ASSESSMENT OF THE FISHERY IMPROVEMENT OPPORTUNITIES ON THE PEND OREILLE RIVER

APPENDICES FOR 1988 ANNUAL REPORT

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APPENDIX A

PEND OREILLE RIVER
SAMPLE SITE LOCATIONS
AND ASSOCIATED TAGS

Table **A.1. Pend Oreille River sample sites and the associated tags.**

SITE	LOCATION	NUMBERED FLOY TAG	NUMBERED FINGERLING TAG	NON-NUMBERED COLOREDTAG
1	Ione (R)	yellow		dark blue
1A	Renshaw Creek (W)	yellow	orange	dark blue
1B	Tiger Slough (W)	yellow		dark blue
1C	Lost Creek (W)	yellow	light blue	dark blue
2	LeClerc (E)	yellow		salmon
2A	LeClerc Creek (E)	yellow	yellow	salmon
2B	Gardner Slough (W)	yellow		salmon
2D	Ruby Creek (W)	yellow		salmon
3	Cee Cee Ah (R)	Int. orange		yellow
3A	Cee Cee Ah Slough (W)	Int. orange		yellow
3B	Cee Cee Ah Creek (W)	Int. orange	Int. orange	yellow
3C	Trimble Slough (W)	Int. orange		yellow
3D	Tacoma Creek (W)	Int. orange	green	yellow
4	Old Dike (R)	Int. orange		lavender
4A	Old Dike Slough (E)	Int. orange		lavender
4B	Bass Slough (W)	Int. orange		lavender
5	Pow Wow [illegible] (R)	Int. orange		red
5A	Pow Wow Slough (E)	Int. orange		red
5B	Calispel Creek (W)	Int. orange		red
6	Goose Island (R)	Int. orange		clear
6A	Goose Island Channel (E)	Int. orange		clear
7	Reservation Boundary (R)	Int. orange		brown
7A	Res. Boundary Slough (E)	Int. orange		brown
7B	Davis Creek Slough (W)	Int. orange		brown
7C	Davis Creek (W)	Int. orange	red	brown
8	Skookum Creek (R)	yellow		green
8A	Skookum Slough (E)	yellow		green
8B	Skookum Creek (E)	yellow	dark blue	green
8C	Red Norse Slough (E)	yellow		green
9	Dalkena (R)	yellow		light blue
9A	Dalkena Slough (W)	yellow		light blue
10	Indian Island (R)	yellow		orange
10A	Char Springs (E)	yellow		orange
11	Cook Island (R)	yellow		orange
11A	Cook Slough (E)	yellow		orange

R = River Site
E = East Side
W = West Side

APPENDIX B

MONTHLY ELECTROFISHING, GILLNETTING, AND BEACH SEINING RELATIVE ABUNDANCE DATA FOR EACH FISH SPECIES

Table B.I. Number of fish caught by electrofishing at each of the study sites in March, 1988.

Site Number	1	1B	2	3	3A	4	4A	4B	5	5A	6	6A	7	8	8C	9	9A	10	10A	11	Total
Shocking time (min)	30	10	30	30	30	30	20	10	30	30	30	30	30	30	30	30	20	20	10	40	520
Bull trout																					0
Cutthroat trout																					0
Brown trout			1		3	1			5		1				1	3					15
Eastern brook trout																					0
Rainbow trout																					0
Mountain whitefish	7		22	9	14	5	5		4		3	1	10	9		13		26	16	37	181
Largemouth bass	3	1		1	1	4	1		5	40	2	4			31		7				100
Black crappie	1				1			4		6		6			2		12			5	37
Pumpkinseed	20		9		4		1	18	8	22	7	17	6	2	23	1	70			7	215
Yellow perch	4		12	2	4			25	13	46	50	19	11	1	24	5	28		1	13	258
Longnose sucker			2	2	6	2	6		1	5	5	8	1	7	33	8	4		1	4	95
Largescale sucker	19	2	9	7	1	2	4		4		7	1	3	2	1	4		1	3	6	76
Brown bullhead					1			1	1	4	5	5	2	1	9		12			1	42
Tench	6		4	1	17	1	9	9	16	60	10	38	15	4	66	4	34	1	7	32	334
Northern squawfish	1		16			1				1	4	2	1	1	1	1	4		1	3	37
Pearmouth						4		1			2	1									8
Redside shiner																					0
Sculpin																					0

Table 8.2. Number of fish caught by electrofishing at each of the study sites in April, 1988.

Site Number	1	2	3	3A	4	4A	4B	5	5A	6	6A	7	7A	8	8C	9	9A	10	10A	11	11A	Tot
Shocking time (min)	30	40	30	30	30	40.3	19.8	40	30	30	20	30	16.2	30	30	30	20	10	10	20	10	546
Bull trout																						0
Cutthroat trout		1																		1		2
Brown trout	5								2	1					2	2						1:
Eastern brook trout																						0
Rainbow trout						1																1
Mountain whitefish	31	123	2	6	2	1	1	10	10	5	8	8		7	3	4	1	2	2	36		26
Largemouth bass			1	4	2	42	16		12			3	2		6	1	25		1			11
Black crappie	2			1		14	4						28		1		5		4			5!
Pumpkinseed	4		1		2	64	12		1		2		56	1	9	3	76	3	$8	3	3	29
Yellow perch	15	1	9	8	15	117	40	23	10	26	4	39	14	13	81	96	88	17	96	63	71	84
Longnose sucker	1	1		1		17	1	1	5		2	1					2	1		3	2	3!
Largescale sucker	93	9	5	1	3	4		18	2	15	8	5		4		1		5	4	3	1	18
Brown bullhead						7	2		4		2				2		15					3:
Tench	3		2	2	1	48	7	1	10	1	19	4	17	1	18	1	54		1		1	19
Northern squawfish	60	3	3		1	3			1		1	1				1			21	18	7	12
Peamouth	4				1	5		1							1	1						1:
Redside shiner																						0
Sculpin																						0

Table 8.3. Number of fish caught by electrofishing at each of the study sites in May, 1988.

Site Number	1	1C	2	3	3A	4	4A	4B	5	5A	5B	6	7	8	8C	9	9A	10	11	TOTAL
Shocking time (min)	30	10	38	17	15	19	10	5	30	3.7	11	10	10	10	12	10	6	15	30	291.7
Bull trout																				0
Cutthroat trout	1		1																	2
Brown trout	1			1					1				1						1	5
Eastern brook trout																				0
Rainbow trout																				0
Mountain whitefish	14	14	47	1		1			3			1		2				7	20	110
Largemouth bass	18	1		3	7	10	45	43	1	8	42	5	16	7	6	15	11	9	2	249
Black crappie	8			3	8		11	18		1	2		2		1				2	56
Pumpkinseed	77	16	2	24	36	79	154	36	7	66	136	38	51	31	28	67	40	32	81	1001
Yellow perch	95	38	22	161	215	169	111	35	70	65	16	67	103	86	244	91	77	193	147	2005
Longnose sucker	1	1	13	8	34	3	4							3	14		3	1	13	98
Largescale sucker	18	4	37	1	11		1	1	3			1			4		2	2	15	100
Brown bullhead	4		2	3	3	7	4	9	3	4	1	4	5	2	6	1	2	5	7	72
Tench	50	8	4	15	32	21	46	-47	16	8	29	21	13	42	22	35	65	43	33	550
Northern squawfish	102	20	28	5	2	1	6	2	9	1	4				3			6	18	207
Peamouth	2	2	2	2	1	4	4	3		1	5				1			1	1	29
Redside shiner																				0
Sculpin																				0

Table 8.4. Number of fish caught by electrofishing at each of the study sites in June, 1988.

Site Number	1	1A	1B	2	3	3A	4	4A	5	5A	6	6A	7	8	9	10	11	TOTAL
Shocking time (min)	29	20	20	15	15	15	25	32	15	29	15	20	15	20	30	20	30	365
Bull trout																		0
Cutthroat trout																		0
Brown trout						1					1	1						3
Eastern brook trout				1														1
Rainbow trout				1			1											2
Mountain whitefish		3		15	2	2										2	2	26
Largemouth bass		7	24	3	2	18	12	5	2	27	5	1	8	4	19	5	2	144
Black crappie			3		1	6				7						1		18
Pumpkinseed	2	18	86		20	22	59	89	51	213	51	63	40	43	27	27	51	662
Yellow perch	3	29	22	11	148	40	91	70	51	120	28	124	23	15	13	13	25	826
Longnose sucker		3			11	11	6	2	4	2	2	18		1	2	6	1	69
Largescale sucker	6	10		4	6	3	12	2	9	6	1	6		1		3	8	77
Brown bullhead	1	2	1		4	1	1	1		10	1	16						38
Tench		5	14		5	10	3	7	3	18	1	21		2	1	2	2	94
Northern squawfish	1	5	6	5	1	2	3					4	1’	2	3	4	4	41
Peamouth		3	1		2	2		1		5		1						15
Redside shiner	2																	2
Sculpin																		0

Table 8.5. Number of fish caught by electrofishing at each of the study sites in July, 1988.

Site Number	1	2	3	3A	4	4A	5	6	6A	7	8	8C	9	9A	10	11	TOTAL
Shocking time (min)	40	50	30	20	15	22.5	29	15	9	21.25	17	10	16	5	30	20	379.3
Bull trout																	0
Cutthroat trout	3																3
Brown trout	1	2		1							1						5
Eastern brook trout																	0
Rainbow trout	2																2
Mountain whitefish	3	28	2	10											1	1	45
Largemouth bass	30	22	3	15	2	30	8	3	2	2	3	6	6	5	8	9	154
Black crappie	9	6		2		10						1	1		2	4	35
Pumpkinseed	40	21	23	38	40	42	22	15	26	38	6	41		13	14	41	420
Yellow perch	87	87	114	73	87	101	78	55	32	103	37	27	38	12	138	58	1127
Longnose sucker		3	5	22	6	5	1	8					1		7	5	63
Largescale sucker	64	80	6	1	4	2	2	1			1		1		7	3	172
Brown bullhead	4	3	1	5	1	1	1	1	1					1	2		21
Tench	8	14	16	25	12	20	11	14	9	9	10	6	13	6	33	15	221
Northern squawfish	48	105	2	3		3	2								7		170
Peamouth	1		4	16													21
Redside shiner	5																5
Sculpin		1															1

Table B.6. Number of fish caught by electrofishing at each of the study sites in August, 1988.

Site Number	1	2	3	3A	4	5	6	6A	7	7A	8	8A	9	10	11	TOTAL
Shocking time (min)	40	30.5	27	20	30	30	25	5	30	2.2	30	10	30	20	30	359.7
Bull trout																0
Cutthroat trout				1												1
Brown trout				17								9		1		27
Eastern brook trout																0
Rainbow trout																0
Mountain whitefish		1		25		5						2			4	37
Largemouth bass	35	13	2	1	4	11	9	8	22	20	5	5	3	1	21	160
Black crappie		5				2	1		2				1	3	1	15
Pumpkinseed	25	16	6	12	37	23	21	54	39	20	3	7	20	21	24	328
Yellow perch	44	73	92	17	97	77	66	40	126	2	90	23	118	112	79	1056
Longnose sucker		1		57	2		2		1		1	44	6	5	2	121
Largescale sucker	8	6		9	5	5	3		1		4	5	1	14	5	66
Brown bullhead			1		1			1	1	1						5
Tench	3	7	14	6	18	18	3	5	8	2	6	4	3	2	lo	109
Northern squawfish	27	7		11	1	1	4		2	1	1	2	1	21	9	88
Peamouth				12		1										13
Redside shiner	1															1
Sculpin																0

Table 8.7. Number of fish caught by electrofishing at each of the study sites in September, 1988.

Site Number	1	2	3	3A	4	4A	5	5A	5B	6	6A	7	70	8	8A	9	10	11	TOTAL
Shocking time (min)	36	36	30	34	30	20	30	11	27	50	10	30	10	20	10	30	30	35	479
Bull trout		1																	1
Cutthroat trout		1																	1
Brown trout	1	7	3	16											1				28
Eastern brook trout																			0
Rainbow trout		1																	1
Mountain whitefish		63		15					4						12			20	114
Largemouth bass	27	11	12	9	1	22	6	29	13	19	6	30	11	43	25	4	9	6	283
Black crappie	3	11		1		1			5	2		3					2		28
Pumpkinseed	14	10	15	18	13	86	27	41	19	11	10	18	30	7	lo	29	19	54	431
Yellow perch	58	17	77	36	98	134	80	75	37	120	12	125	17	62	56	204	65	109	1382
Longnose sucker		10	5	37	2	10	2	4	4	5		5	9	5	6	10	13	9	136
Largescale sucker	22	57		14	3	1	9	1	13	9		4	10		2	8	4	13	170
Brown bullhead	2		2	4	1	4	2	2	1			1	1		1		1	1	23
Tench	3	6	10	18	6	22	16	15	9	17	6	7	2	10	3	3	16	25	194
Northern squawfish	19	70		2	7	5	5		7	2	2	2		2	12	7	6	18	174
Peamouth		2	3						3										8
Redside shiner	2																		2
Sculpin	1																		1

Table 8.8. Number of fish caught by electrofishing at each of the study sites in October, 1988.

Site Number	1	2	3	3A	4	4A	5	5A	6	6A	7	8	9	10	11	TOTAL
Shocking time (min)	27	30	29	20	20	19	30	10	20	10	10	20	20	20	30	315
Bull trout																0
Cutthroat trout	1						1									2
Brown trout	4	2	1	12												19
Eastern brook trout																0
Rainbow trout																0
Mountain whitefish	1	51	1	9	7		1				2	1	3	2	7	85
Largemouth bass	15	22	15	13	8	33	10	22	18	11	23	5	9	18	7	229
Black crappie		6	2	1		1							1		3	14
Pumpkinseed	8	21	17	5	27	32	13	32	14	9	10	10	4	7	27	236
Yellow perch	28	73	75	19	49	82	70	112	94	35	19	60	72	82	20	890
Longnose sucker		19	2	30	1	7		6	10	9	3	4	6	3	3	103
Largescale sucker	16	49	1	10	7		4	3		5	2	4	3	2	1	107
Brown bullhead	2	2	4		3	13	2	4						5		35
Tench	1	12	21	9	10	27	37	26	19	9	5	5	7	29	10	227
Northern squawfish	64	107	7	9		3			3	1			5	12	9	220
Peamouth	13		3	2										2		20
Redside shiner	1															1
Sculpin	1	3														4

Table B.9. Number and percent of each largemouth bass age class collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

AGE	March	April	May	June	July	August	Sept	October	Total
0+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.3)	51 (31.9)	68 (24.0)	19 (8.3)	140 (9.8)
1+	1 (1.0)	1 (0.9)	8 (3.2)	4 (2.8)	21 (13.6)	16 (10.0)	97 (34.3)	85 (37.1)	233(16.2)
2+	46(46.0)	33 (28.7)	101(40.6)	80 (55.6)	78 (50.6)	31 (19.4)	29 (10.2)	23 (10.0)	421(29.4)
3+	16(16.0)	11 (9.6)	29 (11.6)	15 (10.4)	25 (16.2)	41 (25.6)	66 (23.3)	82 (35.8)	285(19.9)
4+	1 (1.0)	12 (10.4)	22 (8.8)	10 (6.9)	2 (1.3)	1 (0.6)	4 (1.4)	5 (2.2)	57 (4.0)
5+	8 (8.0)	11 (9.6)	13 (5.2)	6 (4.2)	7 (4.5)	6 (3.8)	4 (1.4)	6 (2.6)	61 (4.2)
6+	5 (5.0)	18 (15.6)	31 (12.4)	11 (7.6)	5 (3.2)	1 (0.6)	5 (1.8)	2 (0.9)	78 (5.4)
7+	6 (6.0)	13 (11.3)	22 (8.8)	8 (5.6)	6 (3.9)	6 (3.8)	5 (1.8)	3 (1.3)	69 (4.8)
8+	2 (2.0)	5 (4.3)	8 (3.2)	2 (1.4)	2 (1.3)	0 (0.0)	1 (0.4)	1 (0.4)	21 (1.5)
9+	3 (3.0)	3 (2.6)	6 (2.4)	2 (1.4)	1 (0.6)	1 (0.6)	2 (0.7)	1 (0.4)	19 (1.3)
10+	5 (5.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	1 (0.6)	0 (0.0)	0 (0.0)	7 (0.5)
11+	4 (4.0)	5 (4.3)	3 (1.2)	6 (4.2)	4 (2.6)	3 (1.9)	1 (0.4)	2 (0.9)	28 (2.0)
12+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
13+	0 (0.0)	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.1)
14+	3 (3.0)	3 (2.6)	4 (1.6)	0 (0.0)	1 (1.3)	2 (1.2)	1 (0.4)	0 (0.0)	14 (1.0)
TOTAL	100	115	249	144	154	160	283	229	1434

Table B.10. Number and percent of each yellow perch age class collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

AGE	March	April	May	June	July	August	Sept	October	Total
0+	5 (1.9)	4 (0.5)	32 (1.6)	0 (0.0)	6 (0.5)	8 (0.8)	6 (0.4)	7 (0.8)	68 (0.8)
1+	8 (3.1)	3 (0.4)	46 (2.3)	2 (0.2)	64 (5.6)	1 (0.1)	6 (0.4)	7 (0.8)	137 (1.6)
2+	46(17.8)	61 (7.2)	340(17.0)	127(15.4)	100 (8.9)	52 (4.9)	29 (1.6)	14 (1.6)	769 (9.2)
3+	84(32.6)	192(22.7)	502(25.0)	204(24.7)	381(33.8)	279(26.4)	256(18.5)	121(13.6)	2019(24.1)
4+	39(15.1)	247(29.2)	328(16.4)	154(18.6)	244(21.6)	400(37.9)	537(38.9)	322(36.2)	2271(27.1)
5+	41(15.9)	271(32.0)	513(25.6)	229(27.7)	254(22.5)	253(24.0)	433(31.3)	300(33.7)	2294(27.3)
6+	34(13.2)	67 (7.8)	239(11.9)	109(13.2)	78 (6.9)	63 (6.0)	115 (8.3)	118(13.2)	823 (9.8)
7+	1 (0.4)	1 (0.1)	5 (0.2)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.1)	9 (0.1)
TOTAL	258	846	2005	826	1127	1056	1382	890	8390

Table B.ll. Number and percent of each moutntain whitefish age class collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

