6. CHANNEL WIDTH - Record the average width of the channel, or streambed (bank to bank) to the nearest whole foot.
7. MAX DEPTH - Enter the maximum depth of the water at the site to the nearest tenth of a foot.
8. MEAN DEPTH - Enter the average depth of the water at the site to the nearest tenth of a foot.
9. MEAN DEPTH METHOD - Enter the appropriate code from the list below.
10. GRADIENT - Record the distance, in feet, over which a 40 foot change in elevation occurs, with the site at the center. Determine gradient from topographic maps.
11. COMMENTS - Record a "Y" if a comment record, (Rectype CO) relating to a SC record for this collection effort (survey, date and site) has been completed.
12. SECTION LENGTH - Record the length of the site to the nearest whole foot.
13. VELOCITY - Record the average velocity of the stream through the site to the nearest tenth of a foot per second.
14. VELOCITY METHOD - Enter the appropriate code from the list below.
15. DISCHARGE - Record the average discharge volume through the site to the nearest hundredth of a cubic foot per second.
16. DISCHARGE METHOD - Enter the appropriate code from the list below.
17. POOL LENGTH - Record the total, summed length of pools in the section to the nearest whole foot.
18. QUALITY - Enter "Y" if the pools at the site can be considered as high quality trout habitat.
19. WATER TEMPERATURE - Record the water temperature at the site in degrees Fahrenheit or Celsius, as accurately as equipment allows.
20. AIR TEMPERATURE - Record the air temperature at the site in degrees Fahrenheit or Celsius, as accurately as equipment allows.
21. TEMP UNITS - Record "F" if temperature readings are recorded in Fahrenheit or "C" if they are recorded in Celsius. <u>All</u> temperature readings recorded on this sheet should be in the same units.
22. DISSOLVED OXYGEN - Record the concentration of dissolved oxygen at the site to the nearest tenth mg/l.
23. DISSOLVED OXYGEN METHOD - Enter the appropriate code from the list on the back of the **WATER CHEMISTRY RECORD** (Rectype C).
24. pH - Record the pH of the water at the site to the nearest hundredth.
25. pH METHOD - Enter the appropriate code from the list on the back of the **WATER CHEMISTRY RECORD** (Rectype C).
26. TOTAL ALKALINITY - Record the total alkalinity of the water at the site in tenths of mg $CaCO_3$ /l
27. TOTAL ALKALINITY METHOD - Enter the appropriate code from the list on the back of the **WATER CHEMISTRY RECORD** (Rectyp C).
28. CONDUCTIVITY - Record the conductivity of the water at the site to the nearest μmho/cm^3.
29. CONDUCTIVITY METHOD - Record the appropriate code from the list on the back of the **WATER CHEMISTRY RECORD** (Rectype C)
30. SHELTER GRADE - Enter the appropriate code from the list below.
31. SHELTER DESCRIPTION - Briefly describe the shelter present in the stream.
32. COVER GRADE - Enter the appropriate code from the list below.
33. COVER DESCRIPTION - Briefly describe the cover present over the stream.
34. VEGETATION ABUNDANCE - Enter the appropriate code from the list below.
35. VEGETATION DESCRIPTION - Briefly describe the aquatic vegetation present in the stream.
36. INSECT SPECIES - Enter "Y" if at least 10 species of aquatic insects are present in the stream, or "N" if there are less than 10 species.
37. SIMULIIDS & HYDROPSYCHIDS - Enter "Y" if the stream supports abundant simuliids and/or hydropsychid caddisflies associated with a lake outlet, or "N" if it does not.
38. WATERCRESS COMPLEX - Enter "Y" if a complex of extremely stable flow, fine gravel bottom, and abundant watercress or other rooted vegetation is present, or "N" if it does not.
39. INSECT FORAGE - Enter the code that best describes the abundance and availability of insect forage.
40. ALGAE - Enter the code that best describes the abundance of algae on rocks at the site.
41. LEAVES PRESENT - Enter the code that best describes the abundance of leaves on the bottom of the stream.
42. MINNOWS - Enter the code that best describes the abundance of minnows smaller than 2.5" in the stream.
43. WEATHER - Enter the appropriate code from the list below.
44. RAIN 48 - Enter "Y" if significant rain, that could bias the data, has fallen at the site during the previous 48 hours.
45. STREAM CHARACHTER CODES, BANK DESCRIPTION CODES, BOTTOM TYPE CODES, ABUNDANCE (ABD) CODES - Enter the appropriate codes. Up to three codes may be selected.

MEAN DEPTH METHOD CODES

Derived from discharge	- 1
Mean of Thalweg measurements	- 2
Mean of cross sectional transects	- 3
Visual estimate	- 8
Other, explain in Comments	- 9

VELOCITY METHOD CODES

Float method	- 1
Salt slug method	- 2
Velocity meter	- 7
Visual estimate	- 8
Other, see Comments	- 9

DISCHARGE METHOD CODES

Direct measurement of discharge	- 1
Dye method	- 2
Float used to estimate velocity, cross sectional area measured for discharge	- 3
Gauge readings and conversion charts	- 4
Salt brick	- 5
Salt slug	- 6
Velocity meter, cross sectional area measured	- 7
Visual estimate	- 8
Other method, explain in Comments	- 9

NOTES

INDIVIDUAL FISH: SHORT FORM

NYSDEC Bureau of Fisheries: Fisheries Data Base

Sheet ____ of ____ Revision Date: 7/96 Coded

WATERSHED CODE LH POND NUMBER

NAME OF WATER Birch Creek

WATERSHED INDEX NUMBER (STREAMS ONLY) H-171-52

SURVEY NUMBER	DATE (MM/DD/YY)	SITE #	NET/RUN #
396018	9/16/96	1	

PANEL NO	FISH NUMBER	SPECIES CODE	LENGTH (MM)	WEIGHT (GM)	AGE	COMM
	1	BT	165	50		
	2	BT	239	150		
	3	BT	311	300	4	
	4	BT	237	150	2	
	5	RT	204	90	2	
	6	CLM	96	10		
	7	CLM	98	10		
	8	BT	249	180	3	
	9	RT	155	50	1	
	10	RT	185	70	1	
	11	BT	153	40	1	
	12	BT	159	50	1	
	13	BT	171	55	1	
	14	RT	143	35	1	
	15	RT	193	80	2	
	16	BT	155	45	1	
	17	RT	153	45	1	
	18	BT	137	30	1	
	19	BT	167	50	2	
	20	BT	141	35	1	
	21	RT	142	30	1	
	22	RT	168	65	2	
	23	RT	128	30	1	
	24	RT	153	45	1	
	25	BT	142	35	1	
	26	BT	162	42	1	
	27	RT	146	40	1	
	28	RT	149	40	1	
	29	RT	152	40	1	
	30	RT	137	35	1	
	31	RT	150	25	1	
	32	ST	146	35	1	
	33	RT	163	50	1	
	34	BT	356	540	3	
	35	BT	156	40	1	
	36	RT	143	40	1	

INDIVIDUAL FISH: SHORT FORM

NYSDEC Bureau of Fisheries: Fisheries Data Base

Sheet ____ of ____ Revision Date: 7/96 Coded

WATERSHED CODE LH POND NUMBER

NAME OF WATER Birch Creek

WATERSHED INDEX NUMBER (STREAMS ONLY) H-171-52

SURVEY NUMBER	DATE (MM/DD/YY)	SITE #	NET/RUN #
396018	09 16 96	1	

PANEL NO	FISH NUMBER	SPECIES CODE	LENGTH (MM)	WEIGHT (GM)	AGE	COMM
	37	BT	260	170	2	
	38	BT	267	190	3	
	39	BT	190	70	2	
	40	BT	233	140	2	
	41	BT	135	30	1	
	42	RT	172	60	1	
	43	RT	133	30	1	
	44	RT	154	50	1	
	45	BT	150	40	1	
	46	RT	79			
	47	RT	93			
	48	RT	84			
	49	RT	83			
	50	RT	101			
	51	RT	90			
	52	RT	85			
	53	RT	96			
	54	RT	91			
	55	RT	85			
	56	RT	91			
	57	RT	97			
	58	RT	84			
	59	RT	89			
	60	RT	86			
	61	RT	86			
	62	RT	82			
	63	RT	84			
	64	RT	82			
	65	RT	82			
	66	RT	97			
	67	RT	73			
	68	RT	77			
	69	RT	92			
	70	RT	74			
	71	RT	87			
	72	ST	90			

INDIVIDUAL FISH: SHORT FORM

NYSDEC Bureau of Fisheries: Fisheries Data Base

Sheet ____ of ____ Revision Date: 7/96 Coded

WATERSHED CODE LH POND NUMBER

NAME OF WATER Birch Creek

WATERSHED INDEX NUMBER (STREAMS ONLY) H-171-52

SURVEY NUMBER	DATE (MM/DD/YY)	SITE #	NET/RUN #
396018	09 16 96	1	

PANEL NO	FISH NUMBER	SPECIES CODE	LENGTH (MM)	WEIGHT (GM)	AGE	COMM
	73	RT	85			
	74	LNS	190	85		

PANEL NO	FISH NUMBER	SPECIES CODE	LENGTH (MM)	WEIGHT (GM)	AGE	COMM

SC STREAM CHARACTERISTICS RECORD

NYSDEC Bureau of Fisheries: Fisheries Data Base

Sheet ___ of ___ Revision Date: 4/95 Coded

WATERSHED CODE LH NAME Birch Creek

WATERSHED INDEX NUMBER H-171-52

SURVEY NUMBER	DATE (MM/DD/YY)	SITE #
396018	9/16/96	2

TIME	STREAM WIDTH	CHANNEL WIDTH	MAX DEPTH	MEAN DEPTH	METHOD	GRADIENT	COMMENTS
1345	15	30	2.	.7	8		

SECTION LENGTH	VELOCITY	METHOD	DISCHARGE	METHOD	POOL LENGTH	QUALITY	WATER TEMP	AIR TEMP	TEMP UNITS
210	.		9.	8	30	N	59.	72.	F

DISSOLVED OXYGEN	METHOD	pH	METHOD	TOTAL ALKALINITY	METHOD	CONDUCTIVITY	METHOD
9.	4	7.3	4	34.2	4	120	2

SHELTER GRADE	SHELTER DESCRIPTION
2	BO SOME UNDERCUT

COVER GRADE	COVER DESCRIPTION
2	DF AND BRUSH

VEGETATION ABUND.	VEGETATION DESCRIPTION
0	

SHELTER GRADE CODE - Percentage of the stream study section that provides instream shelter (rocks, boulders, undercut banks, etc.): **1** = 0 - 20%; **2** = 21 - 40%; **3** = >40%

COVER GRADE CODE - Percentage of the stream study section covered by overhanging objects (brush, tree branches, bridges, etc.): **1** = 0 - 25%; **2** = 26 - 50%; **3** = >50%

VEGETATION ABUNDANCE - **N** = None; **0** = 1 - 5%; **1** = 6 - 25%; **2** = 26 - 50%; **3** = 51 - 90%; **4** = >90%; **Blank** = not evaluated

CROTS VARIABLES

Enter **Y** for present or **N** for not present, if evaluated.

Enter the proper code, if evaluated: **H** = High; **M** = Moderate; **L** = Low; **N** = None

10 INSECT SPP?	SIMULIIDS & HYDROPSYCHIDS?	WATERCRESS COMPLEX?	INSECT FORAGE?	ALGAE ON ROCKS?	LEAVES PRESENT?	MINNOWS < 2.5"
Y			M	L		M

WEATHER

CLOY

Clear - CLR
Cloudy - CLDY
Hazy - HAZY
Partly Cloudy - PCDY
Raining - RAIN
Snowing - SNOW

RAIN 48

STREAM CHARACTER CODES

MD FA SL

Dry - DY
Dry - Pools - DP
Fast - FA
Low - Flow - LF
Moderate - MD
Salty - SA
Slow - SL
Stagnant - SG
Swampy - SW
Tidal - TD
Torrent - TO

BANK DESCRIPTION CODES

DF

Agriculture - AG
Bog - BG
Coniferous - CF
Deciduous - DF
Industrial - IN
Pasture - PA
Meadow - MW
Mixed forest - MF
Marsh - MR
Lawn - LW
Road - RD
Scrub - SB
Stony - SN
Suburb - SU
Swamp - SW
Urban - UR

BOTTOM TYPE and ABUNDANCE CODES

Bottom 1	ABD 1	Bottom 2	ABD 2	Bottom 3	ABD 3
CO	2	BO	2	GR	2

Plant Debris - PD
Mud - MD
Silt - ST
Sand - SD
Gravel - GR
Cobble - CO
Boulder - BO
Bedrock - BR
Clay - CL
Concrete - CT
Marl - ML
Vegetated - VG
Unknown - UN

Abundance Codes (ABD)

N = None
0 = 1 - 5%
1 = 6 - 25%
2 = 26 - 50%
3 = 51 - 90%
4 = > 90%
Blank = not evaluated

STREAM CHARACTERISTICS RECORD
Coding Instructions. See Data Dictionary for detailed information.

Rev: 4/95

1. **SURVEY NUMBER** - Enter the region, year, and survey serial number. Take caution not to use survey serial numbers more than **once!**
2. DATE - Enter the month, day and year the data on this form was collected. (Use a leading zero for days and months less than 10. ie. 03/06/92).
3. **SITE NUMBER** - Enter the number that corresponds to the description of the location of the sampling effort.
4. TIME - Record the time that the data collection began. Use 24 format, i.e. 3:30 PM = 1530. Record times in Eastern Standard or Daylight Savings time, whichever is in effect when the survey was done. For the AM hours before 10:00 record a leading zero, i.e. 7:30 AM = 0730.
5. STREAM WIDTH - Record the average width of the stream study section from water's edge to water's edge to the nearest whole foot.
6. CHANNEL WIDTH - Record the average width of the channel, or streambed (bank to bank) to the nearest whole foot.
7. MAX DEPTH - Enter the maximum depth of the water at the site to the nearest tenth of a foot.
8. MEAN DEPTH - Enter the average depth of the water at the site to the nearest tenth of a foot.
9. MEAN DEPTH METHOD - Enter the appropriate code from the list below.
10. GRADIENT - Record the distance, in feet, over which a 40 foot change in elevation occurs, with the site at the center. Determine gradient from topographic maps.
11. COMMENTS - Record a "Y" if a comment record, (Rectype CO) relating to a SC record for this collection effort (survey, date and site) has been completed.
12. SECTION LENGTH - Record the length of the site to the nearest whole foot.
13. VELOCITY - Record the average velocity of the stream through the site to the nearest tenth of a foot per second.
14. VELOCITY METHOD - Enter the appropriate code from the list below.
15. DISCHARGE - Record the average discharge volume through the site to the nearest hundredth of a cubic foot per second.
16. DISCHARGE METHOD - Enter the appropriate code from the list below.
17. POOL LENGTH - Record the total, summed length of pools in the section to the nearest whole foot.
18. QUALITY - Enter "Y" if the pools at the site can be considered as high quality trout habitat.
19. WATER TEMPERATURE - Record the water temperature at the site in degrees Fahrenheit or Celsius, as accurately as equipment allows.
20. AIR TEMPERATURE - Record the air temperature at the site in degrees Fahrenheit or Celsius, as accurately as equipment allows.
21. TEMP UNITS - Record "F" if temperature readings are recorded in Fahrenheit or "C" if they are recorded in Celsius. All temperature readings recorded on this sheet should be in the same units.
22. DISSOLVED OXYGEN - Record the concentration of dissolved oxygen at the site to the nearest tenth mg/l.
23. DISSOLVED OXYGEN METHOD - Enter the appropriate code from the list on the back of the **WATER CHEMISTRY RECORD** (Rectype C).
24. pH - Record the pH of the water at the site to the nearest hundredth.
25. pH METHOD - Enter the appropriate code from the list on the back of the **WATER CHEMISTRY RECORD** (Rectype C).
26. TOTAL ALKALINITY - Record the total alkalinity of the water at the site in tenths of mg $CaCO_3$ /l
27. TOTAL ALKALINITY METHOD - Enter the appropriate code from the list on the back of the **WATER CHEMISTRY RECORD** (Rectyp C).
28. CONDUCTIVITY - Record the conductivity of the water at the site to the nearest μmho/cm^3.
29. CONDUCTIVITY METHOD - Record the appropriate code from the list on the back of the **WATER CHEMISTRY RECORD** (Rectype C)
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31. SHELTER DESCRIPTION - Briefly describe the shelter present in the stream.
32. COVER GRADE - Enter the appropriate code from the list below.
33. COVER DESCRIPTION - Briefly describe the cover present over the stream.
34. VEGETATION ABUNDANCE - Enter the appropriate code from the list below.
35. VEGETATION DESCRIPTION - Briefly describe the aquatic vegetation present in the stream.
36. INSECT SPECIES - Enter "Y" if at least 10 species of aquatic insects are present in the stream, or "N" if there are less than 10 species.
37. SIMULIIDS & HYDROPSYCHIDS - Enter "Y" if the stream supports abundant simuliids and/or hydropsychid caddisflies associated with a lake outlet, or "N" if it does not.
38. WATERCRESS COMPLEX - Enter "Y" if a complex of extremely stable flow, fine gravel bottom, and abundant watercress or other rooted vegetation is present, or "N" if it does not.
39. INSECT FORAGE - Enter the code that best describes the abundance and availability of insect forage.
40. ALGAE - Enter the code that best describes the abundance of algae on rocks at the site.
41. LEAVES PRESENT - Enter the code that best describes the abundance of leaves on the bottom of the stream.
42. MINNOWS - Enter the code that best describes the abundance of minnows smaller than 2.5" in the stream.
43. WEATHER - Enter the appropriate code from the list below.
44. RAIN 48 - Enter "Y" if significant rain, that could bias the data, has fallen at the site during the previous 48 hours.
45. STREAM CHARACHTER CODES, BANK DESCRIPTION CODES, BOTTOM TYPE CODES, ABUNDANCE (ABD) CODES - Enter the appropriate codes. Up to three codes may be selected.

MEAN DEPTH METHOD CODES

Derived from discharge	- 1
Mean of Thalweg measurements	- 2
Mean of cross sectional transects	- 3
Visual estimate	- 8
Other, explain in Comments	- 9

VELOCITY METHOD CODES

Float method	- 1
Salt slug method	- 2
Velocity meter	- 7
Visual estimate	- 8
Other, see Comments	- 9

DISCHARGE METHOD CODES

Direct measurement of discharge	- 1
Dye method	- 2
Float used to estimate velocity, cross sectional area measured for discharge	- 3
Gauge readings and conversion charts	- 4
Salt brick	- 5
Salt slug	- 6
Velocity meter, cross sectional area measured	- 7
Visual estimate	- 8
Other method, explain in Comments	- 9

NOTES

INDIVIDUAL FISH: SHORT FORM

NYSDEC Bureau of Fisheries: Fisheries Data Base

just above T2 mud "P"

Sheet ____ of ____ Revision Date: 7/96 Coded

WATERSHED CODE LH POND NUMBER

NAME OF WATER Birch Creek

WATERSHED INDEX NUMBER (STREAMS ONLY) H171-52

SURVEY NUMBER	DATE (MM/DD/YY)	SITE #	NET/RUN #
396018	9/16/96	2	

PANEL NO	FISH NUMBER	SPECIES CODE	LENGTH (MM)	WEIGHT (GM)	AGE	COMM
	1	RT	178	60	1	
	2	BT	207	105	2	
	3	RT	159	35	1	
	4	RT	139	22	1	
	5	BT	183	71	1	
	6	RT	183	67	1	
	7	RT	169	49	1	
	8	RT	150	32	1	
	9	RT	153	33	1	
	10	BT	140	39	1	
	11	RT	75			
	12	LNS	150	35		
	13	BND	53			
	14	BND	74			

PANEL NO	FISH NUMBER	SPECIES CODE	LENGTH (MM)	WEIGHT (GM)	AGE	COMM

SC STREAM CHARACTERISTICS RECORD

NYSDEC Bureau of Fisheries: Fisheries Data Base

just up from Pine Hill Diversion Lake

Sheet___of___ Revision Date: 4/95 Coded

WATERSHED CODE LH NAME Birch Creek

WATERSHED INDEX NUMBER H-171-52

SURVEY NUMBER	DATE (MM/DD/YY)	SITE #
39 6 0 1 8	9 1 6 9 6	3

TIME	STREAM WIDTH	CHANNEL WIDTH	MAX DEPTH	MEAN DEPTH	METHOD	GRADIENT	COMMENTS
1505	10	30	2.5	.5	8		

SECTION LENGTH	VELOCITY	METHOD	DISCHARGE	METHOD	POOL LENGTH	QUALITY	WATER TEMP	AIR TEMP	TEMP UNITS
208	.		6.	8	10		58.5	73.	F

DISSOLVED OXYGEN	METHOD	pH	METHOD	TOTAL ALKALINITY	METHOD	CONDUCTIVITY	METHOD
9.	4	7.0	4	27.4	4	100	B

SHELTER GRADE SHELTER DESCRIPTION

COVER GRADE COVER DESCRIPTION

VEGETATION ABUND. VEGETATION DESCRIPTION

SHELTER GRADE CODE - Percentage of the stream study section that provides instream shelter (rocks, boulders, undercut banks, etc.): **1** = 0 - 20%; **2** = 21 - 40%; **3** = >40%
COVER GRADE CODE - Percentage of the stream study section covered by overhanging objects (brush, tree branches, bridges, etc.): **1** = 0 - 25%; **2** = 26 - 50%; **3** = >50%
VEGETATION ABUNDANCE - **N** = None; **0** = 1 - 5%; **1** = 6 - 25%; **2** = 26 - 50%; **3** = 51 - 90%; **4** = >90%; **Blank** = not evaluated

CROTS VARIABLES

Enter **Y** for present or **N** for not present, if evaluated. Enter the proper code, if evaluated: **H** = High; **M** = Moderate; **L** = Low; **N** = None

10 INSECT SPP?	SIMULIIDS & HYDROPSYCHIDS?	WATERCRESS COMPLEX?	INSECT FORAGE?	ALGAE ON ROCKS?	LEAVES PRESENT?	MINNOWS < 2.5"

WEATHER: CLDY

Clear - **CLR**; Cloudy - **CLDY**; Hazy - **HAZY**; Partly Cloudy - **PCDY**; Raining - **RAIN**; Snowing - **SNOW**

RAIN 48

STREAM CHARACTER CODES: MD

Dry - **DY**; Dry - Pools - **DP**; Fast - **FA**; Low - Flow - **LF**; Moderate - **MD**; Salty - **SA**; Slow - **SL**; Stagnant - **SG**; Swampy - **SW**; Tidal - **TD**; Torrent - **TO**

BANK DESCRIPTION CODES: DF SN

Agriculture - **AG**; Bog - **BG**; Coniferous - **CF**; Deciduous - **DF**; Industrial - **IN**; Pasture - **PA**; Meadow - **MW**; Mixed forest - **MF**; Marsh - **MR**; Lawn - **LW**; Road - **RD**; Scrub - **SB**; Stony - **SN**; Suburb - **SU**; Swamp - **SW**; Urban - **UR**

BOTTOM TYPE and ABUNDANCE CODES

Bottom 1	ABD 1	Bottom 2	ABD 2	Bottom 3	ABD 3
CO	2	GR	2	BO	2

Plant Debris - **PD**; Mud - **MD**; Silt - **ST**; Sand - **SD**; Gravel - **GR**; Cobble - **CO**; Boulder - **BO**; Bedrock - **BR**; Clay - **CL**; Concrete - **CT**; Marl - **ML**; Vegetated - **VG**; Unknown - **UN**

Abundance Codes (ABD): **N** = None; **1** = 6 - 25%; **3** = 51 - 90%; **4** = > 90%; **Blank** = not evaluated

STREAM CHARACTERISTICS RECORD

Coding Instructions. See Data Dictionary for detailed information.