AGE	March	April	May	June	Julv	August	Sept	October	Total
0+	6 (3.3)	51 (19.5)	16 (14.5)	12 (46.2)	6 (13.3)	2 (5.4)	21 (18.4)	4 (4.7)	118(13.7)
1+	13 (7.2)	15 (5.7)	11 (10.0)	2 (7.7)	2 (4.4)	2 (5.4)	14 (12.3)	8 (9.4)	67 (7.8)
2+	52(28.7)	73 (27.9)	32 (29.1)	4 (15.4)	7 (15.6)	1 (2.7)	22 (19.3)	13 (15.3)	204(23.7)
3+	93(51.4)	97 (37.0)	45 (40.9)	3 (11.5)	18 (40.0)	13 (35.1)	42 (36.8)	51 (60.0)	362(42.1)
4+	16 (8.8)	24 (9.2)	6 (5.4)	5 (19.2)	6 (13.3)	10 (27.0)	9 (7.9)	9 (10.6)	85 (9.9)
5+	1 (0.6)	1 (0.4)	0 (0.0)	0 (0.0)	0 (0.0)	1 (2.7)	1 (0.9)	0 (0.0)	4 (0.5)
6+	0 (0.0)	1 (0.4)	0 (0.0)	0 (0.0)	2 (4.4)	0 (0.0)	1 (0.9)	0 (0.0)	4 (0.5)
7+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (6.7)	3 (8.1)	2 (1.8)	0 (0.0)	8 (0.9)
8+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (2.2)	5 (13.5)	2 (1.8)	0 (0.0)	8 (0.9)
TOTAL	181	262	110	26	45	37	114	85	860

Table 8.12. Number and percent of each black crappie age class collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

AGE	March	April	May	June	July	August	Sept	October	Total
o+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (7.1)	1 (7.1)	3 (1.1)
1+	2 (5.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.8)
2+	13(35.1)	38 (64.4)	19 (33.9)	5 (27.8)	9 (25.7)	0 (0.0)	0 (0.0)	0 (0.0)	84 (32.1)
3+	6 (16.2)	6 (10.2)	8 (14.3)	7 (38.9)	21 (60.0)	11 (73.3)	15 (53.6)	5 (35.7)	79 (30.2)
4+	13(35.1)	7 (11.0)	17 (30.4)	5 (27.8)	4 (11.4)	4 (26.7)	9 (32.1)	4 (28.6)	63 (24.0)
5+	1 (2.7)	4 (6.8)	5 (8.9)	1 (5.6)	1 (2.8)	0 (0.0)	1 (3.6)	3 (21.4)	16 (6.1)
6+	1 (2.7)	2 (3.4)	4 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (3.6)	1 (7.1)	9 (3.4)
7+	1 (2.7)	2 (3.4)	3 (5.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	6 (2.3)
TOTAL	37	59	56	18	35	15	28	14	262

Table 8.13. Number and percent of each brown trout age class collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

AGE	March	April	May	June	July	August	Sept	October	Total
o+	1 (6.7)	1 (8.3)	0 (0.0)	1 (33.3)	0 (0.0)	0 (0.0)	1 (3.6)	0 (0.0)	4 (3.5)
1+	2 (13.3)	6 (50.0)	2 (40.0)	1 (33.3)	1 (20.0)	0 (0.0)	1 (3.6)	0 (0.0)	13 (11.4)
2+	8 (53.3)	4 (33.3)	2 (40.0)	1 (33.3)	2 (40.0)	0 (0.0)	1 (3.6)	0 (0.0)	18 (15.8)
3+	3 (20.0)	0 (0.0)	1 (20.0)	0 (0.0)	0 (0.0)	2 (7.4)	3 (10.7)	2 (10.5)	11 (9.6)
4+	1 (6.7)	1 (8.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (3.7)	8 (28.6)	2 (10.5)	13 (11.4)
5+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (14.8)	3 (10.7)	5 126.3)	12 (10.5)
6+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (14.8)	5 (17.8)	3 (15.8)	12 (10.5)
7+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (40.0)	16 (59.3)	6 (21.4)	7 (36.8)	31 (27.2)
TOTAL	15	12	5	3	5	27	28	19	114

Table 8.14. Number and percent of each cutthroat trout age class collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

AGE	March	April	May	June	July	August	Sept	October	Total
o+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
1+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
2+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
3+	0 (0.0)	2(100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (18.2)
4+	0 (0.0)	0 (0.0)	2(100.0)	0 (0.0)	3(100.0)	0 (0.0)	1(100.0)	2(100.0)	8 (72.7)
5+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1(100.0)	0 (0.0)	0 (0.0)	1 (9.1)
TOTAL	0	2	2	0	3	1	1	2	11

Table 8.15. Number and percent of each rainbow trout age class collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

AGE	March	April	May	June	July	August	Sept	October	Total
o+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
1+	0 (0.0)	1(100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (16.7)
2+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (50.0)	0 (0.0)	1(100.0)	0 (0.0)	2 (33.3)
3+	0 (0.0)	0 (0.0)	0 (0.0)	1 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (16.7)
4+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (16.7)
5+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
6+	0 (0.0)	0 (0.0)	0 (0.0)	1 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (16.7)
TOTAL	0	1	0	2	2	0	1	0	6

Table B.16. Number and percent of each pumpkinseed age class collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

AGE	March	April	May	June	July	August	Sept	October	Total
o+	5 (2.3)	2 (0.7)	48 (4.8)	0 (0.0)	7 (1.7)	20 (6.1)	8 (1.8)	(251)	95 (2.5)
1+	9 (4.2)	10 (3.4)	37 (3.7)	8 (0.9)	23 (5.5)	25 (7.6)	8 (1.8)	10 (4.2)	130 (3.4)
2+	27(12.6)	28 (9.4)	92 (9.2)	103(11.9)	72 (17.2)	53 (16.2)	38 (8.8)	38 (16.1)	451(11.9)
3+	53(24.7)	62 (20.8)	253(25.3)	343(39.8)	163(38.5)	88 (26.8)	98 (22.7)	59 (25.4)	1119 (29.5)
4+	61(28.4)	70 (23.5)	226(22.6)	205(23.8)	83 (19.8)	67 (20.4)	128(29.7)	53 (22.4)	893(23.6)
5+	35(16.3)	65 (21.8)	155(15.5)	112(13.0)	40 (9.6)	43 (13.1)	87 (20.2)	35 (14.8)	572(15.1)
6+	25(11.6)	61 (20.5)	190(19.0)	91 (10.6)	32 (7.6)	32 (9.8)	64 (14.8)	336(14.8)	531(14.0)
TOTAL	215	298	001	862	420	328	431	236	3791

Table 8.17. Number and percent of each tench age class collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

AGE	March	April	May	June	July	August	Sept	October	Total
0+	11 (3.3)	2 (1.0)	13 (2.4)	0 (0.0)	2 (0.9)	6 (5.5)	6 (3.1)	7 (3.1)	47 (2.4)
1+	24 (7.2)	5 (2.6)	23 (4.2)	3 (3.2)	6 (2.7)	2 (1.8)	4 (2.1)	8 (3.5)	75 (3.9)
2+	11 (3.3)	7 (3.7)	39 (7.1)	2 (2.1)	7 (3.2)	2 (1.8)	7 (3.6)	13 (5.7)	88 (4.6)
3+	38(11.4)	7 (3.7)	90 (16.4)	14 (14.9)	15 (6.8)	9 (8.2)	27 (13.9)	38 (16.7)	238(12.4)
4+	27 (8.1)	17 (8.9)	95 (17.3)	7 (7.4)	24 (10.8)	15 (13.8)	16 (8.2)	23 (10.1)	224(11.7)
5+	15 (4.5)	27 (14.1)	59 (10.7)	8 (8.5)	29 (13.1)	11 (10.1)	31 (16.0)	29 (12.8)	209(10.8)
6+	38(11.4)	42 (22.0)	76 (13.8)	15 (16.0)	36 (16.3)	21 (19.3)	29 (14.9)	35 (15.4)	292(15.2)
7+	153(45.8)	78 (40.8)	146(26.5)	44 (46.8)	94 (42.5)	39 (35.8)	70 (36.1)	66 (29.1)	690(35.9)
8+	11 (3.3)	4 (2.1)	5 (0.9)	1 (1.1)	6 (2.7)	3 (2.8)	2 (1.0)	6 (2.6)	38 (2.0)
9+	6 (1.8)	2 (1.5)	4 (0.7)	0 (0.0)	2 (0.9)	1 (0.9)	2 (1.0)	2 (0.9)	19 (1.0)
TOTAL	334	191	550	94	221	109	194	227	1920

Table 8.18. Number and percent of each northern squawfish age class collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

AGE	March	April	May	June	July	August	Sept	October	Total
0+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.6)	0 (0.0)	1 (0.6)	0 (0.0)	2 (0.2)
1+	0 (0.0)	17 (14.2)	6 (2.9)	0 (0.0)	5 (2.9)	3 (3.4)	2 (1.1)	1 (0.4)	34 (3.2)
2+	7 (18.9)	53 (44.2)	103(49.8)	19 (46.3)	85 (50.0)	16 (18.2)	36 (20.7)	81 (36.8)	400(37.8)
3+	12(32.4)	25 (20.8)	52 (25.1)	12 (29.3)	44 (25.9)	40 (45.4)	85 (48.8)	114(51.8)	385(36.4)
4+	9 (24.3)	14 (11.7)	36 (17.4)	6 (14.6)	22 (12.9)	26 (29.5)	41 (23.6)	19 (8.6)	173(16.4)
5+	2 (5.4)	3 (2.5)	7 (3.4)	0 (0.0)	8 (4.7)	1 (1.1)	6 (3.4)	4 (1.8)	30 (2.8)
6+	4 (10.8)	2 (1.7)	0 (0.0)	2 (4.9)	4 (2.4)	2 (2.3)	0 (0.0)	1 (0.4)	15 (1.4)
7+	1 (2.7)	3 (2.5)	3 (1.5)	1 (2.4)	1 (0.6)	0 (0.0)	1 (0.6)	0 (0.0)	10 (0.9)
8+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.6)	0 (0.0)	1 (0.1)
9+	1 (2.7)	2 (1.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.6)	0 (0.0)	4 (0.4)
10+	1 (2.7)	1 (0.8)	0 (0.0)	1 (2.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (0.3)
TOTAL	37	120	207	41	170	88	174	220	1057

Table 8.19. Number and percent of each largescale sucker age class collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

AGE	March	April	May	June	July	August	Sept	October	Total
0+	2 (2.6)	14 (7.7)	5 (5.0)	0 (0.0)	4 (2.3)	1 (1.5)	2 (1.2)	1 (0.9)	29 (3.1)
1+	0 (0.0)	22 (12.2)	3 (3.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.9)	26 (2.7)
2+	2 (2.6)	31 (17.1)	6 (6.0)	0 (0.0)	6 (3.5)	0 (0.0)	2 (1.2)	0 (0.0)	47 (5.0)
3+	0 (0.0)	16 (8.8)	6 (6.0)	1 (1.3)	14 (8.1)	2 (3.0)	4 (2.4)	2 (1.9)	45 (4.7)
4+	0 (0.0)	1 (0.6)	3 (3.0)	0 (0.0)	10 (5.8)	3 (4.5)	4 (2.4)	2 (1.9)	23 (2.4)
5+	2 (2.6)	4 (2.2)	5 (5.0)	5 (6.5)	19 (11.0)	3 (4.5)	20 (11.8)	8 (7.5)	66 (7.0)
6+	16(21.1)	16 (8.8)	27 (27.0)	16 (20.8)	55 (31.9)	17 (25.8)	40 (23.5)	31 (29.0)	218(23.0)
7+	16(21.1)	19 (10.5)	27 (27.0)	14 (18.2)	30 (17.4)	17 (25.8)	33 (19.4)	24 (22.4)	180(19.0)
8+	23(30.3)	29 (16.0)	9 (9.0)	24 (31.2)	21 (12.2)	10 (15.2)	39 (22.9)	26 (24.3)	181(19.1)
9+	14(18.4)	24 (13.2)	7 (7.0)	16 (20.8)	12 (7.0)	9 (13.6)	20 (11.8)	10 (9.3)	112(11.8)
10+	1 (1.3)	5 (2.8)	2 (2.0)	1 (1.3)	1 (0.6)	4 (6.1)	6 (3.5)	2 (1.9)	22 (2.3)
TOTAL	76	181	100	77	172	66	170	107	949

Table 8.20. Number and percent of each **longnose** sucker age class collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

AGE	March	April	May	June	July	August	Sept	October	Total
0+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.5)	1 (1.0)	3 (0.4)
1+	0 (0.0)	0 (0.0)	6 (6.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (1.9)	8 (1.1)
2+	9 (9.5)	5 (13.2)	17 (17.3)	5 (7.2)	3 (4.8)	9 (7.4)	4 (2.9)	1 (1.0)	53 (7.3)
3+	3 (3.2)	5 (13.2)	7 (7.1)	4 (5.8)	9 (14.3)	23 (19.0)	18 (13.2)	7 (6.8)	76 (10.5)
4+	27(28.4)	12 (31.6)	22 (22.4)	27 (39.1)	18 (28.6)	24 (19.8)	46 (33.8)	25 (24.3)	201(27.8)
5+	38(40.0)	15 (39.5)	33 (33.7)	29 (42.0)	23 (36.5)	53 (43.8)	51 (37.5)	51 (49.5)	293(40.5)
6+	16(16.8)	1 (2.6)	8 (8.2)	3 (4.3)	9 (14.3)	12 (9.9)	11 (8.1)	14 (13.6)	74 (10.2)
7+	2 (2.1)	0 (0.0)	3 (3.1)	1 (1.4)	1 (1.6)	0 (0.0)	4 (2.9)	2 (1.9)	13 (1.8)
8+	0 (0.0)	0 (0.0)	2 (2.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (0.3)
TOTAL	95	38	98	69	63	121	136	103	723

Table 8.21. Number and percent of brown bullheads in each length increments. Fish collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

RANGE (mm)	March	April	May	June	July	August	Sept	October	Total
O-100	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
101-150	5 (11.9)	0 (0.0)	IO (I3.9)	4 (10.5)	10 (47.6)	0 (0.0)	0 (0.0)	0 (0.0)	29 (10.8)
151-200	9 (21.4)	8 (25.0)	24 (33.3)	9 (23.7)	3 (14.3)	2 (40.0)	8 (34.8)	14 (40.0)	77 (28.7)
201-250	17 (40.5)	18 (56.2)	25 (34.7)	19 (50.0)	8 (38.1)	1 (20.0)	8 (34.8)	12 (34.3)	108 (40.3)
251-300	8 (19.0)	4 (12.5)	13 (18.1)	6 (15.8)	0 (0.0)	2 (40.0)	6 (26.1)	8 (22.8)	47 (17.5)
301-350	2 (4.8)	2 (6.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (4.3)	1 (2.8)	6 (2.2)
351-400	1 (2.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.4)
TOTAL	42	32	72	38	21	5	23	35	268

Table B.22. Number and percent of each peamouth age class collected during relative abundance electrofishing surveys on the Pend Oreille River, WA (March-October, 1988).

AGE	March	April	May	June	July	August	Sept	October	Total
o+	0 (0.0)	0 (0.0)	5 (17.2)	1 (6.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	6 (4.7)
1+	2 (25.0)	9 (69.2)	9 (31.0))	6 (40.0)	1 (4.8)	0 (0.0)	0 (0.0)	0 (0.0)	27 (21.2)
2+	0 (0.0)	1 (7.7)	4 (13.8)	1 (6.7)	2 (9.5)	0 (0.0)	1 (12.5)	5 (25.0)	14 (11.0)
3+	4 (50.0)	1 (7.7)	5 (17.2)	3 (20.0)	0 (0.0)	3 (23.1)	2 (25.0)	11 (55.0)	29 (22.8)
4+	2 (25.0)	2 (15.4)	6 (20.7)	4 (26.7)	18 (85.7)	1 O(76.9)	5 (62.5)	4 (20.0)	51 (40.2)
TOTAL	8	13	29	15	21	13	a	20	127

Table B.23. Total number and percent of each age class of fish collected during gillnetting on the Pend Oreille, River, WA (March-October, 1988).

Species Age	March	April	May	June	July	August	September	October	Annual
Soak time (hrs)	42.3	77.0	24.0	44.3	73.3	54.4	55.3	22.2	393.0
Northern Squawfish									
3+	1 (25.0)	1 (14.3)	1 (50.0)	2 (33.3)	8 (29.6)	1 (6.2)	1 (11.1)	0 (0.0)	15 (20.8)
4+	2 (50.0)	3 (28.6)	0 (0.0)	2 (33.3)	17 (63.0)	8 (50.0)	6 (66.6)	0 (0.0)	37 (51.4)
5+	0 (0.0)	1 (14.3)	0 (0.0)	0 (0.0)	1 (3.7)	0 (0.0)	0 (0.0)	0 (0.0)	2 (2.8)
6+	1 (25.0)	1 (14.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.2)	1 (11.1)	0 (0.0)	4 (5.6)
7+	0 (0.0)	1 (14.3)	0 (0.0)	1 (16.7)	1 (3.7)	2 (12.4)	1 (11.1)	1 (100.0)	7 (9.7)
8+	0 (0.0)	1 (14.3)	0 (0.0)	0 (0.0)	0 (0.0)	2 (12.4)	0 (0.0)	0 (0.0)	3 (4.2)
9+	0 (0.0)	0 (0.0)	1 (50.0)	1 (16.7)	0 (0.0)	2 (12.4)	0 (0.0)	0 (0.0)	4 (5.6)
Total	4	7	2	6	27	16	9	1	72
Peamouth									
2+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (14.3)	0 (0.0)	1 (2.0)
3+	6 (85.7)	1 (50.0)	2 (66.6)	5 (62.5)	9 (60.0)	4 (44.4)	4 (57.1)	0 (0.0)	31 (60.8)
4+	1 (14.3)	1 (50.0)	1 (33.3)	3 (37.5)	6 (40.0)	5 (55.6)	2 (28.6)	0 (0.0)	19 (37.2)
Total	7	2	3	8	15	9	7	0	51
Pumpkinseed									
3+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (8.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (4.2)
4+	0 (0.0)	1 (12.5)	0 (0.0)	2 (33.3)	15 (60.0)	0 (0.0)	0 (0.0)	0 (0.0)	18 (37.5)
5+	1 (100.0)	4 (50.0)	0 (0.0)	3 (50.0)	7 (28.0)	5 (83.3)	2 (100.0)	0 (0.0)	22 (45.8)
6+	0 (0.0)	3 (37.5)	0 (0.0)	1 (16.7)	1 (4.0)	1 (16.7)	0 (0.0)	0 (0.0)	6 (12.5)
Total	1	8	0	6	25	6	2	0	48

Table B.23. (cont.)