Rev: 4/95

1. **SURVEY NUMBER** - Enter the region, year, and survey serial number. Take caution not to use survey serial numbers more than **once!**
2. **DATE** - Enter the month, day and year the data on this form was collected. (Use a leading zero for days and months less than 10. ie. 03/06/92).
3. **SITE NUMBER** - Enter the number that corresponds to the description of the location of the sampling effort.
4. TIME - Record the time that the data collection began. Use 24 format, i.e. 3:30 PM = 1530. Record times in Eastern Standard or Daylight Savings time, whichever is in effect when the survey was done. For the AM hours before 10:00 record a leading zero, i.e. 7:30 AM = 0730.
5. STREAM WIDTH - Record the average width of the stream study section from water's edge to water's edge to the nearest whole foot.
6. CHANNEL WIDTH - Record the average width of the channel, or streambed (bank to bank) to the nearest whole foot.
7. MAX DEPTH - Enter the maximum depth of the water at the site to the nearest tenth of a foot.
8. MEAN DEPTH - Enter the average depth of the water at the site to the nearest tenth of a foot.
9. MEAN DEPTH METHOD - Enter the appropriate code from the list below.
10. GRADIENT - Record the distance, in feet, over which a 40 foot change in elevation occurs, with the site at the center. Determine gradient from topographic maps.
11. COMMENTS - Record a "Y" if a comment record, (Rectype CO) relating to a SC record for this collection effort (survey, date and site) has been completed.
12. SECTION LENGTH - Record the length of the site to the nearest whole foot.
13. VELOCITY - Record the average veloctity of the stream through the site to the nearest tenth of a foot per second.
14. VELOCITY METHOD - Enter the appropriate code from the list below.
15. DISCHARGE - Record the average discharge volume through the site to the nearest hundredth of a cubic foot per second.
16. DISCHARGE METHOD - Enter the appropriate code from the list below.
17. POOL LENGTH - Record the total, summed length of pools in the section to the nearest whole foot.
18. QUALITY - Enter "Y" if the pools at the site can be considered as high quality trout habitat.
19. WATER TEMPERATURE - Record the water temperature at the site in degrees Fahrenheit or Celsius, as accurately as equipment allows.
20. AIR TEMPERATURE - Record the air temperature at the site in degrees Fahrenheit or Celsius, as accurately as equipment allows.
21. TEMP UNITS - Record "F" if temperature readings are recorded in Fahrenheit or "C" if they are recorded in Celsius. <u>All</u> temperature readings recorded on this sheet should be in the same units.
22. DISSOLVED OXYGEN - Record the concentration of dissolved oxygen at the site to the nearest tenth mg/l.
23. DISSOLVED OXYGEN METHOD - Enter the appropriate code from the list on the back of the **WATER CHEMISTRY RECORD** (Rectype C).
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38. WATERCRESS COMPLEX - Enter "Y" if a complex of extremely stable flow, fine gravel bottom, and abundant watercress or other rooted vegetation is present, or "N" if it does not.
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MEAN DEPTH METHOD CODES

Derived from discharge	- 1
Mean of Thalweg measurements	- 2
Mean of cross sectional transects	- 3
Visual estimate	- 8
Other, explain in Comments	- 9

VELOCITY METHOD CODES

Float method	- 1
Salt slug method	- 2
Velocity meter	- 7
Visual estimate	- 8
Other, see Comments	- 9

DISCHARGE METHOD CODES

Direct measurement of discharge	- 1
Dye method	- 2
Float used to estimate velocity, cross sectional area measured for discharge	- 3
Gauge readings and conversion charts	- 4
Salt brick	- 5
Salt slug	- 6
Velocity meter, cross sectional area measured	- 7
Visual estimate	- 8
Other method, explain in Comments	- 9

NOTES

INDIVIDUAL FISH: SHORT FORM

NYSDEC Bureau of Fisheries: Fisheries Data Base

up to concrete dam 7.0 pH 9 DO. 4 drank

Sheet _____ of _____ Revision Date: 7/96 Coded

WATERSHED CODE LH POND NUMBER _____

NAME OF WATER Birch Creek

WATERSHED INDEX NUMBER (STREAMS ONLY) H-171-52

SURVEY NUMBER	DATE (MM/DD/YY)	SITE #	NET/RUN #
396018	9 16 96	3	

PANEL NO	FISH NUMBER	SPECIES CODE	LENGTH (MM)	WEIGHT (GM)	AGE	COMM
	1	BT	253	165	3	
	2	BT	273	175		
	3	BT	232	123	2	♂
	4	BT	257	152		♂
	5	BT	245	152	3	♀
	6	BT	188	72	2	
	7	BT	185	60	2	
	8	BT	168	40	1	
	9	BT	180	68	2	
	10	BT	152	35	1	
	11	BT	141	30	1	
	12	RT	138	29	1	
	13	RT	130	23	1	
	14	BT	138	29	1	
	15	BT	134	23	1	
	16	BT	125	18	1	
	17	BT	128	19	1	
	18	RT	127	22	1	
	19	RT	123	19	1	
	20	BT	143	23	1	
	21	BT	85			
	22	RT	71			
	23	RT	73			
	24	RT	74			
	25	RT	67			
	26	RT	83			
	27	RT	65			
	28	RT	70			
	29	RT	76			
	30	RT	65			
	31	RT	78			
	32	RT	63			
	33	RT	60			
	34	RT	85			
	35	RT	81			
	36	RT	66			

INDIVIDUAL FISH: SHORT FORM

NYSDEC Bureau of Fisheries: Fisheries Data Base

Sheet _____ of _____ Revision Date: 7/96 Coded

WATERSHED CODE 14 POND NUMBER _____

NAME OF WATER Birch Creek

WATERSHED INDEX NUMBER (STREAMS ONLY) H-171-52

SURVEY NUMBER	DATE (MM/DD/YY)	SITE #	NET/RUN #
396018	9 16 96	3	

PANEL NO	FISH NUMBER	SPECIES CODE	LENGTH (MM)	WEIGHT (GM)	AGE	COMM
	37	RT	79			
	38	RT	80			
	39	RT	64			
	40	RT	73			
	41	RT	77			
	42	RT	74			

PANEL NO	FISH NUMBER	SPECIES CODE	LENGTH (MM)	WEIGHT (GM)	AGE	COMM

BF BULK FISH RECORD

NYSDEC Bureau of Fisheries: Fisheries Data Base

WATERSHED CODE LH POND NUMBER

NAME OF WATER Birch Creek

WATERSHED INDEX NUMBER (STREAMS ONLY) H-171-52

Sheet ____ of ____ Revision Date: 4/95 Coded

SURVEY NUMBER 396018

DATE (MM/DD/YY) 09/16/96

DO NOT SUMMARIZE, OR INCLUDE ANY FISH DESCRIBED INDIVIDUALLY ON IF RECORDS.

SITE #	NET/ RUN #	PANEL #	FISH SPECIES CODE	NUMBER CAUGHT or OBSERVED	MINIMUM LENGTH (mm)	MAXIMUM LENGTH (mm)	VALID	STAGE	SEX	TOTAL WEIGHT (gm)	SUB-SAMPLE WEIGHT (gm)	NUMBER In SUB-SAMPLE	COMM
1			RT	22	66	92				160			
1			SS	21	45	87				100			
1			LND	11	89	120				140			
1			BND	35	53	73				100			
2			RT	59	56	95				275			
2			WS	39	50	83				122			
2			SS	18	46	87				102			
2			LND	4	106	115				68			
3			RT	60	60	88				190			

BULK CATCH DESCRIPTIVE DATA RECORD

Ed: 4/95

Coding Instructions. See Data Dictionary for detailed information.

1. **SURVEY NUMBER** - Enter the region, year, and survey serial number. Take caution not to use survey serial numbers more than once!
2. **DATE** - Enter the month, day and year the data on this form was collected. (Use a leading zero for days and months less than 10. ie. 03/06/92).
3. **SITE NUMBER** - Enter the number that corresponds to the description of the location of the sampling effort.
4. **NET/RUN NUMBER** - The number that corresponds to the electrofishing run, trawl run or seine haul during which the fish described was caught.
5. **PANEL NUMBER** - Enter the panel number in which the fish was caught. Panel numbers are assigned to specific mesh sizes in the Gear Description (GD) record. If gear codes 1, 18, or 19 are used instead of an inventory number, then panel numbers are assigned consecutively beginning with 1, from smallest to largest mesh.
6. **SPECIES CODE** - Enter the appropriate code. For species not listed, refer to: A Comprehensive Fish Species Code List for Inland and Marine Fishes of New York State by Kretser, Dudones, and Bonham, NYSDEC Publication, October 1980. Commonly accepted abbreviations such as LMB, ST, BT, etc. may also be entered instead of numerical codes.
7. **NUMBER CAUGHT (OR OBSERVED)** - Enter the number of fish in the catch, either actual or estimated.
8. **MINIMUM LENGTH** - Enter the total length of the smallest fish in the collection, in millimeters.
9. **MAXIMUM LENGTH** - Enter the total length of the largest fish in the collection, in millimeters.
10. **VALIDITY** - Enter the appropriate code that best describes the accuracy of the data recorded in the **NUMBER CAUGHT, MINIMUM LENGTH,** and **MAXIMUM LENGTH** fields. Always complete this field for every species recorded!
11. **STAGE** - Enter the appropriate code from the list below.
12. **SEX** - Enter "M" for male and "F" for female. Leave blank if unknown or undetermined.
13. **TOTAL WEIGHT** - Enter the combined weight for all of the fish captured, when weighed as one single sample. Record weights in grams.
14. **SUB-SAMPLE WEIGHT** - If the catch is divided into sub-samples, record the weight of each sub-sample, in grams. This line of data MUST refer to the sub-sample only.
15. **NUMBER IN SUB-SAMPLE** - If the catch is divided int sub-samples, record the number of fish in the sub-sample. This line of data MUST refer to the sub-sample only.
16. **COMMENTS** - Enter "Y" if a comment record (Rectype CO) relating to a BF record for this survey, date, site, net/run, and species has been completed.

SOME COMMON SPECIES CODES & SPEED CODES

Alewife	- 289; AL	Largemouth bass	- 601; LMB	Adult	- AD
American eel	- 276; AME	Mottled sculpin	- 865; MS	Hard, green	- HD
Atlantic salmon	- 327; LLS	Muskellunge	- 348; MSK	Immature	- IM
Banded killifish	- 531; KF	Northern pike	- 347; NP	Older	- OL
Black crappie	- 603; COB	Pumpkinseed	- 596; PS	Ripe, gravid, unspent	- RP
Blacknose dace	- 402; BND	Rainbow smelt	- 335; RSM	Smolt	- SM
Blueback herring	- 285; BLU	Rainbow trout	- 326; RT	Spent	- SP
Bluegill	- 598; BGS	Redbreast sunfish		Young of the year	- YY
Brook trout	- 329; ST	X Pumpkinseed	- 589		
Brown bullhead	- 444; BB	Redfin pickerel	- 345		
Brown trout	- 328; BT	Rock bass	- 591; RB		
Channel catfish	- 445; CHC	Slimy sculpin	- 866; SS		
Chain pickerel	- 349; PKL	Smallmouth bass	- 600; SMB		
Chinook salmon	- 322	Splake	- 332		
Coho salmon	- 320	Striped bass	- 577		
Common carp	- 365	Striped bass			
Common shiner	- 385; CSH	X White bass	- 579		
Creek chub	- 406; CC	Tiger musky	- 350		
Fallfish	- 407; FF	Tiger trout	- 333		
Gizzard shad	- 294; GIZ	Walleye	- 626; PP		
Golden shiner	- 377; GS	White perch	- 575; WP		
Grass pickerel	- 346	White sucker	- 419; WS		
Lake trout	- 330; LT	Yellow perch	- 617; YP		

STAGE CODES

USING the BF RECORD for WHNF "N" CALCULATIONS

WHNF "N" calculations call for catches of non-trout species to be broken down into size classes in order to estimate their competitive impact on stocked trout. WHNF "N" determinations are also necessary for CROTS stocking calculations. To use this form for WHNF "N" determinations, record the VALIDITY CODE as D, divide the catch by species and into the following size classes:

65	- 125	(2.5	- 5.0 in)
126	- 250	(5.1	- 10.0 in)
251	- 380	(10.1	- 15.0 in)
381	- 500	(15.1	- 20.0 in)
>	500	(>	20.0 in)

VALIDITY CODES

Fish caught, counted, and measured	- A	
Fish caught, counted, smallest and largest measured	- B	
Fish caught, counted, measurements estimated	- C	
Fish caught, counted, measurements reflect length frequency classes	- D	(Use with CROTS surveys only)
Fish caught, numbers estimated, smallest and largest measured	- E	
Fish caught, numbers estimated, measurements estimated	- F	
Fish observed, numbers estimated, measurements estimated	- G	
Bulk weight of individual fish recorded on the IF forms	- H	
Other, explain in comment records	- I	

NOTES: _____

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1593

STREAM SURVEY

Submitted for upgrade to B(T) 9/86

Name & Key of Stream Birch Creek (52-171LH) Quality Classification B(T)

Section Entire Mileage (Section) Mileage (Entire) ~~6.8~~ 7.0 mi

County(s) Ulster Town(s) Shandaken

Quadrangle(s) Shandaken, West Kill

Watershed Lower Hudson Date 7/3/80 Authority Wm. H. Kelly

Previous Stocking

Postage Mileage (Section) Posted Mileage (Entire)

Accessibility (Section) Accessibility (Entire)

Trout inhabited area (Section) Trout inhabited area (Entire)

Special features (dams, falls, pollution, dredging, erosion, etc.)

Note: Hatchery ST collected at station 1 were from experimental stocking earlier in the year. WPE (Mike Jean, personal communication, 9/13/84)

FW-87

Station Location	Upper (3)	Middle (2)	Lower (1)
Average Width (Actual) (Normal)		10.5(7)	21(40)
Depth		0.4(1.5)	0.7(3.0)
Volume		2.9 cfs	26 cfs
Velocity		Moderate	Moderate
Color		White	White
Turbidity		Clear	Sl. Turbid
Altitude		1860	1230
Bottom		Bo, R, Gr	Bo, R, Gr
Temperature	A. W.	64 A. 54 W.	77 A. 65 W.
Time-Weather		11:30AM Fair	2:40PM Fair
Habitat % Pool Shelter Cover	% G.	H=2 % G.	H=2 % G.
Fertility Forage Soil Type		F=1	F=2
Wild Trout (No. per Acre		440 ST 1600 BT	860
Trout: Non-Trout Estimate by Weight		N=3	N=2
Shocker Efficiency Adjusted No. per Acre		25	25%
Length of Shocker Section (feet)		300	300'
		Station 2 0.5 mi above T4a	Station 1 0.5 miles above mouth Lasher Road

Tributary number	Length	Width and depth	Flow	Pools	Food	Air	Water	Time and weather	Bottom	Cover	Stocking policy
1 mth.	1.9mi.	2'8'x2"	½cfs	C/	II-	64	56	2:15 clo	R&gr	fair	180B.T.
Ike Smith Bk./		Trout seen									
2 mth.	1.3mi.	2'4'x1"3"	25gpm	C/	II-	64	58.5	2:35 clo	R &gr	fair	Dry*, none
		dry below road.			Reported to go dry.						
3 mth.	0.6mi.	4'5'x2"6"	200gpm	C	III	64	53	2:45 clo	sand	good	180B.T.
Giggle Hollow Bk.		B.T.fing.		1200	(1931)		300(1933)				
4 mth.	0.1mi. above 2.0mi.	4'10'x6"2'	1cfs	B/	II-	64	53	2:50 clo	Bo & R	good	200B.T., 100
Crystal Spring Bk.*		Trout seen- 2"-6"									
1-4	0.5mi.										Not seen

*Previous stocking B.T. 1934 - '35
800 300.

/Previous stocking

	1931	1932	1933	1934	1935
B. T.	1200	400	450	1600	600

Height			3' dam ? pool
Area and depth of pond			
Pollution Location of outflow			
Nature, extent, index organisms			
Character of region		wide bed-good cover from over-hanging trees.	open wide rock bed-poor cover.

Posted area:

Section of stream Between T1 and T2 Mileage 0.5

Owner's name and address Molyneux & other posting by James Vredenburgh.

Miscellaneous (1)3' dam being constructed here. not yet holding water.

18' dam 100 yds. above T3. Temp. below this dam-air 64°-water 64°- trout reported here-pond 10 acres.

(2) Posted 0.2 mi. above T4-no name. Excellent looking trout water here.

Water suitable for:

	Section	*Mileage*	*Number*
S. T.	Partially posted, 500 B.T., 200.R.T.		
B. T.			
R. T.			

Other fish

Name of species	Abundance	Seine	Gill net	Number and description
Cottus cognatus	C			10 juv-ad
Salmo fario	C/			2-10" tl 1-8" tl 4 yg-juv=31,33 105,118mm. (saved) others seen
Rhinichthys a.stronasus	C/			4 ad
Rhinichthys cataractae	C-			1 ad
Catostomus c.commersonnii				1 ad. seen

released

Cat. No. 458-462, inc.

Req. 356. FG0Je38. 6-13-38-10,000 (16-9943) Survey Lower Hudson

Drainage Hudson Coll. no. M.A.Hall #21

Locality T52(Birch Cr.) of H171(Esopus Cr.) at mouth at Big Indian, N. Y.

County Ulster Quadrangle Phoenicia Elevation 1200

Water clear;white Flow Width to 25'

Vegetation some algae

Bottom sd.r.gr.bo Current mod.

Shore wooded; houses Distance from shore shore to shore

Temperature: Air 78½°F Water 62½°F Time 12M Weather clear

Depth of capture 0-2½' Depth of water 0-1' to 5' in pool.

Method of capture 6' seine

Collected by U.Stone; M. Hall Date June 17, 1936

Orig. preserv. 10% form. Time 11:25-12:10

General notes: History of stocking and angling; fishing conditions and size of fish, etc.

Good trout water. Pools & cover (Rocks & logs) good. Food good; caddis, stone fly, may fly, dragon fly larvae and annelids present.

Cottus eggs in coll?

1593.2

Name of species	Abundance	Seine	Gill net	Number and description
Salmo fario	C/			2 retained juv. 97 & 111 mm Several Release no. 1 - 10 in t.l. 2 - 9 in t.l. 2 - 8 in t.l. 2 - 4 in t.l. 1 - 5 in t.l. 2 - 3 in t.l.
	Several others seen.			
***Salamanders (larvae)**				34 sp.

Cat. No. 451 & 452 , inc.

Req. 356. FG9Je38. 6-13-38-10,000 (16-9943) Survey Lower Hudson

Drainage Hudson Coll. no. M.A.Hall #20

Locality T52(Birch Cr.) of H171(Esopus Cr.) at Pine Hill, N. Y., 1/8 mi. above mouth of T4

County Ulster Quadrangle Phoenicia Elevation 1527'

Water clear white Flow Width 10'

Vegetation sparse some algae on rocks

Bottom gr.,r.,bo Current mod.

Shore wooded;village Distance from shore shore to shore

Temperature: Air 71°F Water 56°F Time 11 AM Weather clear

Depth of capture 0-1' Depth of water same

Method of capture 6' seine

Collected by U.Stone;M. Hall Date June 17, 1936

Orig. preserv. 10% form. Time 10:30-11:00

General notes: History of stocking and angling; fishing conditions and size of fish, etc.

Good brown trout stream at this point; rather small stream for big trout. Pools & cover fair. Food abdt: stoneflies, mayflies, etc. abdt. as nymphs. Caddis & beetle larvae. No minnows seen.

The eggs in coll. were found under large flat rock in a group attached individually by slender gelatinous threads, attached to the under side of the rock & covering an area of 3-4 sq. in.

1593.1

Bond & Tasker
Sept. 3, 1936

Region / Station	Upper ½ mi. mth.	(2) 0.2 above Middle T4	(1) 1/2mi. from mouth Lower
Width		8'15'x4"18"	15'25'x4"1'
Flow	4-5cfs	1½ cfs	1½ cfs
Velocity		mod-to rapid	moderate
Color		clear	clear
Turbidity		white	white
Air temperature	67	64°	65°
Water temperature	62	55°	62°
Hour and weather	11:10 hazy	3:00 clo	2:05 clo.
Altitude		1550	1300
Pools: size, type, frequency		2-2-1	3-3-2
Pool grade		B	C+
Fish Food: Mayflies		com	com+
Stoneflies			com
Caddisflies		few	few
Blackflies		com	Few
Midges		few	com
Shrimp			
Minnows			
Other forage			
Food grade		II	II
Bottom composition		Bo & R	rubble
Vegetation			
Springs Location			
Flow and temperature			
Dams and Falls Location			0.1 mi. belo T3

1593

5000 FG-27-Ap 37 Req. 183 (16-7736)

NEW YORK STATE CONSERVATION DEPARTMENT

STREAM SURVEY

Number and name of stream 52(Birch Cr.) or (Pine Hill Str.)