Species	Age	March	April	May	June	July	August	September	October	Annual
Largescale sucker										
	1+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (16.7)	0 (0.0)	1 (3.7)
	2+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	3+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (16.7)	0 (0.0)	1 (3.7)
	4+	0 (0.0)	1 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (9.1)	0 (0.0)	0 (0.0)	2 (7.4)
	5+	0 (0.0)	0 (0.0)	0 (0.0)	1 (33.3)	0 (0.0)	2 (18.2)	0 (0.0)	0 (0.0)	3 (11.1)
	6+	1 (50.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	6 (54.5)	2 (33.3)	1 (50.0)	10 (37.0)
	7+	1 (50.0)	1 (50.0)	0 (0.0)	1 (33.3)	0 (0.0)	0 (0.0)	1 (16.7)	0 (0.0)	4 (14.8)
	8+	0 (0.0)	0 (0.0)	0 (0.0)	1 (33.3)	1 (100.0)	1 (9.1)	1 (16.7)	0 (0.0)	4 (14.8)
	9+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (9.1)	0 (0.0)	1 (50.0)	2 (7.4)
	Total									27
Longnose sucker										
	4+	5 (71.4)	3 (75.0)	0 (0.0)	1 (50.0)	1 (100.0)	1 (33.3)	1 (100.0)	0 (0.0)	12 (66.7)
	5+	2 (28.6)	1 (25.0)	0 (0.0)	1 (50.0)	0 (0.0)	2 (67.7)	0 (0.0)	0 (0.0)	6 (33.3)
	Total	7	4	0	2	1	3	1	0	18
Yellow perch										
	2+	0 (0.0)	2 (40.0)	0 (0.0)	4 (44.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	6 (42.8)
	3+	0 (0.0)	0 (0.0)	0 (0.0)	5 (55.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (35.7)
	4+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	5+	0 (0.0)	2 (40.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (14.3)
	6+	0 (0.0)	1 (20.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	0	5	0	9	0	0	0	0	14
Tench										
	4+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (25.0)	0 (0.0)	0 (0.0)	1 (7.1)
	5+	0 (0.0)	0 (0.0)	0 (0.0)	1 (50.0)	0 (0.0)	1 (25)	0 (0.0)	0 (0.0)	2 (14.2)
	6+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (33.3)	1 (25.0)	0 (0.0)	0 (0.0)	3 (21.4)
	7+	0 (0.0)	2 (100.0)	0 (0.0)	1 (50.0)	4 (66.7)	1 (25.0)	0 (0.0)	0 (0.0)	8 (57.1)
	Total	0	2	0	2	6	4	0	0	14

Table B.23 (cont.)

S	M		M						
Mountain whitefish									
2+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (25.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (16.7)
3+	0 (0.0)	0 (0.0)	0 (0.0)	2 (66.6)	4 (50.0)	0 (0.0)	1 (100.0)	0 (0.0)	7 (58.3)
4+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (25 0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (16.7)
8+	0 (0.0)	0 (0.0)	0 (0.0)	1 (33.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (8.3)
Total	0	0	0	3	8	0	1	0	12
Brown trout									
3+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (20.0)
4+	1 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (50.0)	0 (0.0)	0 (0.0)	2 (40.0)
5+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
6+	0 (0.0)	0 (0.0)	1 (100.0)	0 (0.0)	0 (0.0)	1 (50.0)	0 (0.0)	0 (0.0)	2 (40.0)
Total	1	0	1	0	1	2	0	0	5
Brown bullhead									
3+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (50.0)	0 (0.0)	0 (0.0)	1 (50.0)
4+	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (50.0)	0 (0.0)	0 (0.0)	1 (50.0)
tal	0	0	0	0	0	2	0	0	2
Cutthroat trout									
4+	1 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (100.0)

Table 8.24. Number of fish caught by gillnets at each study site in March, 1988.

Site number	1	2	3	4	5	6	7	8	9	10	11	Total
Total net soak time (hrs)	4.7	2.9	4.3	2.0	5.1	0.0	4.4	6.8	3.1	0.0	4.3	37.6
Brown trout				1							1	2
Pumpkinseed								1				1
Longnose sucker							4	2	1			7
Largescale sucker							2					2
Northern squawfish			2						2			4
Peamouth					6							6
Total	0	0	2	1	6	0	6	3	3	0	1	22

Table 8.25. Number of fish caught by gillnets at each study site in April, 1988.

Site number	1	2	3	4	6	7	8	8C	9	10	10A	11	Total
Total net soak time (hrs)	13.4	6.4	6.0	7.2	5.7	8.3	2.3	2.1	7.3	4.1	2.2	12.0	77.0
Pumpkinseed							1	7					8
Yellow perch							2	1	1	1			5
Longnose sucker	1							1		2			4
Largescale sucker				2									2
Tench	1							1					2
NortherN squawfish	1		2					4					7
Peamouth						1					1		2
Total	3	0	2	2	0	1	3	14	1	3	1	0	30

Table B.26. Number of fish caught by **gillnets** at each study site in May, 1988.

Site number	3	4	5	8	10	11	Total
Total net soak time (hrs)	3.4	5.0	4.0	3.7	3.7	4.1	23.9
Brown trout	1						1
Peamouth					1	2	3
Northern squawfish						1	1
Total	1	0	0	0	1	3	5

Table 8.27. Number of fish caught by **gillnets** at each study site in June, 1988.

Site number	1	2	3	4	5	6	7	8	9	10	11	Total
Total net soak time (hrs)	3.5	4.2	4.2	7.1	5.5	4.8	2.5	3.2	2.8	3.3	3.2	44.3
Brown trout							1					1
Mountain whitefish					2						1	3
Pumpkinseed			1		2	1				1		5
Yellow perch					6	1						7
Longnose sucker		1				1						2
Largescale sucker	1			2								3
Tench			1						1			2
Northern squawfish			1	1	2	2	1					7
Peamouth				2	3	1	1			1	1	9
Total	1	1	3	5	15	6	3	0	1	2	2	39

Table 8.28. Number of fish caught by gillnets at each study site in July, 1988.

Site number	1	2	3	4	5	6	7	8	9	10	11	Total
Total net soak time (hrs)	6.7	7.6	10.6	3.8	7.9	6.5	3.0	8.0	8.7	6.1	4.5	73.25
Cutthroat trout			1									1
Mountain whitefish			1	2	1	1			3			8
Pumpkinseed				2	12	6		1	4			25
Longnose sucker						1						1
Largescale sucker						1						1
Tench				2	3	1						6
Northern squawfish	2	11	1	2	4	3			3			26
Peamouth			6	3	1			2			3	15
Total	2	11	9	11	21	13	0	3	10	0	3	83

Table 8.29. Number of fish caught by gillnets at each study site in August, 1988.

Site number	3	4	5	6	7	8	9	10	11	Total
Total net soak time (hrs)	12.8	4.1	4.6	6.7	9.8	5.2	6.2	3.4	6.2	59.0
Brown trout	2									2
Pumpkinseed		3					3			6
Longnose sucker		1					2			3
Largescale sucker	5	1	1		2		1		1	11
Tench							1	2	1	4
Northern squawfish	4	6		1	1	3			1	16
Peamouth	4				1			3	1	9
Total	15	11	1	1	4	3	7	5	4	51

Table 8.30. Number of fish caught by **gillnets** at each study site in September, 1988.

Site number	1	2	3	4	5	7	8	9	10	11	Total
Total net soak time (hrs)	4.4	4.5	4.0	13.1	3.8	4.2	3.3	4.1	2.2	11.6	55.25
Mountain whitefish				1							1
Largemouth bass				1	2						3
Pumpkinseed				1	1						2
Longnose sucker				1							1
Largescale sucker	2			1		2					5
Northern squawfish		1		1	1	2		1	1		7
Peamouth		1		2	2	1			1		7
Total	2	2	0	8	6	5	0	1	2	0	26

Table 8.31. Number of fish caught by **gillnets** at each study site in October, 1988.

Site number	3	4	5	6	8	9	Total
Total net soak time (hrs)	7.4	3.0	3.8	1.8	2.2	4.1	22.2
Largescale sucker	1	1					2
Northern squawfish			1				1
Total	1	1	1				3

Table B.32. Total numbers and percent of fish collected during beach seining surveys in July, 1988.

Site	4A	5A	9A	Total
Distance seined (m)	91.5	91.5	91.5	274.5
Largemouth bass	107 (32.2)	54 (39.4)	8 (12.9)	169 (31.8)
Black crappe		1 (0.7)		1 (0.2)
Pumpkinseed	188 (56.6)	67 (48.9)	54 (87.1)	309 (58.2)
Yellow perch	34 (10.2)	13 (9.5)		47 (8.8)
Brown bullhead		1 (0.7)		1 (0.2)
Tench	3 (0.9)	1 (0.7)		4 (0.8)
Total	332	137	62	531

Table 8.33. Total numbers and percent of fish collected during beach seining surveys in August, 1988.

Site	4A	5A	8C	9A	Total
Distance seined (m)	91.5	61	76	91.5	320
Largemouth bass	3 (0.9)	23 (3.5)	6 (16.2)	57 (72.2)	89 (8.0)
Black crappe					
Pumpkinseed	333 (96.5)	623 (95.0)	30 (81.1)	21 (3.2)	1007 (90.2)
Yellow perch	9 (2.6)	8 (1.2)			17 (1.5)
Brown bullhead					
Tench	2 (0.3)	1 (2.7)	1 (1.3)		4 (0.4)
Total	345	656	37	79	1117

Table 8.34. Total numbers and percent of fish collected during beach seining surveys in September, 1988.

Site	3A	4A	5A	8C	9A	Total
Distance seined (m)	30.5	152.5	91.5	137.0	91.5	503.0
Largemouth bass		4 (0.5)	2 (5.7)	54 (7.9)	3 (6.7)	63 (3.6)
Black crappe		1 (0.1)				1 (0.1)
Pumpkinseed	306 (100.0)	736 (97.0)	32 (91.4)	630 (92.0)	42 (93.3)	1646 (95.1)
Yellow perch		12 (1.6)	1 (2.8)			13 (0.8)
Brown bullhead						
Tench		6 (0.8)		1 (0.1)		7 (0.4)
Total	306	759	35	685	45	1730

Table 8.35. Total numbers and percent of fish collected during beach seining surveys in October, 1988.

Site	4A	8C	9A	Total
Distance seined (m)	91.5	81.0	91.5	264.0
Largemouth bass		2 (22.2)	4 (25.0)	6 (20.7)
Black crappe				
Pumpkinseed	4 (100.0)	6 (66.7)	10 (62.5)	20 (69.0)
Yellow perch		1 (11.1)	2 (12.5)	3 (10.3)
Brown bullhead				
Tench				
Total	4	9	16	29

Table 8.36. Summary of selective electrofishing surveys in Cee Cee Ah Slough (3A) for target species (i.e., trout, bass, black crappie, and whitefish) by age class during 1988.

	July	August	September	Total
Shock time (min)	25	74	39	138

Largemouth bass

o+	0 (0.0)	0 (0.0)	1 (33.3)	1 (7.1)
2+	0 (0.0)	0 (0.0)	2 (66.7)	2 (14.3)
3+	7 (77.8)	2 (100.0)	0 (0.0)	9 (64.3)
6+	2 (22.2)	0 (0.0)	0 (0.0)	2 (14.3)
Total	9	2	3	14

Black crappie

3+	0	3 (37.5)	2 (100.0)	5 (50.0)
4+	0	3 (37.5)	0 (0.0)	3 (30.0)
7+	0	2 (25.0)	0 (0.0)	2 (20.0)
Total	0	8	2	10

Brown trout

2+	1 (2.2)	1 (2.2)	0 (0.0)	2 (1.8)
3+	1 (2.2)	0 (0.0)	0 (0.0)	1 (0.9)
4+	4 (8.9)	9 (19.6)	2 (8.7)	15 (13.2)
5+	10 (22.2)	13 (28.3)	5 (21.7)	28 (24.6)
6+	7 (15.6)	12 (26.1)	5 (21.7)	24 (21.1)
7+	22 (48.9)	11 (23.9)	11 (47.8)	44 (38.6)
Total	45	46	23	114

Cutthroat trout

4+	0	2	1	3

Mountain whitefish

1+	1 (4.8)	0 (0.0)	1 (2.8)	2 (1.6)
2+	0 (0.0)	1 (1.4)	0 (0.0)	1 (0.8)
3+	2 (9.5)	15 (21.8)	13 (36.1)	30 (23.8)
4+	2 (9.5)	30 (43.5)	20 (55.6)	52 (41.3)
5+	0 (0.0)	1 (1.4)	0 (0.0)	1 (0.8)
6+	3 (14.3)	5 (7.2)	0 (0.0)	8 (6.3)
7+	6 (28.6)	7 (10.1)	2 (5.6)	15 (11.9)
8+	7 (33.3)	10 (14.5)	0 (0.0)	17 (13.5)
Total	21	69	36	126

Table 8.37. Summary of selective electrofishing surveys in Skookum Slough (8A) for target species (i.e., trout, bass, black crappie, and whitefish) by age class during 1988.

	March	August	September	October	Total
Shock time (min)	10	26	32	30	98
Largemouth bass					
0+	0	0 (0.0)	1 (50.0)	2 (66.7)	3 (42.8)
1+	0	1 (50.0)	1 (50.0)	0 (0.0)	2 (28.6)
3+	0	1 (50.0)	0 (0.0)	1 (33.3)	2 (28.6)
Total	0	2	2	3	7
Brown trout					
2+	0	0	1 (12.5)	0	1 (2.9)
3+	0	1 (14.3)	1 (12.5)	0	2 (5.9)
4+	0	0	0	2 (10.5)	2 (5.9)
5+	0	0	1 (12.5)	2 (10.5)	3 (8.8)
6+	0	1 (14.3)	0	3 (15.8)	4 (11.8)
7+	0	5 (71.4)	5 (62.5)	12 (63)	22 (64.7)
Total	0	7	8	19	34
Cutthroat trout					
4+	1	0	0	0	1
Mountain whitefish					
0+	0	1 (16.7)	1 (4.0)	0	2 (3.8)
1+	0	1 (16.7)	0	0	1 (1.9)
2+	0	0	1 (4.0)	1 (5.3)	2 (3.8)
3+	1 (50.0)	2 (33.3)	18 (72.0)	14 (73.7)	35 (67.3)
4+	1 (50.0)	2 (33.3)	5 (50.0)	3 (15.8)	11 (22.2)
8+	0	0	0	1 (5.3)	1 (1.9)
Total	2	6	25	19	52

Table B.38. Summary of selective electrofishing surveys in Tiger Slough (1 B) for target species (Le., trout, bass, black crappie, and whitefish) by age class during 1988.

	May	June	Total
Shock time (min)	60	25	85

Largemouth bass

1+	8 (8.4)	3 (10.0)	11 (8.8)
2+	4 (4.2)	5 (16.7)	9 (7.2)
3+	1 (1.1)	1 (3.3)	2 (1.6)
4+	19 (20.0)	3 (10.0)	22 (17.6)
5+	8 (8.4)	3 (10.0)	11 (8.8)
6+	16 (16.8)	4 (13.3)	20 (16.0)
7+	12 (12.6)	7 (23.3)	19 (15.2)
8+	8 (8.4)	1 (3.3)	9 (7.2)
9+	4 (4.2)	0	4 (3.2)
10+	5 (5.3)	0	5 (4.0)
11+	6 (6.3)	0	6 (4.8)
14+	4 (4.2)	3 (10.0)	7 (5.6)
Total	95	30	125

Black crappie

4+	1 (100.0)	4 (80.0)	5 (83.3)
6+	0	1 (20.0)	1 (16.7)
Total	1	5	6

Brown trout

4+	1 (50.0)	0	1 (50.0)
6+	1 (50.0)	0	1 (50.0)
Total	2	0	2

Table 8.39. Summary of selective electrofishing surveys at selected locations for target sepcies (*i.e.*, trout, bass, black crappie, and whitefish) during 1988.

Site	1[1]	2[2]	3C[3]	4A[4]	4B[5]	5[6]	5A[7]	5B[8]	7[9]	7B[10]	10A[11]	11[12]	TOTAL
Shock time (min)	10	16	25	49	46	1	3	28	3	25	25	70	271
Largemouth bass	26 (100.0)		39 (97.5)	76 (100.0)	9 (47.4)	4 (100.0)	6 (100.0)	11 (68.8)	5 (100.0)	72 (96.0)	47 (70.1)	12 (17.9)	307 (75.2)
Black crappie		1 (2.5)		10 (52.6)				5 (31.2)		3 (4.0)	2 (3.0)	2 (3.0)	23 (5.6)
Brown trout		3 (42.8)									1 (1.5)	2 (3.0)	6 (1.5)
Cutthroat trout												3 (4.5)	3 (0.7)
Rainbow trout		1 (14.3)											1 (0.2)
Mountain whitefish		3 (42.8)									17 (25.4)	48 (71.6)	68 (16.7)
Total	26	7	40	76	19	4	6	16	5	75	67	67	408

[1] Sampled in August
[2] Sampled in August
[3] Sampled in May, July, and August
[4] Sampled in May and June
[5] Sampled in August
[6] Sampled in May
[7] Sampled in June
[8] Sampled in March, May, and August
[9] Sampled in September
[10] Sampled in August
[11] Sampled in September
[12] Sampled in September

APPENDIX C

MONTHLY MARK AND RECAPTURE DATA FOR EACH FISH SPECIES

Table C.1. Number of yellow perch one year and older caught, marked, and recaptured during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	253	0	245	0	0			
8804	842	0	885	245	208290			
8805	1983	0	1888	910	1804530			
8806	835	0	574	2598	2189330			
8807	1140	1	870	3172	3616080			
8808	1049	5	1023	4042	4240058			
8809	1389	3	1201	5065	7035285			
8810	886	3	---	6286	5551676			
TOTAL	8377	12	6266	22298	24623249	205 1937	1172536	3971492
					RIVER EST.	41777446	23872826	80859573

Table C.2. Number of pumpkinseeds one year and older caught, marked, and recaptured during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	211	0	202	0	0			
8804	304	0	234	202	61408			
8805	969	0	760	436	422484			
8806	868	3	468	1196	1038128			
8807	613	2	409	1664	1020032			
8808	351	0	241	2073	727623			
8809	463	0	276	2314	1071382			
8810	238	1	---	2590	616420			
TOTAL	4017	6	2590	10475	4957477	826246	378433	2253399
					RIVER EST.	16822372	7704903	45879196

Table C.3. Number of tench one year and older caught, marked, and recaptured during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	323	0	319	0	0			
8804	191	2	189	319	60929			
8805	552	0	537	508	280416			
8806	96	1	88	1045	100320			
8807	225	2	211	1133	254925			
8808	107	0	106	1344	143808			
8809	188	0	184	1450	272600			
8810	220	2	---	1634	359480			
TOTAL	1902	7	1634	7433	1472478	210354	102255	525885
					RIVER EST.	4282807	2081920	10707019

Table C.4. Number of largescale suckers one year and older caught, marked, and recaptured during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	76	0	76	0	0			
8804	169	0	168	76	12844			
8805	98	0	87	244	23912			
8806	80	0	64	331	26480			
8807	169	0	149	395	66755			
8808	76	0	72	544	41344			
8809	174	1	169	616	107184			
8810	108	8	---	785	84780			
TOTAL	950	9	785	2991	363299	40367	21246	90825
					RIVER EST.	821863	432560	1849192

Table C.5. Number of longnose suckers one year and older caught, marked, and recaptured during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	102	0	102	0	0			
8804	42	1	35	102	4284			
8805	98	0	93	137	13426			
8806	71	0	63	230	16330			
8807	74	1	70	293	21682			
8808	124	0	124	363	45012			
8809	136	1	133	487	66232			
8810	102	3	---	620	63240			
TOTAL	749	6	620	2232	230206	38368	17573	104639
					RIVER EST.	781166	357786	2130452

Table C.6. Number of largemouth bass one year and older caught, marked, and recaptured during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	102	0	101	0	0			
8804	115	1	72	101	11615			
8805	466	4	387	173	80618			
8806	180	6	91	560	100800			
8807	170	1	59	651	110670			
8808	207	4	141	710	146970			
8809	289	5	93	851	245939			
8810	220	7	---	944	207680			
TOTAL	1749	28	944	3990	904292	32296	22383	48618
					RIVER EST.	657549	455727	989859

Table C.7. Number of northern squawfish one year and older caught, marked, and recaptured during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	41	0	40	0	0			
8804	127	0	110	40	5080			
8805	210	0	196	150	31500			
8806	47	2	36	346	16262			
8807	197	1	110	382	75254			
8808	105	3	97	492	51660			
8809	182	3	177	589	107198			
8810	221	7	---	766	169286			
TOTAL	1130	16	766	2765	456240	28515	17548	49591
					RIVER EST.	580565	357271	1009679

Table C.8. Number of black crappie one year and older caught, marked, and recaptured during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	37	0	37	0	0			
8804	59	0	34	37	2183			
8805	58	0	58	71	4118			
8806	23	1	8	129	2967			
8807	36	0	6	137	4932			
8808	41	0	40	143	5863			
8809	32	0	13	183	5856			
8810	13	0	---	196	2548			
TOTAL	299	1	196	896	28467	28467	5083	284670
					RIVER EST.	579588	103498	5795881

Table C.9. Number of mountain whitefish one year and older caught, marked, and recaptured during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	177	0	174	0	0			
8804	211	3	127	174	36714			
8805	94	1	78	301	28294			
8806	17	0	5	379	6443			
8807	68	1	34	384	26112			
8808	112	6	87	418	46816			
8809	210	14	138	505	106050			
8810	100	14	---	642	64200			
TOTAL	989	39	643	2803	314629	8067	5903	11358
					RIVER EST.	164252	120185	231258

Table C.10. Number of largemouth bass one year and older caught, marked, and recaptured at study site 1B during May and June, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8805A	30	0	29	0	0			
88050	65	4	52	29	1885			
8806	54	5	0	81	4374			
TOTAL	149	9	81	110	6259	695	366	1565

Table C.11. Number of brown trout one year and older caught, marked, and recaptured at study site 3A during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	3	0	3	0	0			
8804	0	0	0	3	0			
8805	3	0	3	3	9			
8806	0	0	0	6	0			
880714	28	0	24	6	168			
880721	19	5	13	30	570			
880828	31	3	25	43	1333			
880829	33	9	24	68	2244			
880912	11	4	7	92	1012			
880913	8	4	3	99	792			
880920	20	11	9	102	2040			
8810	13	6	---	110	1430			
TOTAL	169	42	111	562	9598	229	169	317

Table C.12. Number of 4+ brown trout caught, marked, and recaptured at study site 3A during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	1	0	1	0	0			
8804	0	0	0	1	0			
8805	1	0	1	1	1			
8806	0	0	0	2	0			
880714	1	0	0	2	2			
880721	3	0	2	2	6			
880828	4	0	3	4	16			
880829	7	0	7	7	49			
880912	2	1	1	14	28			
880913	2	1	1	15	30			
880920	4	2	2	16	64			
8810	0	0	---	18	0			
TOTAL	25	4	18	82	196	49	19	196

Table C.13. Number of 5+ brown trout caught, marked, and recaptured at study site 3A during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	0	0	0	0	0			
8804	0	0	0	0	0			
8805	0	0	0	0	0			
8806	0	0	0	0	0			
880714	7	0	6	0	0			
880721	3	2	1	6	18			
880828	7	2	5	7	49			
880829	10	4	6	12	120			
880912	3	1	2	18	54			
880913	1	0	1	20	20			
880920	2	2	0	21	42			
8810	5	3	---	21	105			
TOTAL	38	14	21	105	408	29	17	53

Table C.14. Number of 6+ brown trout caught, marked, and recaptured at study site 3A during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	0	0	0	0	0			
8804	0	0	0	0	0			
8805	1	0	1	0	0			
8806	0	0	0	1	0			
880714	5	0	5	1	5			
880721	2	0	2	6	12			
880828	5	1	3	8	40			
880829	9	1	8	11	99			
880912	3	1	2	19	57			
880913	3	1	1	21	63			
880920	5	2	3	22	110			
8810	3	1	---	24	72			
TOTAL	36	7	25	113	458	65	32	164

Table C.15. Number of 7+ brown trout caught, marked, and recaptured at study site 3A during March through October, 1988.

MM-H	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNAREL	LOWER LIMIT	UPPER LIMIT
8803	0	0	0	0	0			
8804	0	0	0	0	0			
8805	0	0	0	0	0			
8806	0	0	0	0	0			
880714	13	0	12	0	0			
880721	10	3	7	12	120			
880828	15	0	14	19	285			
880829	6	4	2	33	198			
880912	3	1	2	35	105			
880913	2	2	0	37	74			
880920	9	5	4	37	333			
8810	5	2	---	41	205			
TOTAL	63	17	41	214	1320	78	49	133

Table C.16. Number of one year and older brown trout caught, marked, and recaptured at study site 2 during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	1	0	1	0	0			
8804	0	0	0	1	0			
8805	0	0	0	1	0			
8806	0	0	0	1	0			
8807	2	0	1	1	2			
8808	3	0	3	2	6			
8809	7	0	3	5	35			
8810	2	2	---	8	16			
TOTAL	15	2	8	19	59	30	8	295

Table C.17. Number of one year and older brown trout caught, marked, and recaptured at study site 8A during July through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8807	1	0	1	0	0			
880827	9	0	9	1	9			
880829	7	4	2	10	70			
880912	1	0	1	12	12			
880922	8	1	7	13	104			
8810	19	2	---	21	399			
TOTAL	45	7	20	57	594	85	45	270

Table C.18. Number of one year and older mountain whitefish caught, marked, and recaptured at study site 3A during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	23	0	23	0	0			
8804	8	0	0	23	184			
8805	1	0	0	23	23			
8806	4	0	1	23	92			
880714	12	0	1	24	288			
880721	21	0	17	25	525			
880828	36	3	29	42	1512			
880829	58	11	45	71	4118			
880912	23	5	10	115	2645			
880920	28	5	23	124	3472			
8810	10	4	---	147	1470			
TOTAL	224	28	149	617	14329	512	355	770

Table C.19. Number of one year and older mountain whitefish caught, marked, and recaptured at study site 2 during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	22	0	22	0	0			
8804	119	1	110	22	2618			
8805	43	0	32	132	5676			
8806	3	0	1	164	492			
8807	26	1	16	165	4290			
8808	4	0	4	181	724			
8809	43	2	29	185	7955			
8810	48	4	---	214	10272			
TOTAL	308	8	214	1063	32027	4003	2027	9420

Table C.20. Number of one year and older mountain whitefish caught, marked, and recaptured at study site 8A during March through October, 1988.

MONTH	# CAUGHT(Ct)	#RECAP(Rt)	# MARKED	TOTAL MARKED(Mt)	CtMt	SCHNABEL	LOWER LIMIT	UPPER LIMIT
8803	11	0	11	0	0			
8804	7	0	0	11	77			
8805	2	0	2	11	22			
8806	0	0	0	13	0			
8807	0	0	0	13	0			
8808	7	1	6	13	91			
8809	35	4	23	19	665			
8810	20	6	---	42	840			
TOTAL	82	11	42	122	1695	154	86	314

APPENDIX D

GROWTH AND CONDITION FACTORS FOR NON-TARGET SPECIES

Table D.1. Mean back-calculated lengths at the end of each years growth (annulus formation) for each year class of pumpkinseed.

		MEAN±S.D. BACK-CALCULATED LENGTH AT ANNULUS					
COHORT	N	1	2	3	4	5	6
1987	1	51					
1986	15	60±4.0	72±5.6				
1985	58	63±3.8	78±6.6	94±9.9			
1984	49	65±4.7	80±7.4	96±9.5	111±10.8		
1983	18	64±3.8	78±5.7	95±7.9	111±11.2	121±12.8	
1982	8	61±2.6	74±3.6	88±5.6	102±7.9	114±6.5	126±6.7
GRAND MEAN		N=149 63±4.4	N=148 78±6.9	N=133 94±9.4	N=75 110±10.8	N=26 119±11.6	N=8 126±6.7
MEAN ANNUAL GROWTH INCREMENT		63	15	16	16	9	7

Table D.2. Mean weights, lengths, and condition factors (K_{TL}) for each age class of pumpkinseed.

AGE	N	MEAN WEIGHT±S.D.(g)	MEAN LENGTH±S.D. (mm)	MEAN K_{TL} ±S.D.
1 +	1	3	55	1.80
2 +	11	9.8±3.2	77.1±5.4	2.09±0.41
3 +	32	24.3±7.5	104.8±11.2	2.05±0.24
4 +	35	36.1±9.9	118.9±11.0	2.10±0.17
5 +	12	52.2±10.6	133.9±8.0	2.16±0.24
6 +	6	56.5±9.2	136.2±5.2	2.22±0.14
TOTAL	97			2.09±0.24

Table D.3. Mean back-calculated lengths at the end of each years growth (annulus formation) for each year class of northern squawfish.

		MEAN±S.D. BACK-CALCULATED LENGTH AT ANNULUS									
COHORT	N	1	2	3	4	5	6	7	8	9	10
1987	0										
1986	3	82±16.6	125±7.2								
1985	12	81±12.2	139±21.9	189±25.9							
1984	7	85±20.6	152±19.2	220±27.3	273±14.6						
1983	3	97±18.5	163±11.0	226±10.6	292±12.1	346±14.0					
1982	1	81	132	189	272	323	367				
1981	3	96±20.3	153±45.9	209±57.4	258±65.7	305±62.0	355±76.8	411±58.9			
1980	1	79	128	172	246	332	400	456	543		
1979	1	74	140	206	280	331	382	441	485	529	
1978	1	58	112	166	232	299	353	407	473	527	581
GRAND MEAN		N=32 84±16.2	N=32 143±23.1	N=29 202±31.1	N=17 270±29.8	N=10 324±35.5	N=7 367±47.9	N=6 423±42.6	N=3 500±37.2	N=2 528±1.7	N=1 581
MEAN ANNUAL GROWTH INCREMENT		84	59	59	68	54	43	56	77	28	53

Table 0.4. Mean weights, lengths, and condition factors (K_{TL}) for several age classes of northern squawfish.

AGE	N	MEAN WEIGHT±S.D. (g)	MEAN LENGTH±S.D. (mm)	MEAN K_{TL}±S.D.
2+	1	39	177	0.70
3+	4	87.0±52.6	223.8±51.8	0.70±0.02
4+	4	157.0±33.4	280.0±20.4	0.71±0.01
5+	1	660	414	0.93
7+	1	1113	497	0.91
8+	1	1675	555	0.98
10+	2	2390.0±309.7	601.5±12.0	1.10±0.08
TOTAL	14			0.81±0.16

Table D.5. Mean back-calculated lengths at the end of each years growth (annulus formation) for each year class of largescale sucker.

		MEAN&D. BACK-CALCULATED LENGTH AT ANNULUS									
COHORT	N	1	2	3	4	5	6	7	8	9	10
1987	0										
1986	1	169	173								
1985	4	197±4.5	218±6.3	240±12.7							
1984	3	202±1.8	222±4.8	248±3.9	273±12.0						
1983	5	215±3.1	247±6.4	278±10.1	310±13.8	336±8.4					
1982	4	205±3.4	230±3.1	262±11.2	290±8.9	321±17.7	352±20.0				
1981	2	213±4.3	240±8.4	273±16.6	316±18.4	364±16.8	387±15.1	428±31.3			
1980	3	212±1.2	246±9.2	281±12.4	326±7.8	365±8.8	401±8.2	434±7.6	466±4.8		
1979	3	209±2.2	244±12.9	277±12.4	312±5.2	341±12.1	380±11.3	421±32.3	452±24.0	493±8.8	
1978	1	207	231	268	303	330	371	402	459	499	532
GRAND MEAN		N=26 206±10.1	N=26 233±17.5	N=25 265±17.9	N=21 304±19.2	N=18 341±19.5	N=13 377±23.0	N=9 425±22.4	N=7 459±15.8	N=4 495±7.7	N=1 532
MEAN ANNUAL GROWTH INCREMENT		206	27	32	39	37	36	48	34	36	37

Table D.6. Mean weights, lengths, and condition factors (K_{TL}) for several age classes of largescale sucker.

AGE	N	MEAN WEIGHT±S.D. (g)	MEAN LENGTH±S.D. (mm)	MEAN K_{TL}±S.D.
5+	1	371	360	0.80
7+	1	728	428	0.93
8+	2	897.5±45.0	479.5f2.1	0.81 ±0.05
9+	2	1410.0±84.8	521.0±12.7	1.0±0.13
TOTAL	6			0.89±0.12

Table D.7. **Mean back-calculated lengths at the end of each years growth (annulus formation) for each year class of peamouth.**

		MEAN±S.D. BACK-CALCULATED LENGTH AT ANNULUS			
COHORT	N	1	2	3	4
1987	0				
1986	1	97	147		
1985	13	125±19.5	184±24.4	232±27.3	
1984	3	152±18.2	206±13.7	246±19.6	283±14.8
GRAND MEAN		N=17 128±22.4	N=17 185±25.4	N=16 235±26.0	N=3 283±14.8
MEAN ANNUAL GROWTH INCREMENT		128	57	50	48

Table D.8. **Mean weights, lengths, and condition factors (K_{TL}) for each age class of peamouth.**

AGE	N	MEAN WEIGHT±S.D.(g)	MEAN LENGTH±S.D. (mm)	MEAN K_{TL}±S.D.
2 +	1	45	175	0.84
3 +	3	105.7±8.0	252.7±5.8	0.65±0.03
4 +	3	209.3±28.8	306.7±9.3	0.72f0.03
TOTAL	7			0.71f0.07

Table D.9. Mean back-calculated lengths at the end of each years growth (annulus formation) for each year class of tench.

		MEAN±S.D. BACK-CALCULATED LENGTH AT ANNULUS								
COHORT	N	1	2	3	4	5	6	7	8	9
1985	1	106	123	147						
1982	1	117	140	171	230	261	287			
1981	3	111±2.2	139±8.1	171±6.6	201±6.5	235±9.2	270±11.3	301±22.0		
1979	1	132	181	223	247	301	341	383	401	422
GRAND MEAN		N=6 115±9.2	N=6 143±20.3	N=6 175±25.6	N=5 216±21.9	N=5 253±29.9	N=5 288±31.6	N=4 321±44.7	N=1 401	N=1 422
MEAN ANNUAL GROWTH INCREMENT		115	28	32	41	37	35	33	80	21

Table D.lO. Mean weights, lengths, and condition factors (K_{TL}) for a 6+ and 7+ tench.

AGE	N	MEAN WEIGHT±S.D. (g)	MEAN LENGTH±S.D. (mm)	MEAN K_{TL}±S.D.
6+	1	427	310	1.43
7+	1	405	325	1.18
TOTAL	2			1.31±0.18

Table D.11. Mean back-calculated lengths at the end of each years growth (annulus formation) for each year class of longnose sucker.

		MEAN±S.D. BACK-CALCULATED LENGTH AT ANNULUS							
COHORT	N	1	2	3	4	5	6	7	8
1984	2	124±6.4	174±56.0	258±23.9	305±3.8				
1980	1	130	177	225	307	367	430	461	516
GRAND MEAN		N=3 126±5.7	N=3 175±39.7	N=3 247±25.6	N=3 306±3.1	N=1 367	N=1 430	N=1 461	N=1 516
MEAN ANNUAL GROWTH INCREMENT		126	49	72	59	61	63	31	55

Table D.12. Mean weight, length, and condition factor (K_{TL}) for 4+ longnose sucker.

AGE	N	MEAN WEIGHT±S.D. (g)	MEAN LENGTH±S.D. (mm)	MEAN K_{TL} ±S.D.
4+	2	420.5±21.9	342.0f2.8	1.05f0.03

Table D.13. Mean back-calculated lengths at the end of each years growth (annulus formation) for each year class of redside shiner. Back-calculated lengths were obtained using the proportional method.

		ME.4NkS.D. BACK-CALCULATED LENGTH AT ANNULUS				
COHORT	N	1	2 - r	3	4	5
1984	2	42±6.1	63kO.2	98fl.7	121±0.7	
1983	2	48fl.3	72f3.2	93kO.6	122±3.4	146±2.4
GRAND MEAN		N=4 45±5.0	N=4 68±5.6	N=4 95f2.8	N=4 122±2.1	N=2 146±2.4
MEAN ANNUAL GROWTH INCREMENT		45	23	27	27	24

Table D.14. Mean weight, length, and condition factor (K_{TL}) for 4+ and 5+ redside shiner.

AGE	N	MEAN WEIGHT±S.D.(g)	MEAN LENGTH±S.D. (mm)	MEAN K_{TL}±S.D.
4 +	2	23.5±0.71	141.0f1.4	0.84±0.05
5 +	2	39.5f5.0	163±2.8	0.91 ±0.07
TOTAL	4			0.87±0.06

APPENDIX E

MONTHLY BENTHIC MACROINVERTEBRATE DENSITIES IN THE PEND OREILLE RIVER AND TRIBUTARIES

Table E.I. Mean number (± standard deviation) of invertebrates per square meter (collected by Hess sampler) in Skookum Creek, WA., 1988.