Section E Length 6.8 miles

Tributary to 171-Hudson River Town Shandaken

River system Lower Hudson Quadrangle Phoenicia & Margaretville

County Ulster Authority Downs & Bond Date June 24, 1936

Previous stocking See below

Remarks: Coll.Hall 20-T52(Birch Cr.)-H171,1/8mi. above mouth of T4-Cat.No.451 452,inc.
" " 21-T52(" ")- " at mouth-Cat. No.458-462,inc.

	1926	1927	1928	1929	1930	1932	1933	1934	1935
S.T.fing.	700	700	1800	...	5600	400	1200	4000	1600
S.T.fry	3000	4200	...	10000	...	...	...	...	...

Trib. No.	Location Station	Length	Width	Flow	Yg. Trout	Non-Trout	Habitat	Fertility	Temp Air	Temp Water	Weather Time	Stocking Policy
1					280/A							BT (NSA)
2												Dry, none
3												Small, none
4 (Crystal Spring Bk.)												" "
1-4												" "

Recommendations: Fishing rights, improvement, spearing, commercial bait, set lines or other:

Posting Notes

Miscellaneous:

Stocking Policy:

Entire, 6.8 miles, B.T.(N.S.A.)

BIRCH CREEK (52-171HR)
Section #4 (1.5 mi.abv.T4)

1593S4

Salmo trutta 90

W N H F

W = 1549

BT - NSA

BIRCH CREEK (52-171 HR) 159352

Section #3 0.5 mi. abv.T-3

Salmo trutta	123
Rhinichthys atratulus	130
Rhinichthys cataractae....	45
Exoglossum maxillingua	1

BIRCH CREEK (52-171-HR)

Section #1,0.5 mi. abv. mouth

Salmo trutta	45
Salmo gairdnerii	12
Cottus sp.	190
Rhinichthys cataractae...	81
Rhinichthys atratulus ...	abdt.
Exoglossum maxillingua	37
Catostoma commersonnii.....	55

(OVER)

W N H F

W = 290 BTF/acre

BT (NSA)

Section #2, 0.2 mi. bel. T-53

Salmo trutta	102
Rhinicthys atratulus	55
Rhinichthys cataractae	20
Salmo gairdnerii	5
Catostomus commersonnii	8

1.5 mi.abv.T-4 0.5 mi.abv.T-3 0.2 mi.bel.T-2 0.5mi.abv.mc

Station Location	6' (3-10')	Upper (3)	Middle (2)	Lower (1)
Average Width (Actual) (Normal)		14' (12-29)	13' (12-18)	10' (3-15)
Depth	4" (2-8")	4" (2-8")	4" (2-12")	6 (2-12")
Volume		2 cfs	3 cfs	2-3 cfs
Velocity	Slow	Slow	Slow	Slow
Color	White	Wh.	Wh.	Wh.
Turbidity	-----	....	....	.....
Altitude	1780	1500	1480	1220
Bottom	Bo, Gr.	R, Gr.	B.	Bo, R., Gr.
Temperature	66A. W.56	69 A. W. 63	69 A. W. 64	60 A. W. 63
Time-Weather	12:00 Clo.	11:30 Clo.	11:00 Clo.	9:00 Clo.
Habitat	1	1	2	2
% Pool	10% G1	10 % G. 1	70% G. 2	20 % G. 2
Shelter	1	1	2	2
Cover	2	1	1	1
Fertility	1	2	2	2
Forage	2	2	2	3
Soil Type	1	1	1	1
Wild Trout (F) No. per Acre	NSA 1549 BTF/acre	NSA 1089 BTF/acre	NSA 927 BTF/acre	NSA 290 BTF/acre
Trout: Non-Trout Estimate by Weight	3	3	3	3
Shocker Efficiency Adjusted No. per Acre	90%	90%	90%	95%
Length of Shocker Section (feet)	300'	300'	300'	300'

1593S.

NEW YORK STATE CONSERVATION DEPARTMENT

STREAM SURVEY

Name & Key of Stream: Birch Cr. or Pine Hill Stream (52-171HR)

Section: E. Mileage (Section): _____ Mileage (Entire): 6.8 mi.

County(s): Ulster Town(s): Shandaken

Quadrangle(s): Phoenicia and Margaretville

Watershed: LH Date: 27 Aug. 1956 Authority: Gould and Saladino

Previous Stocking: _____

Postage Mileage (Section): _____ Posted Mileage (Entire): _____

Accessibility (Section): _____ Accessibility (Entire): _____

Trout inhabited area (Section): _____ Trout inhabited area (Entire): _____

Special features (dams, falls, pollution, dredging, erosion, etc.): _____

1/56/10M

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FISH COLLECTION OR SMALL STREAM SURVEY

Station 1

Survey Lower Hudson **Date** 7/3/80 **Authority** Wm. H. Kelly

Name and key Birch Creek (52-171LH) **Quad** Shandaken

Lasher Road

Station location 0.5 mi above mouth **County** Ulster

Length 300' **Width** 21' **Depth** 0.7(3.0) **Acres** 0.15

Flow 26 cfs **Temp: A** 77 **W** 65 **Time (EDT)** 2:40 PM

Gear 230 VAC Generation **Efficiency (Wild (adults) trout)** 25%

Young trout per acre (adjusted total) 860

Factors: W NSA **N** 2 **H** 2 **F** 2 **Total** NSA 8

General notes: Stream higher than normal following rain. Excellent section for fishing. No BT fings collected or seen. One RT fing (1.5" collected). March flood may have restricted BT spawning success.

pH=7.0
M.O.=21ppm
D.O.=10ppm

Specific Conductivity = 43 mmhos

Stocking policy:

NSA 8 : RT, BT

94-14-7 (5/76)
Formerly FW-88

Name of species	Abundance	Number and description
Salmo Gairdneri		18(3.8-9.9") 1.4 lbs
Salmo Trutta		13(4.2-11.6") 2.9 lbs
Salvelinus Fontinalis (hatchery)		3(8.0-9.6") 0.9 lbs.
Catostomus Commersoni		4(8.7-13.8") 2.6 lbs
Catostomus Cutostomus		7(6.5-11.6") 2.2 lbs
Cottus (sp)		30(2.0-3.4") 0.3 lbs
Rhinichthys Atratulus		3(2.8-3.5") trace
Exoglossum Maxillingua		2(4.2, 4.7) 0.1 lbs
Rhinichthys Cataractae		5 (3.8-4.3") 0.1 lbs

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FISH COLLECTION OR SMALL STREAM SURVEY

Station 2

Survey Lower Hudson **Date** 7/3/80 **Authority** Wm. H. Kelly

Name and key Birch Creek (52-171LH) **Quad** West Kill

Station location 0.5 mi below T4a (17) **County** Ulster

Length 300' **Width** 10.5 **Depth** 0.4(1.5) **Acres** 0.07

Flow 2.9 cfs **Temp: A** 64 **W** 54 **Time (EDT)** 11:30AM

Gear 230 VAC Generation **Efficiency (yg trout)** 25%

Young trout per acre (adjusted/total) 1600 BT + 440 ST

Factors: W NSA **N** 3 **H** 2 **F** 1 **Total** NSA 6

General notes: Only trout were collected. No other species observed. Typical headwater wild trout environment.
pH=7.0
D.O.=9ppm

Specific Conductivity = 25 mmhos

Stocking policy:

94-14-7 (5/76)
Formerly FW-88

Name of species	Abun-dance	Number and description
Salmo Trutta		29 (3.2-7.7") 1.95 lbs
Salvelinus Fontinalis		8 (4.0-5.8") 0.45 lbs

1568 S.1

NEW YORK STATE CONSERVATION DEPARTMENT

STREAM SURVEY

Name & Key of Stream LOST CLOVE (53-171 HR)

Section Entire Mileage (Section) 1.5 mi. Mileage (Entire) 1.5 mi.

County(s) Ulster Town(s) Shandaken

Quadrangle(s) Phoenix

Watershed Lower Hudson Date 8/27/57 Authority J. Gould, J. Saladino

Previous Stocking

Postage Mileage (Section) Posted Mileage (Entire)

Accessibility (Section) Accessibility (Entire)

Trout inhabited area (Section) Trout inhabited area (Entire)

Special features (dams, falls, pollution, dredging, erosion, etc.)

1/56/10M

Station Location	Upper (3)	Middle (2)	Lower (1)
Average Width (Actual)			5 (3-12)
(Normal)			"
Depth			4 (2-8)
Volume			0.5 - 1 CFS
Velocity			Slow
Color			Wh.
Turbidity			.....
Altitude			1220
Bottom			Bo, R, Gr.
Temperature	A. W.	A. W.	76 A. W. 66
Time-Weather			2:00PM-Pt.Clo.
Habitat			2
% Pool	% G.	% G.	76 % G.2
Shelter			2
Cover			2
Fertility			2
Forage			2
Soil Type			1
Wild Trout (F)			522 NSA
No. per Acre			
Trout: Non-Trout			
Estimate by Weight			
Shocker Efficiency			90%
Adjusted No. per Acre			
Length of Shocker			300'
Section (feet)			

LOST CLOVE BROOK (53-171 HR)

1568.51 ?

Section #1, 0.1 mi. abv. mouth

			W	N	H	F
Cottus sp.	Abundant					
Rhinichthys atratulus...	"	BT (NSA)				
Salmo trutta	19					
Salmo gairdnerii	15					
Rhinichthys cataractae ..	7					
Salvelinus fontinalis ...	4					

Recommendations: Fishing rights, improvement, spearing, commercial bait, set lines or other:

Posting Notes

Miscellaneous:

Stocking Policy:

Entire, 1.5 mi., BT (NSA)

Recommendations: Fishing rights, improvement, spearing, commercial bait, set lines or other:

Posting Notes

Miscellaneous:

Stocking Policy:

Entire 6.8 miles, BT, RT, ST NSA

Trib. No.	Location Station	Length	Width	Flow	Yg. Trout	Non-Trout	Hab-itat	Fer-tility	Temp Air	Temp Water	Weather Time	Stocking Policy

NYSDEC Bureau of Fisheries
Stream Survey Report

File #: 1593

BIRCH CREEK **Lower Hudson watershed** **Survey #: 393049**

Site Information

Survey Purpose: Trap and transfer Authority: FLAHERTY

WIN: H-171-52

Site	Date	Description	RMI	RMIup
1	11/09/93	JUST UPSTREAM OF T3	1.9	
	Town: SHANDAKEN	Cnty: Ulster	Quad: WEST KILL	
2	11/09/93	50 FT UPSTREAM OF UPSTREAM LIMIT OF SITE 1	1.9	
	Town: SHANDAKEN	Cnty: Ulster	Quad: WEST KILL	
3	11/09/93	50 FT UPSTREAM OF UPSTREAM LIMIT OF SITE 2	1.9	
	Town: SHANDAKEN	Cnty: Ulster	Quad: WEST KILL	

NYSDEC Bureau of Fisheries
Survey Report

File #: 1593

BIRCH CREEK | Lower Hudson watershed | Survey #: 393049

Water Chemistry

Date: 11/09/93 **Site #: 1**

Time start: 1200 | Secchi depth: ft | Color:
Time stop: | Bottom depth: ft | Turbidity:
Air temp: C | Weather: Cloudy | Surface
F | Rain 48: | Conditions:

Methods - Dissolved Oxygen: Hach kit
pH: Hach kit
Total Alkalinity: Hach kit
Conductivity: Presto-tek model DP 03