	APRIL	JUNE	JULY	SEPTEMBER	OCTOBER	TOTAL MEAN	% ABUNDANCE
TRICHOPTERA							
Glossossomatidae		33±25	43±75	16±21	585±163	169.3	3.4
Brachycentridae				53±25	305±318	89.5	1.8
Hydropsychidae			3±6	17±21	65±7	21.3	0.4
Hydroptilidae					15±21	3.8	0.08
Limnephilidae		3±6	50±27			13.3	0.3
Rhyacophilidae		130±17	83±97	37±35	760±141	252.5	5.1
Leptoceridae			47±81			11.8	0.2
Lepidostomatidae				3±6		0.8	0.02
Tricop. pupae			13±23			3.3	0.07
EPHEMEROPTERA							
Heptageniidae		660±378	270±255	27±25	810±410	441.8	8.9
Ephemerellidae		153±75	620±240	17±21	35±7	206.3	4.1
Baetidae		240±159	357±339	227±196	1125±7	487.3	9.8
Leptophleblidae		80±130	37±64	17±29		33.5	0.7
PLECOPTERA							
Chloroperlidae		533±242	410±332	97±134		260.0	5.2
Perlidae		3±6		50±78	400±85	113.3	2.3
Perlodidae					95±21	23.8	0.5
Nemouridae			37±64		70±28	26.8	0.5
COLEOPTERA							
Elmidae larvae		350±197	163±216	243±185	355±191	277.8	5.6
Elmidae adults			17±12			4.3	0.09
DIPTERA							
Chironomidae larvae		2110±2019	2143±2403	110±140	635±78	1249.5	25.1
Chironomidae pupae		50±63	107±151	3±6	20±14	45.0	0.9
Ceratopogonidae		20±17	7±12	10±10	15±7	13.0	0.3
Tipulidae			63±67	10±10	225±21	74.5	1.5
Simuliidae		3±6	7±6	53±42	15±7	19.5	0.4
Tabanidae				3±6		0.8	0.02
Empididae				10±10		2.5	0.05
HYDRACARINA		20±17	33±40	63±50	80±28	49.0	1.0

Table E.I. cont.

COPEPODA							
Harpacticoid			3±6			0.8	0.02
AMPHIPODA							
Gammaridae		767±1259				191.8	3.9
Talitridae			23±12			5.8	0.1
CLADOCERA				7±12	55±78	15.5	0.3
OLIGOCHAETA							
Lumbriculidae			83±97			20.8	0.4
Naididae		1190±1652	107±134	53±38	1250±297	650.0	13.1
NEMATODA		160±165	63±55		10±14	58.3	1.2
TURBELLARIA							
Planariidae		247±136		3±6	165±233	103.8	2.1
BIVALVIA							
Sphaeriidae		10±17		13±6	15±7	9.5	0.2
TERRESTRIALS							
DIPTERA							
Simuliidae					15±21	3.8	0.08
HEMIPTERA			7±6			1.8	0.04
HOMOPTERA							
Aphididae			10±17		5±7	3.8	0.08
NEUROPTERA							
Chrysopidae					5±7	1.3	0.03
COLLEMBOLA							
Entomobryidae					15±21	3.8	0.08
PSOCOPTERA							
Pseudocaeciliidae		3±6	7±12			2.5	0.05
DIPLOPODA					5±7	1.3	0.03
ARANEIDA				3±6		0.8	0.02
UNKNOWN TERRESTRIALS		7±12				1.8	0.04
TOTAL		6772	4813	1145	7150	4971.5	

Table E.2. Mean number (± standard deviation) of macroinvertebrates per square meter (collected by Hess sampler) in Cee Cee Ah Creek, WA., 1988.

	APRIL	JUNE	JULY	SEPTEMBER	OCTOBER	TOTAL MEAN	% ABUNDANCE
TRICHOPTERA							
Glossossomatidae		7±6	490±210	110±91	90±102	139.4	2.4
Brachycentridae		20±20	430±182	353±380	793±881	319.2	5.4
Hydropsychidae		110±27	210±313	203±134	123±107	127.2	2.1
Hydroptilidae				8±15	73±104	16.2	0.3
Limnephilidae		50±30	27±12		5±6	16.4	0.3
Rhyacophilidae	3±6	177±45	70±56	238±283	43±38	106.2	1.8
Lepidostomatidae							
Tricop. pupae			7±6	55±64		12.4	0.2
EPHEMEROPTERA							
Heplageniidae	40±53	367±157	13±12	395±330	220f 126	667.0	14.6
Ephemerellidae		347±240	270±118	258±111	533±577	261.6	4.8
Baetidae		277±116	973±446	1760±1689	3932234	660.6	11.5
Leptophlebiidae		3±6	3±6	185±198		38.2	0.6
PLECOPTERA							
Chloroperlidae	47±42	360±76	263±35	460±497	58±66	237.6	4.0
Perlidae		13±13	3±6	43±72	18±35	15.4	0.3
Perlodidae				11±197	53±39	12.8	0.2
Peltoperlidae				73±99	13±25	17.2	0.3
Nemouridae				245±477	63±29	61.6	1.0
COLEOPTERA							
Elmidae larvae	47±57	1697±583	2327±365	653±171	1260±862	1196.8	20.2
Elmidae adults		40±35	190±46	20±14	98±103	69.6	1.2
DIPTERA							
Chironomidae larvae	353±480	1187±439	1013±811	1800±3148	318±314	934.2	15.6
Chironomidae pupae		40±40	37±21	3±5		16.0	0.3
Ceratopogonidee			27±285	15±24	23±29	13.0	0.2
Tipulidae	10±17	37±47	47±42	383±745	35±29	102.4	1 7
Simuliidae		40±30	183±38	250±231	150±169	124.6	2.1
Tabanidae		17±29				3.4	0.06
Empididae			3±6	25±17		5.6	0.09
Psychodidae					5±10	1.0	0.02
HYDRACARINA		23±15	270±221	125±27	68±31	97.2	1.6
COPEPODA							
Harpacticoid		10±17		20±28		6.0	0.1

Table E.2. cont.

AMPHIPODA							
Talitridae			13±12			2.6	0.04
OSTRACODA				73±145	35±44	21.6	0.4
OLIGOCHAETA							
Lumbriculidae		4±6	7±6	140±280	133±160	56.8	1.0
Naididae	23±25	240±257	67±21	55±37	208±244	118.6	2.0
NEMATODA		27±46	20±27	13±3	10±12	14.0	0.2
TURBELLARIA							
Planariidae		3±6	187±186	40±33	163±263	76.6	1.3
GASTROPODA							
Planorbidae	33±58	33±58			45±51	22.2	0.4
Lymnaeidae			3±6			0.6	0.01
BIVALVIA							
Sphaeriidae	3±6	20±27	54±51	35±33	138±149	50.0	0.8
TERRESTRIAL INSECTS							
DIPTERA							
Chironomidae				8±15		1.6	0.03
Simuliidae							
Culicidae				3±5		0.6	0.01
COLEOPTERA							
Curculionidae					5±10	1.0	0.02
HEMIPTERA				3±5		0.6	0.01
HOMOPTERA							
Aphididee			7±6	7±12	8±10	4.4	0.07
c occidae				3±5		0.6	0.01
HYMENOPTERA							
Eulophidae				3±5		0.6	0.01
NEUROPTERA							
Chrysopidae							
PSOCOPTERA							
Pseudocaeciliidae			3±6			0.6	0.01
DIPLOPODA					5±7	1.3	0.03
ARANEIDA				3±6		0.8	0.02
UNKNOWN TERRESTRIALS	4±6	4±6	23±21	103±130		26.8	0.5
TOTAL	566	5153	7240	8177	5180	5921.2	

Table E.3. Mean number (± standard deviation) of macroinvertebrates per square meter (collected by Hess sampler) in LeClerc Creek, WA., 1988.

	APRIL	JUNE	JULY	SEPTEMBER	OCTOBER	TOTAL MEAN	% ABUNDANCE
TRICHOPTERA							
Glossossomatidae	7±12		137±50	205±35	160±158	101.8	2.1
Brachycentridae	113±99	57±47	330±261	505±587	365±244	274.0	5.7
Hydropsychidae	67±70		7±12	280±170	178±140	106.4	2.2
Limnephilidae	33±35	20±10	7±12			12.0	0.2
Rhyacophilidae	93±95	97±90	217±76	285±290	200±101	178.4	3.7
Leptoceridae			20±35			4.0	0.08
Tricop. pupa		3±6		160±156	15±24	35.6	0.7
EPHEMEROPTERA							
Heptageniidae	263±350	93±86	390±195	465±262	768±686	395.8	8.2
Ephemerellidae	933±1489	90±72	350±10	135±177	513±331	404.2	8.4
Baetidae	350±606	370±262	1130±509	885±7	973±739	735.6	15.3
Leptophlebiidae			7±6			1.4	0.03
PLECOPTERA							
Chloroperlidae	87±150	237±230	290±36	255±361	200±133	213.8	4.4
Perlidae			7±12		33±30	8.0	0.2
Perlodidae					20±23	4.0	0.08
Nemouridae					133±140	26.6	0.6
COLEOPTERA							
Elmidae larvae	997±874	190±87	517±143	210±14	205±68	423.8	8.8
Elmidae adults	10±17		40±27	15±21	3±5	13.6	0.3
DIPTERA							
Chironomidae larvae	1577±1690	257±285	230±122	1405±856	355±315	764.8	15.9
Chironomidae pupae			13±12	40±57	33±36	17.2	0.4
Ceratopogonidae	33±58	27±23	13±15	10±14	13±19	19.2	0.4
Tipulidae	280±394	3±6	27±15	5±7	18±29	66.6	1.4
Simuliidae	170±286	3±6	367±333	10±0	65±130	123.0	2.6
Tabanidae	7±12		3±6		20±34	6.0	0.1
Empididae	17±15			35±7	13±25	13.0	0.3
Psychodidae				15±7		3.0	0.06
HYDRACARINA	37±35	3±6	33±32		30±26	20.6	0.4
OSTRACODA					3±5	0.6	0.01

Table E.3. cont.

OLIGOCHAETA							
Lumbriculidae	47±81		7±12		98±118	30.4	0.6
Naididae	2923±4780	303±235	217±191	40±57	90±143	714.6	14.8
NEMATODA	83±144		23±21		20±22	25.2	0.5
TURBELLARIA							
Planariidae	47±57		120±108	35±21	70±87	54.4	1.1
GASTROPODA							
Planorbidae	7±12					1.4	0.03
BIVALVIA							
Sphaeriidae		3±6				0.6	0.01
TERRESTRIALS							
DIPTERA							
Chironomidae					3±5	0.6	0.01
Simuliidae					13±15	2.6	0.05
HOMOPTERA							
Aphididae					8±15	1.6	0.03
THYSANOPTERA							
Thripidae					3±5	0.6	0.01
COLLEMBOLA							
Entomobryidae					28±55	5.6	0.1
PSOCOPTERA							
Pseudocaeciliidae			10±10			2.0	0.04
UNKNOWN TERRESTRIALS	30±52		13±6	5±7	3±5	10.2	0.2
TOTAL	**8211**	**1756**	**4525**	**4970**	**4652**	**4822.8**	

Table E.4. Mean number (± standard deviation) of invertebrates per square meter (collected by Hess sampler) in Tacoma Creek, WA., 1988.

	APRIL	JUNE	JULY	SEPTEMBER	OCTOBER	TOTAL MEAN	% ABUNDANCE
TRICHOPTERA							
Glossossomatidae				30±42	250±57	56.0	1.1
Brachycentridae		273±221	2016±1455	795±7	520±113	263.0	5.4
Hydropsychidae	5±7	7±12	17±15	765±50	195±177	197.8	4.0
Hydroptilidae				10±14	50±71	12.0	0.2
Limnephilidae	25±7		3±6		10±14	7.6	0.2
Rhyacophilidae		30±27	137±116	165±64	15±21	69.4	1.4
Leptoceridae	10±14				5±7	3.0	0.06
Lepidostomatidae							
Philopotamidae			3±6			0.6	0.01
Tricop. pupae		43±59	7±12			10.0	0.2
EPHEMEROPTERA							
Heptageniidae		150±30	60±44	275±347	110±28	119.0	2.4
Ephemerellidae	5±7	223±74	800±1031	995±347	855±629	404.6	8.2
Baetidae	5±7	200±180	867±420	560±495	740±85	474.4	9.7
Leptophlebiidae		3±6	890±1456	25±35		183.6	3.7
PLECOPTERA							
Chloroperlidae	5±7	33±49	133±126	250±85			
Perlidae		3±6			20±14	80.6	0.01
Perlodidae				5±7	25±35	6.0	0.1
Nemouridae					100±141	20.0	0.4
Leuctridae			3±6			0.6	0.01
COLEOPTERA							
Elmidae larvae	300±382	333±15	1323±861	1265±21	1340±170	912.2	18.6
Elmidae adults		40±17	170±138	95±21	75±35	76.0	1.5
DIPTERA							
Chironomidae larvae	530±735	293±155	3183±2263	1590±283	965±474	1312.2	26.7
Chironomidae pupae			20±20	115±21		27.0	0.6
Ceratopogonidae	5±7	3±6	23±32	40±42	70±28	28.2	0.6
Tipulidae	20±14	47±15	107±21	165±106	40±14	75.8	1.5
Simuliidae	130±184	200±89	197±85	300±198	10±14	167.4	3.4
Tabanidae			3±6			0.6	0.01
Empididae		3±6	40±0		10±14	10.6	0.2
Psychodidae	5±7			470±38	510±247	197.0	4.0
HYDRACARINA					160±99	32.0	0.7
COPEPODA							
Harpacticoid			33±58			6.6	0.1
AMPHIPODA					35±50	7.0	0.1

Table E.4. cont.

OLIGOCHAETA							
Lumbriculidae			10±17	10±0	55±21	15.0	0.3
Naididae	45±50	37±64	33±15	95±64	35±50	49.0	1.0
NEMATODA					10±14	2.0	0.04
TURBELLARIA							
Planariidae	5±7	7±12	30±35	55±7	10±14	21.4	0.4
GASTRPOPDA							
Planorbidae	5±7		3±6		35±50	8.6	0.2
BIVALVIA							
Sphaeriidae	125±149				10±0	27.0	0.6
TERRESTRIAL INSECTS							
EPHEMEROPTERA							
Baetidae				5±7		1.0	0.02
HEMIPTERA		3±6	3±6			1.2	0.02
HOMOPTERA							
Aphididae			3±6	15±7	5±7	4.6	0.1
Coccidae					15±7	3.0	0.06
PSOCOPTERA							
UNKNOWNPseudocaecilidae	5±7	3±6	10±10		5±7	4.6	0.01
TOTAL	1230	1937	10127	8105	6280	4907.0	

Table E.5. Mean number (± standard deviation) of macroinvertebrates per 100 cubic meters (collected by drift sampler) in Skookum Creek, WA., 1988.

	APRIL	JUNE	JULY	SEPTEMBER	OCTOBER	TOTAL MEAN	% ABUNDANCE
TRICHOPTERA							
Brachycentridae			1.2±1.7	5.2±4.0	2.4±3.6	2.9	1.0
Hydropsychidae					1.9±2.2	0.6	0.2
Hydroptilidae				0.4±0.9	0.6±1.3	0.3	0.1
Rhyacophilidae				10.9±16.8		3.6	1.3
Leptoceridae				0.6±1.3		0.2	0.1
EPHEMEROPTERA							
Heptageniidae				6.1±12.1	2.8±3.6	3.0	1.1
Ephemerellidae			4.8±3.4	3.0±6.1		2.6	0.9
Baetidae			16.8±3.5	66.0±116.0	4.0±5.2	28.9	10.2
PLECOPTERA							
Chloroperlidae					2.4±3.6	0.8	0.3
Nemouridae				6.1±12.3	2.9±5.8	3.0	1.1
Pteronarcyidae			0.6±0.9			0.2	0.1
COLEOPTERA							
Elmidae larvae			0.6±0.9	32.1±45.1	5.8±11.5	12.8	4.5
Elmidae adults			1.2±1.7	0.4±0.9		0.5	0.2
Dytiscidae				0.4±0.9		0.1	0.04
DIPTERA							
Chironomidae larvae			19.7±12.5	503.3±967.2	11.0±12.1	178.0	63.0
Chironomidae pupae			18.0±12.0	29.2±45.3	1.0±1.9	16.1	5.7
Tipulidae				1.8±3.6		0.6	0.2
Simuliidae			1.8±2.6	5.6±5.0		2.5	0.9
Tabanidae				2.7±5.4		0.9	0.3
Empididae				0.8±1.5		0.3	0.1
Psychodidae				2.7±5.4	1.0±1.9	1.2	0.4
Blephariceridae				0.8±1.5		0.3	0.1
HYDRACARINA			4.2±2.6	3.4±3.0		2.5	0.9
OSTRACODA					0.5±0.9	0.2	0.1
OLIGOCHAETA							

Table E.5. cont.

Lumbriculidae			0.6±0.9			0.2	0.1
Naididae					2.6±3	0.9	0.3
NEMATODA			0.6±0.9			0.2	0.1
GASTROPODA							
Planorbidae			1.2±1.7		0.5±0.9	0.6	0.2
BIVALVIA							
Sphaeriidae			6.0±5.0	13.4±24.5		6.5	2.3
TERRESTRIALS							
DIPTERA							
Chironomidae				6.7±10.2		2.2	0.8
Sciaridae			0.8±1.5	0.8±1.5		0.5	0.2
EPHEMEROPTERA							
Baetidae			1.2±1.7			0.4	0.1
COLEOPTERA							
Buprestidae			0.6±0.9			0.2	0.1
HOMOPTERA							
Aphididae			0.6±0.9	20.4±25.8		7.0	2.5
Coccidae					0.9±1.9	0.3	0.1
PSOCIDAE							
Psocidae				0.8±1.5		0.3	0.1
Polypsocidae			1.2±1.7			0.4	0.1
HYMENOPTERA							
Formicidae				0.9±1.8		0.3	0.1
Eurytomidae				0.8±1.5		0.3	0.1
Chalcidae				0.8±1.5		0.3	0.1
TOTAL			81.7	726.1	40.3	283.0	

Table E.6. Mean number (± standard deviation) of macroinvertebrates per 100 cubic meters (collected by drift sampler) in Cee Cee Ah Creek, WA., 1988.