Sample Depth (ft)	Wate Temperature C	F	Dissolved Oxygen (mg/l)	pH	Total Alkalinity (mg CaCO3/l)	Conductivity (umhos)	Pt-Co Color
.1			10.0	6.30	13.7	80	

Date: 11/09/93 **Site #: 3**

Time start: 1515 | Secchi depth: ft | Color:
Time stop: | Bottom depth: ft | Turbidity:
Air temp: C | Weather: Clear | Surface
F | Rain 48: | Conditions:

Methods - Dissolved Oxygen:
pH:
Total Alkalinity:
Conductivity: Presto-tek model DP 03

Sample Depth (ft)	Water Temperature C	F	Dissolved Oxygen (mg/l)	pH	Total Alkalinity (mg CaCO3/l)	Conductivity (umhos)	Pt-Co Color
.1						143	

NYSDEC Bureau of Fisheries
Survey Report

File #: 1593

BIRCH CREEK **Lower Hudson watershed** **Survey #: 393049**

==========

Electrofishing Gear

Date: 11/09/93 **Site #: 1** **Net/Run #:**

Gear: Backpack shocker; DC

Time start: 1100
Time stop: 1125
On-time: .33 hr
Conductivity: 80 umhos
Method: Presto-tek model DP 03

Water temp: C F
Air temp: C F
Weather: Rain 48:

AC/DC: DC
Amperage:
# of units: 2
# of scappers: 2
Waveform:

Pulse rate:
Voltage: 350
# of DC wands:
Brail length: ft
Flow: Gear employed against the current

Target: Trout, all

Efficiencies - Fingerling: 33% Yearling: 50% Older Trout or All: 50%

Date: 11/09/93 **Site #: 2** **Net/Run #:**

Gear: Backpack shocker; DC

Time start: 1205
Time stop: 1230
On-time: .41 hr

Water temp: C F
Air temp: C F
Weather: Rain 48:

AC/DC: DC
Amperage:
# of units: 2
# of scappers: 2
Waveform:

Pulse rate:
Voltage: 350
# of DC wands:
Brail length: ft
Flow: Gear employed against the current

Target: Trout, all

Efficiencies - Fingerling: 33% Yearling: 50% Older Trout or All: 50%

NYSDEC Bureau of Fisheries
Survey Report

File #: 1593

BIRCH CREEK | Lower Hudson watershed | Survey #: 393049

Electrofishing Gear

Date: 11/09/93 **Site #: 3** **Net/Run #:**

Gear: Backpack shocker; DC

Time start:	1410		Water temp:	C	F
Time stop:	1500		Air temp:	C	F
On-time:	.83	hr	Weather:		Rain 48:
Conductivity:	143	umhos			

Method: Presto-tek model DP 03

AC/DC:	DC	Pulse rate:	
Amperage:		Voltage:	350
# of units:	2	# of DC wands:	
# of scappers:	2	Brail length:	ft
Waveform:		Flow:	Gear employed against the current

Target: Trout, all

Efficiencies - Fingerling: 25% Yearling: 40% Older Trout or All: 50%

NYSDEC Bureau of Fisheries
Survey Report

File #: 1593

BIRCH CREEK — Lower Hudson watershed — Survey #: 393049

Individual Fish Information

Fish Species	Number Caught	Length(mm) Min	Length(mm) Max	Weight(g) Min	Weight(g) Max	******** Number of Occurences ******** Com	Wild	Stage	Sex	Age	Marks Appl	Marks Pres	Marks Pan
Date: 11/09/93	**Site #: 1**												
RAINBOW TROUT	30	67	197										
BROWN TROUT	47	66	230							2			
Date: 11/09/93	**Site #: 2**												
RAINBOW TROUT	84	62	326							8			
BROWN TROUT	36	84	426	130	450					12			
Date: 11/09/93	**Site #: 3**												
RAINBOW TROUT	17	67	151										
BROWN TROUT	6	135	231										

NYSDEC Bureau of Fisheries
Survey Report

File #: 1593

BIRCH CREEK Lower Hudson watershed Survey #: 393049

Bulk Fish data

Fish Species	Number Caught	Length(mm) Min	Length(mm) Max	Total Weight(g)	Stage	Sex	Pan #

Date: 11/09/93 Site #: 3 Net/Run #:

FISH CAUGHT, COUNTED, MEASUREMENTS ESTIMATED			
RAINBOW TROUT	87	60	150
BROWN TROUT	12	60	105

NYSDEC Bureau of Fisheries
Survey Report

File #: 1593

BIRCH CREEK | Lower Hudson watershed | Survey #: 393049

Comments

Date: 11/09/93 **Site #: 1** **Net/run #:**

Stream Site Location

THIS SECTION OF BIRCH CR HAS A PETITION ON FILE FOR UPGRADING FROM A B(T) TO A B(TS) CLASSIFICATION STANDARD

Date: 11/09/93 **Site #: 2** **Net/run #:**

Stream Characteristics

THIS SECTION WAS BISECTED BY THE OUTLET FLOW OF PINE HILL LAKE AND SOME MINIMAL FLOW FROM A BLACK PLASTIC PIPE (WATER CONDO. 50) CONDO. ABOVE THIS WAS 143

BIRCH CREEK	10/06/1989	File #
Survey # 389007	Site # 1	Watershed LOWER HUDSON

*** See Comments ***

Survey Purpose : TRAP AND TRANSFER Authority : PIERCE

Watershed Index Number: H-171-52 Water Class: B(T)

=== Site Description ===

DOWNSTREAM END STARTS 0.1 MI ABOVE T3

=== Map References ===

County : ULSTER
Township : SHANDAKEN
Quadrangle : WEST KILL (1960 USGS)

Altitude (ft)	NYTME	NYTMN	RMI	RMI Up	Stream Length (mi)
1410	05435	47637	2.1	2.4	6.5

====== Stream Biological & Physical Data ======

Survey #: 389007 Site #: 1 10/06/1989

Time: 1000 Weather: CLEAR

=== Section Desc. ===

Section Length (ft): 1700
Stream Width (ft): 15
Channel Width (ft): 15
Gradient (ft/40 ft drop): 2000
Pool Length (ft): 85

=== Flow ===

Max Depth (ft): 1.5
Mean Depth (ft): .5
Conductivity:
Velocity (fps): 2.0
Discharge (cfs): 10.0

=== Methods ===

Mean Depth: VISUAL ESTIMATE
Velocity: VISUAL ESTIMATE
Discharge: VISUAL ESTIMATE

=== Stream Character ===

FAST

=== Bank Description ===

MEADOW

=== Bottom Type and Abundance ===

COBBLE	51 - 90%
BOULDER	6 - 25%
GRAVEL	6 - 25%

=== Shelter Grade and Description ===
0 - 20% CHANNEL CONSTRUCTED IN 1986-87

=== Cover Grade and Description ===
0 - 25% ALMOST NO SHADE

=== Vegetation Abundance and Description ===
1 - 5%

=== CROTS Factors ===

10 or more Insect Species:	PRESENT
Simuliids and Hydropshychids:	PRESENT
Insect Forage abundance:	HIGH
Algae abundance On Rocks:	LOW
Leaf abundance On Bottom:	LOW
Minnows < 2.5 in. abundance:	LOW

====== Gear Performance & Description ======

Survey #: 389007 Site #: 1 10/06/1989

Gear Type: BACKPACK SHOCKER: DC

Weather: CLEAR

== Time, Chemical and Physical Info ==

Time Start:	1000	Air Temp(F):	
Time Stop:	1300	Water Temp(F):	
On-Time:	2.0 hrs	Conductivity:	
Secchi Depth (ft):	.1		

== Gear Settings, Readings and Configurations ==

AC/DC:	DC	Pulse Rate:	
Amperage:		Voltage:	
No. of Units:	2	No. of DC Wands:	2
No. of Scappers:	3	Direction Fished:	AGAINST THE CURRENT

== Target ==
TROUT, ALL

== Efficiencies ==

Fingerling:	20%
Yearling:	25%
Older Trout:	25%

==== Gear Details ====

Electroshocker Model: DEC BACK PACK

====== Summary Statistics for Individual Fish Records ======

Survey #: 389007 Site #: 1 10/06/1989

Species	Number Caught	Min mm (in)	Max mm (in)	Mean mm (in)	SD mm (in)
Gear Type: BACKPACK SHOCKER: DC Effort: 2.00 (hrs)					
RAINBOW TROUT CPUE = 33	66	60 (2.4)	208 (8.2)	122 (4.8)	45 (1.8)
BROWN TROUT CPUE = 86	172	67 (2.6)	322 (12.7)	110 (4.3)	44.8 (1.8)
BROOK TROUT CPUE = 0.5	1	115 (4.5)			

====== Individual Fish Records ======

Survey #: 389007 Site #: 1 10/06/1989

Common Name	Length mm (in)	Weight gm (lb)	W/S	Stage	Sex	Age	Pan#	Fish#
BROWN TROUT	67 (2.6)							226
BROWN TROUT	69 (2.7)							83
BROWN TROUT	70 (2.8)							225
BROWN TROUT	70 (2.8)							224
BROWN TROUT	71 (2.8)							223
BROWN TROUT	73 (2.9)							158
BROWN TROUT	73 (2.9)							151
BROWN TROUT	74 (2.9)							157
BROWN TROUT	74 (2.9)							146
BROWN TROUT	74 (2.9)							118
BROWN TROUT	75 (3.0)							236
BROWN TROUT	75 (3.0)							216
BROWN TROUT	75 (3.0)							213
BROWN TROUT	75 (3.0)							206
BROWN TROUT	75 (3.0)							196
BROWN TROUT	75 (3.0)							187
BROWN TROUT	76 (3.0)							133
BROWN TROUT	76 (3.0)							89
BROWN TROUT	76 (3.0)							79
BROWN TROUT	77 (3.0)							207
BROWN TROUT	77 (3.0)							86
BROWN TROUT	77 (3.0)							78
BROWN TROUT	78 (3.1)							230
BROWN TROUT	78 (3.1)							211
BROWN TROUT	78 (3.1)							185
BROWN TROUT	78 (3.1)							114
BROWN TROUT	79 (3.1)							237
BROWN TROUT	79 (3.1)							131
BROWN TROUT	80 (3.2)							235
BROWN TROUT	80 (3.2)							227
BROWN TROUT	80 (3.2)							222
BROWN TROUT	80 (3.2)							197
BROWN TROUT	80 (3.2)							127
BROWN TROUT	80 (3.2)							85
BROWN TROUT	80 (3.2)							82
BROWN TROUT	80 (3.2)							72
BROWN TROUT	81 (3.2)							148
BROWN TROUT	81 (3.2)							123
BROWN TROUT	82 (3.2)							220
BROWN TROUT	82 (3.2)							192
BROWN TROUT	82 (3.2)							179
BROWN TROUT	82 (3.2)							106
BROWN TROUT	83 (3.3)							145
BROWN TROUT	84 (3.3)							180
BROWN TROUT	85 (3.3)							234
BROWN TROUT	85 (3.3)							233
BROWN TROUT	85 (3.3)							232
BROWN TROUT	85 (3.3)							210
BROWN TROUT	85 (3.3)							194
BROWN TROUT	85 (3.3)							191
BROWN TROUT	85 (3.3)							186