	APRIL	JUNE	JULY	SEPTEMBER	OCTOBER	TOTAL MEAN	% ABUNDANCE
TRICHOPTERA							
Glossosomatidae		0.3f0.5				0.1	0.1
Brachycentridae		1.4±0.1	0.5±0.7	16.0f18.5	8.1 f16.2	6.5	9.6
Hydropsychidae				4.9f5.7	0.8±1.5	1.4	2.1
Hydroptilidae					2.2f3.4	0.6	0.9
Limnephilidae		5.3k6.8	1.3±1.9	0.4f0.7		1.8	2.7
Rhyacophilidae			0.5f0.7	4.7f5.6		1.3	1.9
Lepidostomatidae					0.9±1.8	0.2	0.3
Psychomyiidae					0.3f0.6	0.1	0.1
Helicopsychidae			0.5±0.7			0.1	0.1
EPHEMEROPTERA							
Heptageniidae			0.5±0.7	2.8±5.6	1.2±2.3	1.1	1.6
Ephemerellidae		3.5±0.8	0.7±0.9	11.3±13.1	4.2±7.5	4.9	7.2
Baetidae		6.3±3.1	3.0±4.2	8.9±10.7	3.3±4.1	5.2	7.7
Leptophlebiidae					0.4±0.8	0.1	0.1
PLECOPTERA							
Perlidae				17.8±26.2		4.5	6.6
Perlodidae		0.3±0.4				0.1	0.1
Nemouridae					0.6±1.2	0.2	0.3
Psephenidae					0.3±0.6	0.1	0.1
COLEOPTERA							
Elmidae larvae		4.7±1.9	1.5±2.1	14.5±9.6	3.9±5.1	6.2	9.1
Elmidae adults		1.8±0.4	1.0±1.4		1.2±2.4	1.0	1.5
DIPTERA							
Chironomidae larvae		4.5±1.4	7.9±5.6	4.2±4.8	10.7±16.8	6.8	10.0
Chironomidae pupae		1.5±0.7	1.0±1.4		0.7±0.8	0.8	1.2
Tipulidae		0.3±0.5	0.5±0.7	2.8±5.6	0.3±0.6	1.0	1.5
Simuliidae		4.0±5.7	1.2±0.2	4.7±3.5	4.8±7.3	3.7	5.5
Tabanidae		0.3±0.5				0.1	0.1
Psychodidae					1.5±2.9	0.4	0.6

Table E.6. cont.

Stratiomyidae					0.4±0.8	0.1	0.1
Culicidae					0.8±1.5	0.2	0.3
HYDRACARINA		1.0±1.4	4.5±6.3	1.0±2.1	3.9±5.1	2.6	3.8
OSTRACODA				1.7±3.5	4.6±9.2	1.6	2.4
OLIGOCHAETA							
Lumbriculidae					1.8±2.2	0.5	0.7
Naididae				0.7±1.4		0.2	0.3
GASTROPODA							
Planorbidae		0.5±0.7			0.7±0.8	0.3	0.4
Lymnaeidae		0.3±0.5			0.8±1.5	0.3	0.4
BIVALVIA							
Sphaeriidae		2.5±2.2	1.2±0.2		14.0±25.6	4.4	6.5
TERRESTRIALS							
DIPTERA							
Chironomidae		0.7±1.0			6.1±8.7	1.7	2.5
Simuliidae					0.3±0.6	0.1	0.1
Mycetophilidae					0.8±1.5	0.2	0.3
Drosophilidae					0.4±0.8	0.1	0.1
EPHEMEROPTERA							
Baetidae		4.9±2.2				1.2	1.8
COLEOPTERA							
Buprestidae			0.7±0.9			0.2	0.3
HOMOPTERA							
Aphididae		5.5±4.9	0.7±0.9		4.7±4.9	2.7	4.0
PSOCIDAE							
Psocidae		1.1±0.6			0.4±0.8	0.4	0.6
HYMENOPTERA							
Formicidae		2.2±1.7	0.7±0.9			0.7	1.0
UNKNOWN TERRESTRIALS		3.3±3.8	0.5±0.7		3.9±7.7	1.9	2.8
TOTAL		**56.8**	**28.4**	**96.4**	**89.0**	**68.0**	

Table E.7. Mean number (± standard deviation) of macroinvertebrates per 100 cubic meters (collected by drift sample) in LeClerc Creek, WA., 1988.

	APRIL	JUNE	JULY	SEPTEMBER	OCTOBER	TOTAL MEAN	% ABUNDANCE
TRICHOPTERA							
Glossosomatidae			0.3±0.5	2.1±2.9		0.6	0.5
Brachycentridae		8.9±1.1	4.6±1.2	4.6±9.1	20.3±31.2	9.6	7.6
Hydropsychidae					1.0±2.1	0.3	0.2
Hydroptilidae		0.2±0.3				0.1	0.1
Limnephilidae		2.4±0.3	1.3±1.8	1.5±3.0		1.3	1.0
Rhyacophilidae		1.1±1.1	0.3±0.5	2.7±3.1	28.1±56.3	8.1	6.4
Leptoceridae				2.3±4.6	1.0±2.1	0.8	0.6
Philopotamidae				1.5±3.0		0.4	0.3
EPHEMEROPTERA							
Heptageniidae		2.2±2.6		10.6±21.2	9.4±18.8	5.6	4.4
Ephemerellidae		2.6±2.1	3.5±2.3	2.3±4.6	18.7±29.6	6.8	5.4
Baetidae		5.9±8.4		11.3±18.9	27.2±48.6	11.1	8.8
Leptophlebiidae				0.8±1.5	1.0±2.1	0.5	0.4
PLECOPTERA							
Chloroperlidae					10.4±20.8	2.6	2.0
Perlidae		0.2±0.3				0.1	0.1
Perlodidae				1.5±3.0		0.4	0.3
Nemouridae				4.4±8.8	40.3±63.4	11.2	8.8
COLEOPTERA							
Elmidae larvae		1.3±0.3	1.8±2.6	9.3±8.5	9.4±18.8	5.5	4.3
Elmidae adults		1.0±0.8	0.9±1.3	6.6±11.8	2.4±4.0	2.7	2.1
DIPTERA							
Chironomidae larvae		1.3±1.3	0.3±0.5	36.2±57.8	47.1±85.4	21.2	16.7
Chironomidae pupae		13.7±19.4		3.8±5.0		4.4	3.5
Ceratopogonidae					1.0±2.1	0.3	0.2
Tipulidae		0.4±0.5		1.1±2.3		0.4	0.3
Simuliidae		1.3±0.3	5.9±0.7		1.0±2.1	2.1	1.7
Psychodidae			0.3±0.5			0.1	0.1
HYDRACARINA		1.5±1.6	6.6±1.6	0.5±1.1	2.4±4.0	2.8	2.2

Table E.7. cont.

OLIGOCHAETA							
Lumbriculidae			0.3±0.5			0.1	0.1
Naididae					5.2±10.4	1.3	1.0
NEMATODA		0.2±0.3			1.0±2.1	0.3	0.2
TURBELLARIA							
Planariidae				0.8±1.5	1.4±2.8	0.6	0.5
GASTRPODA							
Planorbidae			1.0±1.4			0.3	0.2
BIVALVIA							
Sphaeriidae		0.4±0.5	0.3±0.5			0.2	0.2
TERRESTRIALS							
DIPTERA							
Chironomidae			3.1±1.9		33.0±61.4	9.0	7.1
Simuliidae		1.0±1.4				0.3	0.2
Empididae					1.0±2.1	0.3	0.2
EPHEMEROPTERA							
Baetidae		0.7±1.1			13.5±27.1	3.6	2.8
Duns		0.6±0.8				0.2	0.2
COLEOPTERA							
Curculionidae		0.2±0.3				0.1	0.1
HEMIPTERA							
Gerridae		0.4±0.5		1.1±2.3		0.4	0.3
HOMOPTERA							
Aphididae		3.2±4.5	5.9±0.7	6.8±13.6	7.9±14.2	6.0	4.7
PSOCIDAE							
Psocidae		1.5±0			2.4±2.9	1.0	0.8
Polypsocidae			0.6±0.9			0.2	0.2
HYMENOPTERA							
Apidae			1.9±2.7			0.5	0.4
Formicidae					1.0±2.1	0.3	0.2
TRICHOPTERA							
Limnephilidae					0.3±0.6	0.1	0.1
UNKNOWN TERRESTRIALS		1.1±1.1	2.5±1.0		7.7±11.9	2.8	2.2
TOTAL		**52.3**	**23.2**	**111.8**	**295.1**	**126.6**	

Table E.8. Mean number (± standard deviation) of macroinvertebrates per 100 cubic meters (collected by drift sampler) in Tacoma Creek, WA., 1988.

	APRIL	JUNE	JULY	SEPTEMBER	OCTOBER	TOTAL MEAN	% ABUNDANCE
TRICHOPTERA							
Brachycentridae		0.3±0.4		9.4±4.7		3.2	2.9
Hydropsychidae				3.0±0.1		1.0	0.9
Limnephilidae		1.8±0.9				0.6	0.5
Rhyacophilidae				1.0±0		0.3	0.3
T. pupae							
EPHEMEROPTERA							
Ephemerellidae		1.2±1.7	23.3±20.6	5.1±7.1		9.9	8.9
Baetidae		1.8±0.9		9.1±12.9		3.6	3.2
PLECOPTERA							
Perlodidae				2.0±1.5		0.6	0.5
COLEOPTERA							
Elmidae larvae		0.9±1.3	23.3±20.6	6.5±3.7		10.2	9.2
Elmidae adults		0.9±1.3	81.4±72.1			27.4	24.7
DIPTERA							
Chironomidae larvae		1.5±1.4	11.6±10.3	13.5±6.6		8.9	8.0
Chironomidae pupae		0.6±0.8	46.5±41.1	11.5±3.8		19.5	17.6
Simuliidae		11.8±2.3		5.5±3.6		5.8	5.2
Psychodidae				1.0±0		0.3	0.3
LEPIDOPTERA							
Pyralidae		0.6±0.8				0.2	0.2
HYDRACARINA		1.5±0.5	11.6±10.3			4.4	4.0
OLIGOCHAETA							
Lumbriculidae		1.1±1.6				0.4	0.4
GASTROPODA							
Lymnaeidae		0.3±0.4				0.1	0.09
BIVALVIA							
Sphaeriidae		0.6±0.8				0.2	0.2

Table E.8. cont.

TERRESTRIALS							
DIPTERA							
Chironomidae		0.3±0.4	11.6±10.3	0.5±0.7		4.1	3.7
HEMIPTERA							
Mesoveliidae				0.5±0.7		0.1	0.09
Gerridae		0.3±0.4				0.2	0.2
Anthocoridae							
HOMOPTERA							
Aphididae		0.9±1.3	11.6±10.3			4.2	3.8
PSOCIDAE							
Psocidae		2.1±3.0		0.5±0.7		0.9	0.8
HYMENOPTERA							
Apidae				0.5±0.7		0.2	0.2
UNKNOWN TERRESTRIALS		2.4±3.5	11.6±10.3			4.7	4.2
TOTAL		30.9	232.5	69.6		111.0	

Table E.9. Mean number (± standard deviation) of benthic macroinvertebrates per square meter in the Pend Oreille River at each study site for April, 1988.

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
TRICHOPTERA											
Hydroptilidae	52±90		5±9		365±325			156±271	469±663	573±632	
Leptoceridae			10±18		3058±2466		260±325		1615±2526	78±110	
Polycentropodidae					52±90		313±541		52±90		
Limnephilidae									52±90		
EPHEMEROPTERA											
Tricorythidae			52±90	78±10					104±90	78±110	
COLEOPTERA											
Elmidae						234±110	1458±1626	234±110	104±180	549±329	
DIPTERA											
Chironomidae larvae	625±156		3177±4842	8203±9833	11510±6266	781±864	19563±19318	9609±11822	17344±11673	4063±3314	
Chironomidae pupae	52±90		52±90	391±110	1094±1220		1302±1329	2344±3094	2448±2351	78±110	
Ceratopogonidae			208±361	781±663	156±156	78±110	158±271		52±90	78±110	
Dolichopodidae								78±110			
Tipulidae					365±361		625±413	1953±2320	365±393		
ODONATA							104±180		52±90		
HYDRACARINA	126±218		260±239	391±111	365±502		469±413	234±332	156±271	78±110	
CLADOCERA											
Daphnidae					52±90		52±90	1250±1768	104±90		
COPEPODA											
Harpacticoid			52±90	78±110							
Cyclopoid				313±442			208±239	313±442			
Calanoid					52±90						
AMPHIPODA				78±110	573±738		469±812	313±442	833±502	234±110	
OSTRACODA	1094±1094		469±681	1875±1768	208±239	78±110			208±239		
OLIGOCHAETA	8021±2033		365±393	938±1105	4703±3074	1485±2099	5521±1040	9063±1105	4635±3063		
HIRUDINEA	52±90				156±271				104±180		
TURBELLARIA											
Planariidae			156±156		52±90	78±110	52±90		1094±1631		
NEMATODA			260±451	391±332	625±541	78±110	104±180	234±110	52±90		
GASTROPODA											
Lymnaeidae				78±110		156±0	573±992	78±110			
Planorbidae			260±325	156±221	1042±705	234±110	313±413	234±111	104±90		
BIVALVIA											
Sphaeriidae			1094±1507	1485±773	4427±3456		2500±2270	1172±552	1978±3428		
TERRESTRIAL INSECTS			104±90	2500±3315		1406±1988					
TOTAL	10022		6524	17736	28855	4608	34114	27265	31925	5809	

Table E.10. Mean number (± standard deviation) of benthic macroinvertebrates per square meter in the Pend Oreille River at each study site for June, 1988.

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
TRICHOPTERA											
Hydroptilidae			156±156	78±110							
Leptoceridae						156±156		126±218	126±218	104±108	
Polycentropodidae						52±90					
EPHEMEROPTERA											
Tricorythidae			104±180					156±0	315±393	208±361	417±722
COLEOPTERA											
Elmidae		1094		52±90	1250±441	63±109	990±1329	189±327	1006±218		781±1221
DIPTERA											
Chironomidae larvae	156±221		573±592	313±221	818±663	1094±1083	104±90	1635±1537	755±680	2135±2189	1615±1825
Chironomidae pupae								63±109		52±90	
Ceratopogonidae			469±541	156±221		260±239	189±327	126±109	189±189	833±1184	365±632
Empididae			52±90								
Tipulidae				78±110			189±327	63±109		104±108	3±6
ODONATA								63±109	126±218		52±90
HYDRACARINA	78±110		156±156	78±110				126±109	189±327		156±156
COPEPODA											
Harpacticoid									63±109	52±90	
AMPHIPODA			313±541					607±621	1436±2353	365±632	417±592
OSTRACODA			52±90				63±109		63±109	156±271	
OLIGOCHAETA	2031±663	18246	4740±3188	7969±1768	7127±5846	4323±2081	755±654	1510±822	1447±1256	1667±2366	2239±3744
HIRUDINEA				78±110		104±108					
TURBELLARIA											
Planariidae								63±109	126±218	52±90	
NEMATODA			469±541	2032±221	2197±2375	208±361	126±218		63±109	156±271	104±108
GASTROPODA											
Lymnaeidae										52±90	52±90
Planorbidae	234±110		27±46	78±110	63±109	208±239	503±871		252±109	365±632	469±542
BIVALVIA											
Sphaeriidae			52±109		63±109	313±271	63±109	503±576	252±288		104±90
TERRESTRIAL INSECTS										52±109	
TOTAL	2499	19340	7215	12110	10331	7708	2181	6047	5402	7134	5993

Table E.11. Mean number (± standard deviation) of benthic macroinvertebrates per square meter in the Pend Oreille River at each study site for July, 1988.

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
TRICHOPTERA											
Brachycentridae		1761±3050									
Hydroptilidae				126±109	252±456		189				
Leptoceridae					126±218			63±109			
Limnephilidae					386±391						
T. pupae		63±109		63±109							
EPHEMEROPTERA											
Baetidae		2453±4248									
Ephemerellidae		440±763									
Leptophlebidae		252±436									
Tricorythidae		63±109	104±180	189±0	252±436				63±109		95±134
PLECOPTERA											
Chloroperlidae		126±218		63±109							
COLEOPTERA											
Elmidae		1132±1361	573±992	566±980	3019±5229	503±871	5283		126±218		
Chrysomelidae			52±109								
DIPTERA											
Chironomidae	469	4276±5351	104±90	503±436	2127±3053	1195±1257	4717	63±109	126±218	126±109	1510±1602
Chironomidae pupae	189	189±186			126±218						
Ceratopogonidae			52±90		126±218						
Simuliidae		63±109									
Tipulidae		126±218				63±109					
HYDRACARINA		189±327		63±109	252±436	63±109	755				
CLADOCERA											
Daphnidae							189				
COPEPODA											
Harpacticoid		189±327	52±90								
Calanoid						126±218					
OLIGOCHAETA	1875	3373±6536	2813±976	4780±2760	1486±1512	1069±1199	15283		1824±2513	63±109	63±109
HIRUDINEA					377±654						
TURBELLARIA											
Planariidae										63±109	63±109
NEMATODA		629±785	52±90	566±822							
GASTROPODA											
Lymnaeidae							189				
Planorbidae			52±109	63±109	189±198	189±198	2264			252±288	252±288
BIVALVIA											
Sphaeriidae				189±189	1258±576	377±654	755	566±377	503±714	63±109	63±109
TERRESTRIAL INSECTS						189±189					
TOTAL	2533	15724	3854	7171	9976	3774	29624	692	2642	567	2046

Table E.12. Mean number (± standard deviation) of benthic macroinvertebrates per square meter in the Pend Oreille River at each study site for September, 1988.

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
TRICHOPTERA											
Brachycentridae						126±218	629±1090				
Hydroptilidae						755±1307				126±218	
Leptoceridae			95±134	63±109	314±288			377±654			252±436
Limnephilidae						2641±4575					
EPHEMEROPTERA											
Baetidae				189±327				377±654	126±218	126±218	
Tricorythidae						252±436	126±218	126±218	126±218		377±654
PLECOPTERA											
Chloroperlidae							126±218				
COLEOPTERA											
Elmidae							126±218		125±218		126±218
DIPTERA											
Chironomidae larvae	755±1067		944±534	4403±5099	3019±4591	1509±0	5283±8825	3614±2530	1635±2833	503±871	3925±2795
Chironomidae pupae			189±0			126±218					
Ceratopogonidae	189±267			126±218	315±393	126±218	252±436		126±218		
Empididae					189±327						
Tabanidae											126±218
HYDRACARINA				126±109	63±109	126±218	252±436	252±236	126±218	252±218	377±654
CLADOCERA											
Daphnidae											126±218
Chydoridae						126±218					
COPEPODA											
Harpacticoid	189±267										
AMPHIPODA				126±109		126±218		1006±950	126±218	126±218	755±378
OSTRACODA						377±378	252±436				
OLIGOCHAETA	2265±534	189±267	378±267	818±851	754±654	252±436		880±1213	503±436	1384±2397	5031±3780
HIRUDINEA							252±436				
TURBELLARIA											
Planariidae				629±931		755±755	126±218	126±218			126±218
NEMATODA	755±0			440±475	252±109		126±218				1132±1961
GASTROPODA											
Lymnaeidae		189±267								503±576	
Planorbidae				252±288	126±218			126±218	377±378	503±218	1761±1525
BIVALVIA											
Sphaeriidae	189±267			1195±1228	1227±1890	126±218	1258±871	2390±3817	503±436	252±436	1887±1645
TERRESTRIAL INSECTS											
TOTAL	4342	378	1606	8367	6479	7423	8808	9274	3899	3775	16001

Table E.13. Mean number (± standard deviation) of benthic macroinvertebrates per square meter in the Pend Oreille River at each study site for October, 1988.

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11
TRICHOPTERA											
Brachycentridae									503±871		
Hydroptilidae			252±436	503±576	440±606	63±109	126±218	63±109			
Leptoceridae	63±109		251±218	566±566			252±436	63±109			
EPHEMEROPTERA											
Baetidae					126±218						
Tricorythidae			63±109	126±218		126±218		63±109	252±436	63±109	
PLECOPTERA											
Chloroperlidae	63±109										
DIPTERA											
Chironomidae larvae	63±109	692±892	4969±7186	4214±5182	818±544	629±785	7610±6427	2642±3639	881±1525	818±1256	
Chironomidae pupae			63±109								
Ceratopogonidae						251±218					
Empididae					251±218	566±980		251±218			
HYDRACARINA			63±109	126±218	63±109					314±544	
CLADOCERA											
Daphnidae					252±436						
COPEPODA											
Harpacticoid	126±218										
AMPHIPODA				63±109			126±218	126±218		2956±5120	
OSTRACODA	63±109		63±109		377±654		377±654				
OLIGOCHAETA	2075±2295	503±714		818±288	3208±3140	440±288		1635±2832	1006±1743	629±1089	
TURBELLARIA											
Planariidae				629±576	63±109			63±109			
NEMATODA	126±109		63±109		63±109	314±109					
GASTROPODA											
Lymnaeidae			63±109							63±109	
Planorbidae				189±188	692±606	1447±2035	377±377			314±393	
BIVALVIA											
Sphaeriidae	566±822	126±109	566±566	1258±950	503±871	1195±851	2453±3174	1698±1544	252±436	440±763	
TOTAL	3145	1321	6416	8492	6856	5031	11446	6604	2894	5597	

Table E.14. Mean number (± standard deviation) of macroinvertebrates per square meter in Cee Cee Ah Slough (site 3A), 1988.

	APRIL	JUNE	JULY	SEPTEMBER	OCTOBER	TOTAL MEAN	% ABUNDANCE
TRICHOPTERA							
Hydroptilidae		117±78			95±134	42.4	0.6
EPHEMEROPTERA							
Baetidae	52±90					10.4	0.1
DIPTERA							
Chironomidae larvae	1562±1094	353±82	378±534	440±475	1226±400	791.8	10.9
Chironomidae pupae	260±239					52.0	0.7
Ceratopogonidae	156±271	78±156	189±267	126±218	1227±1467	355.2	4.9
HYDRACARINA	417±452					83.4	1.1
AMPHIPODA					189±267	37.8	0.5
OSTRACODA	52±90		189±267			48.2	0.7
OLIGOCHAETA		14460±2830	4151±4803	2483±3414	1793±667	4577.4	62.9
NEMATODA		78±90	189±267	440±763	1132±1068	367.8	5.1
TURBELLARIA							
Planariidae	999±719	2103±4207				620.4	8.5
GASTROPODA							
Planorbidae	316±318	39±78		252±436		121.4	1.7
BIVALVIA							
Sphaeriidae				252±436	95±137	69.4	1.0
TERRESTRIALS	265±458	39±78	189±0			98.6	1.4
TOTAL	**4079**	**17267**	**5285**	**3993**	**5757**	**7276.2**	

Table E.15. Mean number (± standard deviation) of macroinvertebrates per square meter in Dike Slough (site 4A), 1988.

	APRIL	JUNE	JULY	SEPTEMBER	OCTOBER	TOTAL MEAN	% ABUNDANCE
TRICHOPTERA							
Hydroptilidae		63±109	126±109	126±218		79	1.2
Leptoceridae				63±109		16	0.2
Tricop. pupae				189±189		47	0.7
EPHEMEROPTERA							
Tricorythidae			62±109			16	0.2
DIPTERA							
Chironomidae larvae		1006±1153	1321±998	252±436	5283±1601	1966	30.6
Chironomidae pupae		252±218	189±0	440±475	378±534	315	4.9
ODONATA				63±109		16	0.2
HYDRACARINA		566±377	126±218	189±327	283±400	291	4.5
COPEPODA							
Harpacticoid		63±109				16	0.2
AMPHIPODA		126±218	63±109	252±288	95±134	134	2.1
OSTRACODA		126±218				32	0.5
OLIGOCHAETA		1384±475	1510±1510	1887±2225	755±1067	1384	21.6
NEMATODA		63±109		252±436		79	1.2
HIRUDINEA		63±109				16	0.2
GASTROPODA							
Planorbidae		3774±327	63±109	251±218	3302±3602	1848	28.8
Lymnaeidae		241±292			189±267	108	1.7
TERRESTRIALS			63±109	63±109	95±134	55	0.9
TOTAL		**7721**	**3523**	**4027**	**10380**	**6415**	

Table E.16. Mean number (± standard deviation) of macroinvertebrates per square meter in Pow Wow Slough (site 5A), 1988.

	APRIL	JUNE	JULY	SEPTEMBER	OCTOBER	TOTAL MEAN	% ABUNDANCE
TRICHOPTERA							
Hydroptilidae	78±156		252±436	63±109	95±134	98	0.8
Leptoceridae	78±90			63±109	189±267	66	0.6
EPHEMEROPTERA							
Tricorythidae	78±156			252±109	189±267	104	0.9
COLEOPTERA							
Elmidae larvae	39±78		755±755	503±288		259	2.2
DIPTERA							
Chironomidae larvae	3535±2402	881±288	1761±1089	8365±8982		2908	24.8
Chironomidae pupae	356±601				95±134	90	0.8
Ceratopogonidae	274±197	189±189	629±576	503±436	3868±4670	1093	9.3
Empididae				126±109		25	0.2
Simuliidae	39±78					8	0.07
Tipulidae	39±78	63±109				20	0.2
ODONATA	78±156				95±134	35	0.3
HYDRACARINA	189±377	189±189				76	0.6
COPEPODA							
Cyclopoid	39±78					8	0.07
AMPHIPODA				755±1147		151	1.3
OSTRACODA	625±1250			252±436		175	1.5
OLIGOCHAETA	6219±5457	1824±1890	8931±4748	3648±1213	7648±4661	4046	34.4
NEMATODA	742±1484	126±109	57±98	3396±1677	283±400	921	7.8
TURBELLARIA							
Planariidae			126±218			25	0.2
HIRUDINEA	39±78					8	0.07
GASTROPODA							
Planorbidae	1117±928	566±654	145±204	1447±763	1415±2001	938	8.0
Lymnaeidae	117±234			629±762	95±134	168	1.4
BIVALVIA							
Sphaeriidae	293±535			2264±1970		511	4.4
TERRESTRIALS		63±109				13	0.1
TOTAL	13974	3901	12656	22266	13972	13354	

Table E.17. Mean number (± standard deviation) of macroinvertebrates per square meter in Goose Island Slough (site 6A), 1988.

	APRIL	JUNE	JULY	SEPTEMBER	OCTOBER	TOTAL MEAN	% ABUNDANCE
TRICHOPTERA							
Hydroptilidae	1094±0				189±0	257	2.1
Leptoceridae	156±0				95±134	50	0.4
EPHEMEROPTERA							
Baetidae				126±218		25	0.2
COLEOPTERA							
Elrnidae larvae	469±0				95±134	113	0.9
DIPTERA							
Chironomidae larvae	1330±0	938±782	2830±2401	2013±1861	944±1334	1611	13.3
Chironomidae pupae	1562±0		189±267			350	2.9
Ceratopogonidae	1562±0		378±534	20±35		392	3.2
Tipulidae	156±0	104±180				52	0.4
HYDRACARINA	781±0	52±90	755±534	139±207		345	2.8
COPEPODA							
Harpacticoid			1887±0			377	3.1
Cyclopoid	312±0					62	0.5
AMPHIPODA	312±0	104±180		252±436		134	1.1
CLADOCERA		104±180				21	0.2
OSTRACODA			3774±5337		95±134	774	6.4
OLIGOCHAETA	12188±0	2135±1978	4340±1334	2390±2078	1887±800	4588	37.9
NEMATODA	635±0					127	1.1
TURBELLARIA							
Planariidae	238 1 ±0	52±90			189±0	524	4.3
HIRUDINEA	625±0	52±90				135	1.1
GASTROPODA							
Planorbidae	8095±0	208±90	378±534	503±576	189±267	1875	15.5
Lymnaeidae		52±90			189±267	48	0.4
BIVALVIA							
Sphaeriidae	476±0			126±218	566±800	234	1.9
TOTAL	32134	3801	14531	5569	4438	12095	

APPENDIX F

MONTHLY ZOOPLANKTON DENSITIES, PERCENT COMPOSITION, AND BIOMASS VALUES AT PEND OREILLE RIVER STUDY SITES

Table F.1. Mean monthly zooplankton densities (organisms/liter) for Pend Oreille River study sites during April, 1988.

SPECIES / SITES	1	2	3	4	5	6	7	8	9	10	11	$\bar{X}$
Daphnia galeata mendotae	0	0	0	0	0	0	0	0	0	0	0.38	0.035
Daphnia retrocurva	0	0	0	0	0	0	0	0	0	0	0	0
Ceriodaphnia reticulata	0	0	0	0	0	0	0	0	0	0	0	0
Bosmina longirostris	0	0	0	0	0	0	0	0	0	0.46	0	0.042
Chydorus sphaericus	0.56	1.14	4.14	1.38	1.14	1.74	1.52	1.38	0	0.92	1.14	1.37
Camptocercus rectirostrus	0	0	0	0	0	0	0	0	0	0	0	0
Graptoleberis testudinaria	0	0	0	0	0	0	0	0	0	0	0	0
Diaphanosoma leuchtenbergianum	0	0	0	0	0	0	0	0	0	0	0	0
Leptodora kindtii	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CLADOCERA	**0.56**	**1.14**	**4.14**	**1.38**	**1.14**	**1.74**	**1.52**	**1.38**	**0**	**1.38**	**1.52**	**1.45**
Diaptomus ashlandi	6.16	2.66	2.30	11.50	1.52	2.90	5.70	1.84	2.90	5.98	6.46	4.54
Epischura lacustris	0	0	0	0	0	0	0	0.46	0	0	0	0.042
calanoid copepodids	1.40	2.28	4.60	3.22	0.38	1.74	9.50	5.52	8.70	2.76	3.04	4.23
Cyclops bicuspidatus thomasi	3.08	0.76	0.92	1.84	0.	2.32	0.38	0	0	0	1.90	0.93
cyclopoid copepodids	1.68	1.52	0	0.46	3.80	0	0	0	0	0	0.38	0.37
Bryocampus sp.	0.28	1.14	2.30	1.38	0	0	1.14	1.38	0	1.84	0.76	0.96
nauplii	18.2	11.40	11.04	11.04	9.50	15.66	15.20	19.32	20.88	16.10	8.36	14.25
TOTAL COPEPODA	**30.80**	**19.76**	**21.16**	**29.44**	**15.20**	**22.62**	**31.92**	**28.52**	**32.48**	**26.68**	**20.90**	**25.32**
Asplanchna herricki	0	0	11.50	0	6.46	0	8.74	3.22	6.96	0	1.90	3.53
Asplanchna priodonta	7.84	4.94	0	3.68	0	4.64	0	0	0	3.22	0	1.76
Collotheca pellagica	0	0	0	0	0	0	0	0	0	0	0	0
Conochilus unicornis	0	0	0	0	0	0	0	0	0	0	0	0
Euchlanis dilatata	0	0	0	0	0	0	0	0	0	0	0	0
Filinia terminalis	0	0.38	0	0	0	0	0	0	0	0	0.38	0.035
Kellicottia longispina	26.04	9.88	2.30	3.68	7.22	12.76	7.60	7.36	7.54	5.98	2.66	8.46
Keratella cochlearis	23.24	30.78	10.12	12.42	10.26	24.36	26.98	24.84	36.54	34.96	7.22	21.98
Keratella quadrata	15.96	13.68	7.36	4.14	10.64	12.18	9.50	11.04	8.12	9.66	7.22	9.96
Lecane luna	0	0	0	0	0	0	0	0	0	0	0	0
Monostyla lunaris	0	0	0	0	0	0	0	0	0	0	0.38	0.035
Notholca laurentiae	45.08	33.82	4.60	24.38	12.16	30.16	0	20.70	19.72	27.60	12.16	20.94
Platyias patulus	0	0	0	0	0	0	0	0	2.90	0	0	0
Polyarthra dolchoptera	2.80	3.04	0	1.38	0	2.32	0	0	0	2.30	0.76	1.15
Polyarthra vulgaris	0	9.88	1.38	0	0	12.76	2.66	2.30	1.74	0	0	0.74
Testudinella patina	0	0	0	0	0	0	0	0	0	0	0	0
Trichocerca cylindrica	0	0	0	0	0	0	0	0	0	0	0	0
Trichocerca lata	0	0	0	0	0	0	0	4.14	1.74	0	0	0.16
TOTAL ROTIFERA	**120.96**	**96.14**	**37.26**	**49.68**	**46.74**	**86.42**	**55.48**	**73.60**	**85.26**	**83.72**	**32.68**	**69.81**
Other organisms	0	0	0	0	0	0	0	0.92	0	0.92	0	1.76
TOTAL ORGANISMS	**152.32**	**117.42**	**62.56**	**80.50**	**63.08**	**110.78**	**88.92**	**104.42**	**117.74**	**112.70**	**55.10**	**96.82**

Table F.2. Mean monthly zooplankton densities (organisms/liter) for Pend Oreille River study sites during June, 1988.

SPECIES SITES	1	2	3	4	5	6	7	8	9	10	11	$\bar{X}$
Daphnia galeata mendotae	0.51	0.46	0	0	2.28	0	0	0	0	0.84	0	0.37
Daphnia retrocurva	0	0	0.51	0.36	1.14	0	1.02	1.38	0	0	0	0.40
Ceriodaphnia reticulata	0	0	0	0	0	0	0	0	0	0	0	0
Bosmina longirostris	5.10	13.8	14.28	11.16	7.22	35.0	13.26	12.88	10.44	21.84	9.12	14.01
Chydorus sphaericus	0	0	0	0	0	0	0	0	0	0	0	0
Camptocercus rectirostrus	0	0	0	0	0	0	0	0	0	0	0	0
Graptoleberis testudinaria	0	0	0	0	0	0	0	0	0	0	0	0
Diaphanosoma leuchtenberglanum	0	0	0	0	0.38	0	0	0	0	0	0	0.035
Leptodora kindtii	0	0	0	0	0	0	0.51	0	0	0	0	0.053
TOTAL CLADOCERA	**5.61**	**14.26**	**14.79**	**11.52**	**11.02**	**35.00**	**14.79**	**14.26**	**10.44**	**22.68**	**9.12**	**14.86**
Diaptomus ashlandi	0.17	2.76	3.57	2.16	1.14	7.0	2.04	3.68	3.48	2.52	1.90	2.77
Epischura lacustris	0	0	0	0	0	0	0	0	0	0	0	0
calanoid copepodids	0	5.52	3.57	1.80	2.28	2.80	2.04	4.60	6.38	2.10	1.90	3.00
Cyclops bicuspidatus thomasi	3.06	6.90	8.16	5.04	9.12	6.30	8.16	11.50	17.98	5.04	4.37	7.78
cyclopoid copepodids	2.72	3.22	2.04	14.40	0	21.70	0	0	0	8.82	11.59	5.81
Bryocampus sp.	0	0	0	0	0	0	0	0	0	0	0	0
nauplii	11.39	13.34	13.77	10.80	12.54	11.20	8.16	24.38	22.04	11.76	11.02	13.67
TOTAL COPEPODA	**17.34**	**31.74**	**31.11**	**34.20**	**25.08**	**49.00**	**20.40**	**44.16**	**49.88**	**30.24**	**30.78**	**33.08**
Asplanchna herricki	0	0	0.51	0	0	0	1.02	0	0.58	0	0	0.19
Asplanchna priodonta	0.51	0.46	0	0	0	0.70	0	0	0	0.84	0.38	0.31
Collotheca pelagica	0	0	0	0	0	0	0	0	0	0	0	0
Conochilus unicornis	0	0	0	0	7.98	0	0.51	0.92	0	0	0	0.86
Euchlanis dilatata	0	0	0	0	0	0	0	0	0	0	0	0
Filinia terminalis	0	0	0	0	0	0	0	0	0	0	0	0
Kellicottia longispina	12.75	17.48	10.2	9.72	4.18	27.30	8.16	11.96	13.34	12.18	4.94	12.02
Keratella cochlearis	310.59	407.10	253.96	186.84	249.28	268.80	203.49	166.98	216.34	218.40	97.47	234.39
Keratella quadrata	2.21	2.76	4.08	3.96	3.42	3.50	1.53	2.30	3.48	2.10	0.95	2.75
Lecane luna	0	0	0	0	0	0	0.51	0	0	0	0	0.046
Monostyla lunaris	0	0.46	0	0	0	0	0	0	0	0	0	0.042
Notholca laurentiae	0.17	0	0	0	0	0	0	0	0	0	0	0.015
Platyias patulus	0	0	0	0	0	0	0	0	0	0	0	0
Polyarthra dolchoptera	26.66	22.5-4	10.71	13.66	19.76	9.10	15.30	14.72	24.36	22.26	11.40	17.34
Polyarthra vulgaris	3.57	10.12	24.99	4.32	11.02	11.90	6.16	9.74	11.60	10.06	4.94	12.02
Testudinella patina	0	0	0	0	0	0	0	0	0	0	0	0
Trichocerca cylindrica	0	0	0	0	0	0	0	0	0	0	0	0
Trichocerca iota	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL **ROTIFERA**	356.66	460.92	303.45	216.52	295.64	321.30	235.11	205.62	260.70	265.06	120.6	277.6
Other organisms	0	0	0	0	0	0	0	0	0.58	0	0	0.053
TOTAL ORGANISMS	**379.61**	506.92	**349.35**	264.24	**331.74**	**405.30**	**270.30**	**264.04**	**330.60**	**318.78**	**160.74**	**325.6**

Table F.3. Mean monthly zooplankton densities (organisms/liter) for Pend Oreille River study sites during July, 1988.