====== Individual Fish Records ======

Survey #: 389007 Site #: 1 10/06/1989

Common Name	Length mm (in)	Weight gm (lb)	W/S	Stage	Sex	Age	Pan#	Fish#
BROWN TROUT	85 (3.3)							154
BROWN TROUT	85 (3.3)							147
BROWN TROUT	85 (3.3)							130
BROWN TROUT	85 (3.3)							126
BROWN TROUT	85 (3.3)							119
BROWN TROUT	85 (3.3)							71
BROWN TROUT	87 (3.4)							155
BROWN TROUT	87 (3.4)							129
BROWN TROUT	87 (3.4)							74
BROWN TROUT	88 (3.5)							231
BROWN TROUT	88 (3.5)							219
BROWN TROUT	88 (3.5)							199
BROWN TROUT	88 (3.5)							188
BROWN TROUT	88 (3.5)							176
BROWN TROUT	88 (3.5)							173
BROWN TROUT	88 (3.5)							138
BROWN TROUT	88 (3.5)							80
BROWN TROUT	89 (3.5)							134
BROWN TROUT	89 (3.5)							115
BROWN TROUT	90 (3.5)							218
BROWN TROUT	90 (3.5)							215
BROWN TROUT	90 (3.5)							201
BROWN TROUT	90 (3.5)							189
BROWN TROUT	90 (3.5)							183
BROWN TROUT	90 (3.5)							159
BROWN TROUT	90 (3.5)							125
BROWN TROUT	90 (3.5)							122
BROWN TROUT	90 (3.5)							77
BROWN TROUT	91 (3.6)							184
BROWN TROUT	91 (3.6)							156
BROWN TROUT	91 (3.6)							76
BROWN TROUT	92 (3.6)							181
BROWN TROUT	92 (3.6)							150
BROWN TROUT	92 (3.6)							140
BROWN TROUT	92 (3.6)							117
BROWN TROUT	92 (3.6)							69
BROWN TROUT	93 (3.7)							214
BROWN TROUT	93 (3.7)							135
BROWN TROUT	94 (3.7)							209
BROWN TROUT	94 (3.7)							202
BROWN TROUT	94 (3.7)							175
BROWN TROUT	94 (3.7)							136
BROWN TROUT	94 (3.7)							132
BROWN TROUT	94 (3.7)							87
BROWN TROUT	95 (3.7)							228
BROWN TROUT	95 (3.7)							217
BROWN TROUT	95 (3.7)							208
BROWN TROUT	95 (3.7)							204
BROWN TROUT	95 (3.7)							193
BROWN TROUT	95 (3.7)							190
BROWN TROUT	95 (3.7)							170

====== Individual Fish Records ======

Survey #: 389007 Site #: 1 10/06/1989

Common Name	Length mm (in)	Weight gm (lb)	W/S	Stage	Sex	Age	Pan#	Fish#
BROWN TROUT	95 (3.7)							168
BROWN TROUT	95 (3.7)							162
BROWN TROUT	95 (3.7)							143
BROWN TROUT	96 (3.8)							149
BROWN TROUT	96 (3.8)							139
BROWN TROUT	97 (3.8)							152
BROWN TROUT	97 (3.8)							100
BROWN TROUT	98 (3.9)							212
BROWN TROUT	98 (3.9)							203
BROWN TROUT	98 (3.9)							164
BROWN TROUT	98 (3.9)							66
BROWN TROUT	99 (3.9)							153
BROWN TROUT	99 (3.9)							113
BROWN TROUT	99 (3.9)							75
BROWN TROUT	100 (3.9)							229
BROWN TROUT	100 (3.9)							200
BROWN TROUT	100 (3.9)							195
BROWN TROUT	100 (3.9)							163
BROWN TROUT	100 (3.9)							128
BROWN TROUT	100 (3.9)							120
BROWN TROUT	100 (3.9)							116
BROWN TROUT	102 (4.0)							88
BROWN TROUT	103 (4.1)							124
BROWN TROUT	105 (4.1)							167
BROWN TROUT	105 (4.1)							121
BROWN TROUT	105 (4.1)							73
BROWN TROUT	125 (4.9)							109
BROWN TROUT	132 (5.2)							165
BROWN TROUT	133 (5.2)							182
BROWN TROUT	134 (5.3)							144
BROWN TROUT	137 (5.4)							221
BROWN TROUT	140 (5.5)							178
BROWN TROUT	144 (5.7)							81
BROWN TROUT	145 (5.7)							141
BROWN TROUT	146 (5.8)							198
BROWN TROUT	148 (5.8)							177
BROWN TROUT	149 (5.9)							108
BROWN TROUT	150 (5.9)							205
BROWN TROUT	150 (5.9)							99
BROWN TROUT	151 (5.9)							142
BROWN TROUT	152 (6.0)							105
BROWN TROUT	152 (6.0)							84
BROWN TROUT	153 (6.0)							112
BROWN TROUT	153 (6.0)							110
BROWN TROUT	160 (6.3)							98
BROWN TROUT	163 (6.4)							97
BROWN TROUT	163 (6.4)							96
BROWN TROUT	164 (6.5)							104
BROWN TROUT	165 (6.5)							107
BROWN TROUT	165 (6.5)							92
BROWN TROUT	168 (6.6)							166

====== Individual Fish Records ======

Survey #: 389007 Site #: 1 10/06/1989

Common Name	Length mm (in)	Weight gm (lb)	W/S	Stage	Sex	Age	Pan#	Fish#
BROWN TROUT	168 (6.6)							102
BROWN TROUT	170 (6.7)							172
BROWN TROUT	172 (6.8)							169
BROWN TROUT	172 (6.8)							90
BROWN TROUT	173 (6.8)							111
BROWN TROUT	175 (6.9)							68
BROWN TROUT	176 (6.9)							174
BROWN TROUT	176 (6.9)							171
BROWN TROUT	178 (7.0)							95
BROWN TROUT	178 (7.0)							93
BROWN TROUT	178 (7.0)							67
BROWN TROUT	185 (7.3)							160
BROWN TROUT	230 (9.1)							137
BROWN TROUT	235 (9.3)							161
BROWN TROUT	265 (10.4)							103
BROWN TROUT	265 (10.4)							91
BROWN TROUT	265 (10.4)							70
BROWN TROUT	271 (10.7)							94
BROWN TROUT	322 (12.7)							101
RAINBOW TROUT	60 (2.4)							34
RAINBOW TROUT	62 (2.4)							31
RAINBOW TROUT	63 (2.5)							36
RAINBOW TROUT	63 (2.5)							17
RAINBOW TROUT	67 (2.6)							39
RAINBOW TROUT	67 (2.6)							15
RAINBOW TROUT	68 (2.7)							37
RAINBOW TROUT	68 (2.7)							35
RAINBOW TROUT	70 (2.8)							65
RAINBOW TROUT	70 (2.8)							38
RAINBOW TROUT	72 (2.8)							29
RAINBOW TROUT	72 (2.8)							16
RAINBOW TROUT	73 (2.9)							64
RAINBOW TROUT	74 (2.9)							60
RAINBOW TROUT	74 (2.9)							48
RAINBOW TROUT	75 (3.0)							56
RAINBOW TROUT	75 (3.0)							53
RAINBOW TROUT	75 (3.0)							51
RAINBOW TROUT	77 (3.0)							55
RAINBOW TROUT	77 (3.0)							49
RAINBOW TROUT	80 (3.2)							52
RAINBOW TROUT	80 (3.2)							47
RAINBOW TROUT	80 (3.2)							33
RAINBOW TROUT	80 (3.2)							13
RAINBOW TROUT	87 (3.4)							54
RAINBOW TROUT	91 (3.6)							50
RAINBOW TROUT	120 (4.7)							25
RAINBOW TROUT	122 (4.8)							4
RAINBOW TROUT	125 (4.9)							12
RAINBOW TROUT	127 (5.0)							26
RAINBOW TROUT	128 (5.0)							238
RAINBOW TROUT	130 (5.1)							28

====== Individual Fish Records ======

Survey #: 389007 Site #: 1 10/06/1989

Common Name	Length mm (in)	Weight gm (lb)	W/S	Stage	Sex	Age	Pan#	Fish#
RAINBOW TROUT	132 (5.2)							239
RAINBOW TROUT	133 (5.2)							61
RAINBOW TROUT	133 (5.2)							45
RAINBOW TROUT	133 (5.2)							42
RAINBOW TROUT	134 (5.3)							21
RAINBOW TROUT	135 (5.3)							2
RAINBOW TROUT	138 (5.4)							3
RAINBOW TROUT	139 (5.5)							32
RAINBOW TROUT	140 (5.5)							46
RAINBOW TROUT	140 (5.5)							7
RAINBOW TROUT	142 (5.6)							62
RAINBOW TROUT	142 (5.6)							44
RAINBOW TROUT	142 (5.6)							6
RAINBOW TROUT	145 (5.7)							27
RAINBOW TROUT	145 (5.7)							24
RAINBOW TROUT	145 (5.7)							11
RAINBOW TROUT	152 (6.0)							5
RAINBOW TROUT	156 (6.1)							58
RAINBOW TROUT	157 (6.2)							30
RAINBOW TROUT	163 (6.4)							20
RAINBOW TROUT	165 (6.5)							63
RAINBOW TROUT	165 (6.5)							14
RAINBOW TROUT	166 (6.5)							9
RAINBOW TROUT	167 (6.6)							43
RAINBOW TROUT	173 (6.8)							22
RAINBOW TROUT	176 (6.9)							23
RAINBOW TROUT	185 (7.3)							19
RAINBOW TROUT	189 (7.4)							10
RAINBOW TROUT	192 (7.6)							8
RAINBOW TROUT	195 (7.7)							59
RAINBOW TROUT	200 (7.9)							41
RAINBOW TROUT	200 (7.9)							40
RAINBOW TROUT	205 (8.1)							57
RAINBOW TROUT	208 (8.2)							18
BROOK TROUT	115 (4.5)							1

====== Comments ======

Survey #: 389007 Site #: 1 10/06/1989

Stream Site Location

1 ST, 65 RT, 172 BT MEASURED PLUS 230 UNMEASURED RT AND BT COLLECTED. 17 DIED REMAINING 450 TROUT TRANSFERRED TO NEWLY FININSHED (1989) PINE HILL LAKE.

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* * * * * * * * * * * * * * * * * * * * * * * * * * * *
*          BIRCH CREEK                  09/09/1988      *        File #
*     Survey #        Site #       Watershed            *        1593
*      388996           0        LOWER HUDSON           *
* * * * * * * * * * * * * * * * * * * * * * * * * * * *
          *** See Comments ***
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Survey Purpose : 11 Delay Rep ct. Authority : PIERCE

Watershed Index Number Water Class: BT
H-171-52

=== Site Description ===
BRDG BEL TO BRDG ABV PINE HILL LAKE

=== Map References ===
County : ULSTER
Township : SHANDAKEN
Quadrangle : WEST KILL (19)

Altitude (ft)	NYTME	NYTMN	RMI	RMI Up	Stream Length (mi)
1410	05436	46637	1.9	2.3	6.5

====== Comments ======
Survey #: 388996 Site #: 0 09/09/1988
Stream Site Location

AN 8 FT DIVERSION DAM USED TO CREATE NEW PINE HILL LAKE BLOCKS FISH PASSAGE, AS DOES A BOX CULVERT .5 MI UPSTREAM
PROPOSED FOR UPGRADING TO B(TS) IN SEPTEMBER 1986
THE INSTALLATION OF POOL DIGGERS IN THE RELOCATED SECTION SHOULD BE CONSIDERED. FLOWS WERE ABOUT NORMAL FOR SEPTEMBER, HOWEVER, VERY DRY CONDITIONS HAD PREVAILED FROM EARLY JUNE TO MID JULY. CONSIDERING THIS THE LARGE NUMBER OF TROUT COLLECTED WAS ALL THE MORE IMPRESSIVE

* *
* BIRCH CREEK 09/09/1988 * File #
* Survey # Site # Watershed * 1593
* 388996 1 LOWER HUDSON *
* *

Survey Purpose : Authority : PIERCE

Watershed Index Number Water Class: BT
H-171-52

=== Site Description ===
IN BYPASS CHANNEL AROUND PINE HILL LAKE

=== Map References ===
County : ULSTER
Township : SHANDAKEN
Quadrangle : WEST KILL (19)

Altitude (ft)	NYTME	NYTMN	RMI	RMI Up	Stream Length (mi)
1410	05435	46639	2.0		6.5

====== Stream Biological & Physical Data ======
Survey #: 388996 Site #: 1 09/09/1988
Time: 1300 Air Temp: 77 Water Temp: 61 Weather: CLEAR
*** See Comments ***

=== Section Desc. ===
Section Length (ft): 300
Stream Width (ft): 15
Channel Width (ft): 20
Gradient (ft/40 ft drop):
Pool Length (ft):

=== Flow ===
Max Depth (ft): 1.2
Mean Depth (ft): .3
Conductivity: 110
Velocity (fps):
Discharge (cfs): 5.6

=== Methods ===

Discharge: FLOAT USED TO EST. VEL., X-SECTIONAL AREA MEASURED FOR DISCHARGE.

=== Bottom Type and Abundance ===
BEDROCK
BOULDER
GRAVEL

=== Shelter Grade and Description ===
0 - 20%

=== Cover Grade and Description ===
0 - 25%

=== CROTS Factors ===

10 or more Insect Species: PRESENT

Insect Forage abundance: HIGH

====== Water Chemistry Data ======

Survey #: 388996 Site #: 1 09/09/1988

Time Start: 1300 Time Stop Air Temp: 77 Weather:CLEAR

Surface: Color: CLEAR, COLORLESS Turbidity: NONE

Bottom Depth (ft): 1.2 Secchi Depth (ft):

Depth (ft)	Water Temp	Dissolved Oxygen	pH	Total Alkalinity	Conductivity	Pt-Co Color
.0	61	10.0	7.20	27.20	110	

====== Gear Performance & Description ======

Survey #: 388996 Site #: 1 09/09/1988

Gear Type: ELECTROSHOCKER: AC GENERATOR, STREAM BRAIL

** See Comments **

Weather: CLEAR

== Time, Chemical and Physical Info ==

Time Start: 1300 Air Temp(F): 77

Time Stop: Water Temp(F): 61

On-Time: hrs Conductivity: 110

== Gear Settings, Readings and Configurations ==

AC/DC: AC Pulse Rate:

Amperage: Voltage: 230

== Efficiencies ==

Fingerling: 51%

== Bottom Type and Abundance ==

BEDROCK:

BOULDER:

GRAVEL:

==== Gear Details ====

Electroshocker Model: STREAM SHOCKER

Brail Length: 30 ft.

230 VAC WITH 30 FT BRAIL

====== Summary Statistics for Individual Fish Records ======

Survey #: 388996 Site #: 1 09/09/1988

Species	Number Caught	Min mm (in)	Max mm (in)	Mean mm (in)	SD mm (in)
Gear Type: ELECTROSHOCKER: AC GENERATOR, STREAM BRAIL					
Effort: Effort was not recorded.					
LONGNOSE DACE	3	109 (4.3)	140 (5.5)	124 (4.9)	15.6 (0.6)
RAINBOW TROUT	2	147 (5.8)	157 (6.2)	152 (6.0)	7.1 (0.3)
BROWN TROUT	1	193 (7.6)			
BLACKNOSE DACE	2	66 (2.6)	86 (3.4)	76 (3.0)	14.1 (0.6)

====== Individual Fish Records ======

Survey #: 388996 Site #: 1 09/09/1988

Common Name	Length mm (in)	Weight gm (lb)	W/S	Stage	Sex	Age	Pan#	Fish#
		Net/Run 1						
BLACKNOSE DACE	66 (2.6)							2
BLACKNOSE DACE	86 (3.4)							3
LONGNOSE DACE	140 (5.5)							1
		Net/Run 2						
LONGNOSE DACE	122 (4.8)							4
RAINBOW TROUT	147 (5.8)							2
RAINBOW TROUT	157 (6.2)							3
BROWN TROUT	193 (7.6)							1
		Net/Run 3						
LONGNOSE DACE	109 (4.3)							1

====== Bulk Catch Data ======

Survey #: 388996 Site #: 1 09/09/1988

Name	Number Caught	Min Length mm (in)	Max Length mm (in)	Total Weight	Stage	Com	Run#
Validity: FISH CAUGHT, MEASURED AND COUNTED							
SCULPINS	18	38 (1.5)	117 (4.6)			Y	1
RAINBOW TROUT	4	150 (5.9)	170 (6.7)		OL		1
RAINBOW TROUT	111	48 (1.9)	84 (3.3)		YY		1
BROWN TROUT	4	221 (8.7)	234 (9.2)		OL		1
BROWN TROUT	244	56 (2.2)	114 (4.5)		YY		1
SCULPINS	6	38 (1.5)	124 (4.9)			Y	2
RAINBOW TROUT	57	48 (1.9)	81 (3.2)		YY		2
BROWN TROUT	108	64 (2.5)	112 (4.4)		YY		2
SCULPINS	7	41 (1.6)	102 (4.0)			Y	3
RAINBOW TROUT	35	48 (1.9)	86 (3.4)		YY		3
BROWN TROUT	54	56 (2.2)	104 (4.1)		YY		3

====== Comments ======

Survey #: 388996 Site #: 1 09/09/1988

Bulk Catch

COTTUS NOT KEYED TO SPECIES.

Gear, Electrofishing

BLOCKING SEINES USED AT UPPER & LOWER ENDS OF THE SECTION.

BIRCH CREEK	09/09/1988	File #
Survey # 388996	Site # 2	Watershed LOWER HUDSON	1593

Survey Purpose :

Authority : PIERCE

Watershed Index Number H-171-52

Water Class: BT

=== Site Description ===

100 FT ABV PINE HILL LAKE DIVERSION

=== Map References ===

County : ULSTER

Township : SHANDAKEN

Quadrangle : WEST KILL (19)

Altitude (ft)	NYTME	NYTMN	RMI	RMI Up	Stream Length (mi)
1425	05433	46639	2.1		6.5

====== Stream Biological & Physical Data ======

Survey #: 388996 Site #: 2 09/09/1988

Time: 1315 Air Temp: 79 Water Temp: 59 Weather: CLEAR

=== Section Desc. ===

Section Length (ft): 300

Stream Width (ft): 17

Channel Width (ft): 22

Gradient (ft/40 ft drop):

Pool Length (ft):

=== Flow ===

Max Depth (ft): 2.4

Mean Depth (ft): .6

Conductivity: 100

Velocity (fps):

Discharge (cfs): 5.3

=== Methods ===

Discharge: FLOAT USED TO EST. VEL., X-SECTIONAL AREA MEASURED FOR DISCHARGE.

=== Bottom Type and Abundance ===

BEDROCK

BOULDER

GRAVEL

=== Shelter Grade and Description ===

> 40% BOULDERS UDERCUT BANKS & ROOTS

=== Cover Grade and Description ===

> 50%

=== CROTS Factors ===

Insect Forage abundance: HIGH

====== Water Chemistry Data ======

Survey #: 388996 Site #: 2 09/09/1988
Time Start: 1315 Time Stop Air Temp: 79 Weather:CLEAR

Surface: Color: CLEAR, COLORLESS Turbidity: NONE
Bottom Depth (ft): 2.4 Secchi Depth (ft):

Depth (ft)	Water Temp	Dissolved Oxygen	pH	Total Alkalinity	Conductivity	Pt-Co Color
.0	59	10.0	7.10	27.20	100	

====== Gear Performance & Description ======

Survey #: 388996 Site #: 2 09/09/1988
Gear Type: ELECTROSHOCKER: AC GENERATOR, STREAM BRAIL
Weather: CLEAR

== Time, Chemical and Physical Info ==

Time Start: 1315 Air Temp(F): 79
Time Stop: Water Temp(F): 59
On-Time: hrs Conductivity: 100

== Gear Settings, Readings and Configurations ==

AC/DC: AC Pulse Rate:
Amperage: Voltage: 230

== Bottom Type and Abundance ==

BEDROCK:
GRAVEL:
BOULDER:

==== Gear Details ====

Electroshocker Model: STREAM SHOCKER
Brail Length: 30 ft.

230 VAC WITH 30 FT BRAIL

====== Summary Statistics for Individual Fish Records ======

Survey #: 388996 Site #: 2 09/09/1988

Species	Number Caught	Min mm (in)	Max mm (in)	Mean mm (in)	SD mm (in)
Gear Type: ELECTROSHOCKER: AC GENERATOR, STREAM BRAIL					
Effort: Effort was not recorded.					
RAINBOW TROUT	2	127 (5.0)	183 (7.2)	155 (6.1)	39.6 (1.6)
BROWN TROUT	2	257 (10.1)	439 (17.3)	348 (13.7)	128.7 (5.1)

====== Individual Fish Records ======

Survey #: 388996 Site #: 2 09/09/1988

Common Name	Length mm (in)	Weight gm (lb)	W/S	Stage	Sex	Age	Pan#	Fish#
		Net/Run 1						
BROWN TROUT	439 (17.3)			OL				1
		Net/Run 2						
BROWN TROUT	257 (10.1)			OL				2
		Net/Run 3						
RAINBOW TROUT	127 (5.0)			OL				3
RAINBOW TROUT	183 (7.2)			OL				4

====== Bulk Catch Data ======

Survey #: 388996 Site #: 2 09/09/1988

Name	Number Caught	Min Length mm (in)	Max Length mm (in)	Total Weight	Stage	Com	Run#
Validity: FISH CAUGHT, MEASURED AND COUNTED							
BROWN TROUT	3	272 (10.7)	284 (11.2)		OL		1
RAINBOW TROUT	37	119 (4.7)	191 (7.5)		OL		1
RAINBOW TROUT	14	61 (2.4)	81 (3.2)		YY		1
BROWN TROUT	33	178 (7.0)	244 (9.6)		OL		1
BROWN TROUT	101	53 (2.1)	97 (3.8)		YY		1
RAINBOW TROUT	6	122 (4.8)	188 (7.4)		OL		2
RAINBOW TROUT	9	64 (2.5)	76 (3.0)		YY		2
BROWN TROUT	5	160 (6.3)	224 (8.8)		OL		2
BROWN TROUT	30	66 (2.6)	91 (3.6)		YY		2
RAINBOW TROUT	7	61 (2.4)	71 (2.8)		YY		3
BROWN TROUT	3	147 (5.8)	193 (7.6)		OL		3
BROWN TROUT	19	71 (2.8)	97 (3.8)		YY		3