SPECIES / SITES	1	2	3	4	5	6	7	8	9	10	11	$\bar{X}$
Daphnia galeata mendotae	8.28	11.02	2.76	2.55	3.22	1.84	0.51	15.08	8.7	5.6	2.88	5.68
Daphnia retrocurva	3.68	3.48	5.06	2.55	4.6	1.38	4.08	4.06	2.9	0	0.96	2.98
Ceriodaphnia reticulata												
Bosmina longirostris	10.12	2.32	1.84	1.53	0	2.3	3.06	1.16	1.74	1.6	0.24	2.35
Chydorus sphaericus	0	0	0	0	0	0	0	0	0	0	0	0
Camptocercus rectirostrus												
Graptoleberis testudinaria												
Diaphanosoma leuchtenbergianum	0	0	0	0	0	0	2.04	0	1.74	0.4	0.48	0.42
Leptodora kindtii	0	0	0	0	0	0	0	0	0	0	0	
TOTAL CLADOCERA	**23.0**	**16.82**	**9.66**	**6.63**	**7.82**	**5.52**	**9.69**	**20.3**	**15.08**	**7.6**	**4.56**	**11.52**
Diaptomus ashlandi	3.22	7.54	6.44	4.08	7.36	1.84	9.69	8.7	11.6	2.8	1.68	5.91
Epischura lacustris	0	0	0	0	0	0	0	0	0	0	0	
calanoid copepodids	7.82	17.96	4.14	6.12	4.14	3.68	5.1	8.7	8.7	10.4	4.8	7.42
Cyclops bicuspidatus thomasi	.92	2.32	10.12	1.53	9.2	0	7.14	12.18	17.96	1.2	0.72	5.75
cyclopoid copepodids	16.1	18.56	3.22	12.75	3.22	13.8	5.61	4.64	5.22	18	14.88	10.54
Bryocampus sp.	0	0	0	0	0	0	0	0	0	0	0	
nauplii	21.16	13.92	9.66	11.73	5.98	7.36	3.57	5.8	5.8	7.2	10.32	9.32
TOTAL COPEPODA	**49.22**	**60.32**	**33.58**	**36.21**	**29.9**	**26.68**	**31.11**	**40.02**	**49.3**	**39.6**	**32.4**	**38.41**
Asplanchna herricki	0	0	0	0	0.92	0	1.02	0	0	0	0	0.18
Asplanchna priodonta	0.46	1.74		1.53		0				0	0	0.34
Collotheca pellagica	0	0	0	0	0	0	0	0	0	0	0	
Conochilus unicornis	0	0	0	0	0	0	0	0	0	0	0	
Euchlanis dilatata	0	0	0	0	0	0	2.04	0	0	0	0	0.18
Filinia terminalis	0.46											0.04
Kellicottia longispina	4.14	1.74	1.38	3.06	6.44	2.76	1.02	2.32	0	0	0.72	2.14
Keratella cochlearis	83.02	29.58	16.1	52.53	23.46	23	6.63	3.48	8.7	10.4	17.04	23.08
Keratella quadrata	2.76	0.58	0	0.51	0	0.46	0	0	0	0.4	0.24	0.45
Lecane luna	0	0	0	0	0	0	0	0	0	0	0	
Monostyla lunaris												
Notholca laurentiae	0	0	0	0	0	0	0	0	0	0	0	
Platyias patulus	0	0	0	0	0	0	0	0	0	0	0	
Polyarthra dolchoptera	1.84	0	0	0	0	0	0	0	0	0	0	0.17
Polyarthra vulgaris	9.66	3.48	4.14	9.18	5.98	5.52	1.02	9.28	0.58	2.4	6	5.20
Testudinella patina	0	0	0	0	0	0	0	0	0	0	0	
Trichocerca cylindrica	0	0	0	0	0	0	0	0.58	0	0	0	0.05
Trichocerca lata	0	0	0	0	0.46	0	0	0	0	0	0	0.04
TOTAL ROTIFERA	**82.34**	**37.12**	**21.62**	**66.81**	**37.26**	**31.74**	**11.73**	**15.66**	**9.28**	**13.2**	**24**	**31.89**
Other organisms	0	0	0	0	.92	0	0	0	0	0	0	0.08
TOTAL ORGANISMS	**153.64**	**114.26**	**64.86**	**109.65**	**75.9**	**63.94**	**52.53**	**75.98**	**73.66**	**60.4**	**60.96**	**81.9**

Table F.4. Mean monthly zooplankton densities for Pend Oreille River study sites during September, 1988.

SPECIES / SITES	1	2	3	4	5	6	7	8	9	10	11	$\bar{x}$
Daphnia galeata mendotae	0	1.52	0.54	0.94	0	2.88	1.50	0.47	0.52	0	1.00	0.85
Daphnia retrocurva	0.33	0	0	0	0	0	0	0	0	0	0	0.03
Ceriodaphnia reticulata	10.56	3.04	1.08	4.23	6.96	4.68	2.25	4.70	2.08	2.10	0.40	3.83
Bosmina longirostris	0	0.38	0.81	0.94	0.	10.8	1.25	1.41	1.56	1.05	1.20	0.88
Chydorus sphaericus	0	0	0	0	0	0	0	0	0	0	0	0
Camptocercus rectirostrus	0	0	0	0	0	0	0	0	0	0	0	0
Graptoleberis testudinaria	0	0	0	0	0	0	0	0	0	0	0	0
Diaphanosoma leuchtenbergianum	0	1.80	0	0	2.32	1.80	1.00	0.47	0.52	0.70	1.00	0.88
Leptodora kindtii	0	0	0	0.47	0	0	0	0	0	0	0	0.043
TOTAL CLADOCER	10.89	6.54	2.43	6.58	8.28	16.44	6.00	1.41	1.56	3.85	3.60	6.51
Diaptomus ashlandi	0.99	0	1.89	1.41	6.36	4.32	2.00	0.94	3.64	0.70	1.00	1.90
Epischura lacustris	0	0	0	0	0	0	0	0	0	0	0	0
calanoid copepodids	4.95	4.56	9/.18	7.52	2.90	9.72	5.25	5.64	5.72	3.50	0	5.72
Cyclops bicuspidatus thomasi	0	0	0.81	0.47	0	0	1.50	1.41	0.52	0	0	0.39
cyclopoid copepodids	2.31	3.04	3.51	3.76	4.06	7.56	2.00	5.17	1.04	2.45	3.80	3.52
Bryocampus sp.	0	0	0	0	0	0	0	0	0	0	0	0
nauplii	17.82	12.54	6.75	13.16	11.02	17.28	9.25	15.98	13.52	12.25	8.00	12.51
TOTAL COPEPODA	26.07	20.14	22.14	26.32	24.36	38.88	20.00	29.14	24.44	18.90	16.80	24.29
Asplanchna herricki	0	1.52	0	0	0	0	0	0	0	0	0	0.15
Asplanchna priodonta	0	0	0	0	0	0	0	0	0	0	0	0
Collotheca pelagica	0	0	0	0	0	0	0	a	0	0	0	0
Conochilus unicornis	57.42	26.60	7.83	28.20	42.92	13.32	0	17.86	22.36	9.10	0	20.51
Euchlanis dilatata	0	0	0	0	0	0	0	0	0	0	In	0
Filinia terminalis	0	a	0	0	0	0	0	0	0	0	0	0
Kellicottia longispina	0	1.52	0	1.41	0	0	0	0	0	0	0	0.27
Keratella cochlearis	1.32	0.38	0.27	0	1.16	0	0	0	1.56	0	0	0.43
Keratella quadrata	0	0	0	0	0	0	a	0	0	0	0	0
Lecane luna	0	0	0	0	0	0	0	0	0	0	0	0
Monostyla lunaris	0	0	0	0	0	0	0	0	0	0	0	0
Notholca laurentiae	0	0	0	0	0	0	0	0	0	0	0	0
Platyias patulus	0	0	0	0	0	0	0	0	0	0	0	0
Polyarthra dolchoptera	0	0	0	0	0	0	0	0	0	0	0	0
Polyarthra vulgaris	0	2.28	0.54	1.41	1.74	2.88	3.50	3.29	2.60	3.85	0	2.01
Testudinella patina	0	0	0	0	0	0	0	0	0	0	0	0
Trichocerca cylindrica	0	0	0	0	0	0	0	0	0	0	0	0
Trichocerca longa	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL ROTIFERA	58.74	32.30	8.54	31.02	45.52	15.20	3.50	21.15	25.52	12.55	0	23.37
Other organisms	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL ORGANISMS	95.70	55.25	533.21	53.02	79.46	55.52	29.50	57.34	55.54	35.70	20.40	54.15

Table F.5. Mean montly zooplankton densities (organisms/liter) for Pend Oreille River study sites during October, 1988.

SPECIES / SITES	1	2	3	4	5	6	7	8	9	10	11	$\bar{X}$
Daphnia galeata mendotae	0.92	2.50	0.47	0.84	3.10	2.80	4.70	2.94	3.84	8.75	4.62	3.23
Daphnia retrocurva	0	0	0	0	0	0	0	0	0	0	0	0
Ceriodaphnia reticulata	1.84	0.50	0.94	0	0	0	0	0	0	0	0	0.30
Bosmina longirostris	2.76	5.10	3.76	2.24	1.24	0.80	2.35	0.84	0	5.95	11.88	3.36
Chydorus sphaericus	0	0	0	0	0	0	0	0	0	0	0	0
Camptocercus rectirostrus	0	0	0.47	0.28	0	0	0	0.42	0	0	0	0.11
Graptoleberis testudinaria	0	0	0	0	0	0	0	0	0	0	0	0
Diaphanosoma leuchtenbergianum	0	5.10	0.47	0	0.31	0.40	0	0.42	3.20	1.05	0	0.55
Leptodora kindtii	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CLADOCERA	5.52	8.30	6.11	3.36	4.65	4.00	7.05	4.62	7.04	15.75	16.50	7.54
Diaptomus ashlandi	1.38	0.70	2.82	2.52	1.24	3.20	4.23	2.10	1.28	3.15	4.62	2.48
Epischura lacustris	0	0	0	0	0	0	0	0	0	0	0	0
calanoid copepodids	0	1.40	2.35	1.96	1.24	2.40	1.88	2.94	1.92	4.55	11.88	2.96
Cyclops bicuspidatus thomasi	0.92	0.20	0	0.84	0.31	0	0	0	0.32	0	0	0.24
cyclopoid copepodids	3.45	1.60	2.82	2.24	4.65	0.40	0.47	3.78	2.56	1.75	8.58	2.94
Bryocampus sp.	0	0	0.47	0	0	0	0	0	0	0	0	0.04
nauplii	5.52	3.00	6.58	5.32	4.65	6.40	5.17	4.62	4.80	4.20	10.56	5.53
TOTAL COPEPODA	11.27	6.90	15.04	12.88	12.09	12.40	11.75	13.44	10.88	13.65	35.64	14.17
Asplanchna herricki	0	0	0	0	0	0	0	0	0	0	0	0
Asplanchna priodonta	0	0	0	0	0	0	0	0	0	0	0	0
Collotheca pelagica	0	0	0	0	0	0	0	0	0	0	0	0.14
Conochilus unicornis	6.21	2.50	11.75	7.00	3.10	4.00	8.46	2.52	2.56	1.05	3.30	4.77
Euchlanis dilatata	0	0	0	0	0	0	0	0	0	0	0	0
Filinia terminalis	0	0	0	0	0	0	0	0	0	0	0	0
Keilicottia longispina	1.15	0	1.88	0.28	0.93	0.40	1.41	0	1.28	0	0	0.67
Keratella cochlearis	1.38	0	0	0	0	2.00	1.41	0	0	0.35	0	0.47
Keratella quadrata	0	0	0	0	0	0	0	0	0	0	0	0
Lecane luna	0	0	0	0	0	0	0	0	0	0	0	0
Monostyla lunaris	0	0	0	0	0	0	0	0	0	0	0	0
Notholca laurentiae	0	0	0	0	0	0	0	0	0	0	0	0
Platyias patulus	0	0	0	0	0	0	0	0	0	0	0	0
Polyarthra dolchoptera	0	0	0	0	0	0	0	0	0	0	0	0
Polyarthra vulgaris	15.41	16.60	19.27	16.80	10.85	10.40	17.86	15.12	13.12	11.20	19.14	15.07
Testudinella patina	0	0.70	0	0	0	0	0	0.42	0	0	0	0.10
Trichocerca cylindrica	0	0	0	0	3.41	4.00	0.94	5.46	1.92	0	0	1.56
Trichocerca lata	0	1.20	0	1.12	0	0	0	0	0	1.40	0	0.21
TOTAL ROTIFERA	24.15	20.90	32.90	25.20	18.29	20.80	30.55	23.52	18.88	14.00	22.44	22.87
Other organisms	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL ORGANISMS	40.94	36.10	54.05	41.72	35.03	37.2	49.35	41.58	36.8	43.00	74.58	44.58

Table F.6. Percent composition of major zooplankton taxa present in the Pend Oreille River at each study site for each month, 1988.

	1	2	3	4	5	6	7	8	9	10	11	$\bar{X}$
APRIL												
CLADOCERANS	0.37	0.97	6.62	1.71	1.80	1.57	1.71	1.32	0	1.22	2.76	1.50
COPEPODS	20.22	16.83	33.82	36.57	24.10	20.42	35.90	27.31	27.59	23.67	37.93	26.15
ROTIFERS	79.41	81.88	59.56	61.71	74.10	78.01	62.39	70.48	72.41	74.29	59.31	72.10
OTHERS	0	0	0	0	0	0	0	0.88	0	0.82	0	0.2
JUNE												
CLADOCERANS	1.48	2.81	4.24	4.36	3.32	8.63	5.47	5.40	3.16	7.11	5.67	4.60
COPEPODS	4.57	6.26	8.90	12.94	7.56	12.10	7.55	16.73	15.09	9.49	19.15	10.20
ROTIFERS	93.95	90.98	86.86	82.70	89.12	79.27	86.98	77.87	81.58	83.40	75.15	85.30
OTHERS	0	0	0	0	0	0	0	0	0.17	0	0	0.02
JULY												
CLADOCERANS	14.97	14.72	14.89	6.05	10.30	8.63	18.45	26.72	20.47	12.58	7.48	14.07
COPEPODS	32.04	52.79	51.77	33.02	39.39	41.73	59.22	45.04	66.93	65.56	53.15	46.70
ROTIFERS	53.59	32.49	33.33	60.93	49.09	49.64	22.33	20.61	12.60	21.85	39.37	38.94
OTHERS	0	0	0	0	1.21	0	0	0	0	0	0	0.10
SEPTEMBER												
CLADOCERANS	11.38	11.54	7.32	10.29	11.68	15.93	20.34	2.72	2.97	10.78	17.65	12.0
COPEPODS	27.24	33.97	66.66	41.18	30.66	59.34	67.80	56.36	46.53	52.94	82.35	44.90
ROTIFERS	61.38	54.49	26.02	48.53	57.66	24.73	11.86	40.91	50.50	36.27	0	43.20
OTHERS	0	0	0	0	0	0	0	0	0	0	0	0
OCTOBER												
CLADOCERANS	13.48	22.99	11.30	8.05	13.27	10.75	14.28	11.11	19.13	36.63	22.12	16.91
COPEPODS	27.53	19.12	27.83	30.87	34.51	33.33	23.81	32.32	29.56	31.74	47.79	31.18
ROTIFERS	58.99	57.89	60.87	60.46	52.21	55.91	61.90	56.57	51.30	32.56	30.09	51.30
OTHERS	0	0	0	0	0	0	0	0	0	0	0	0

Table F.7. Mean monthly cladoceran biomass values (µg/L) for Pend Oreille River study sites during April, 1988.

SPECIES / SITES	1	2	3	A	5	6	7	8	9	10	11	$\bar{X}$
Daphnia galeata mendotae	0	0	0	0	0	0	0	0	0	0	0.22	0.02
Daphnia retrocurva	0	0	0	0	0	0	0	0	0	0	0	0
Ceriodaphnia reticulata	0	0	0	0	0	0	0	0	0	0	0	0
Bosmina longirostris	0	0	0	0	0	0	0	0	0	0.80	0	0.073
Chydorus sphaericus	0.392	3.18	36.02	0.97	4.94	0.56	9.85	5.99	0	0.38	0.81	5.74
Camptocercus rectirostrus	0	0	0	0	a	0	0	0	0	0	0	0
Graptoleberis testudinaria	0	0	0	0	0	0	0	0	0	0	0	0
Diaphanosoma leuchtenbergianum	0	0	0	0	0	0	0	0	0	0	0	0
Leptodora kindtii	0	0	0	0	0	0	0	0	0	0	0	0
Total Biomass	0.392	3.18	36.02	0.97	4.94	0.56	9.85	5.99	0	1.18	1.03	5.83

Table F.8. Mean monthly cladoceran biomass values (µg/L) for Pend Oreille River study sites during June, 1988.

SPECIES / SITES	1	2	3	4	5	6	7	8	9	10	11	$\bar{X}$
Daphnia galeata mendotae	9.23	6.95	0	0	12.27	0	0	0	0	1.39	0	2.71
Daphnia retrocurva	0	0	2.13	0.21	3.42	0	6.60	9.42		0	0	1.98
Ceriodaphnia reticulata	0	0	0	0	0	0	0	0	0	0	0	0
Bosmina longirostris	5.81	16.84	17.28	10.16	8.16	37.03	18.43	17.90	14.62	19.87	8.30	15.85
Chydorus sphaericus	0	0	0	0	0	0	0	0	0	0	0	0
Camptocarcus rectirostrus	0	0	0	0	0	0	0	0	0	0	0	0
Graptoleberis testudinaria	0	0	0	0	0	0	0	0	0	0	0	0
Diaphanosoma leuchtenbergianum	0	0	0	0	1.00	0	0	0	0	0	0	0.09
Leptodora kindtii	0	0	0	0	0	0	1.17	0	0	0	0	0.11
Total Biomass	15.04	23.79	19.41	10.37	23.85	37.03	26.20	27.32	14.62	21.26	8.30	20.74

Table F.9. Mean monthly cladoceran biomass values (µg/L) for Pend Oreille River study sites during July, 1988.

SPECIES / SITES	1	2	3	4	5	6	7	8	9	10	11	$\bar{X}$
Daphnia galeata mendotae	26.31	44.94	21.22	5.34	13.50	15.99	3.67	111.14	77.1	35.45	11.74	33.31
Daphnia retrocurva	7.95	18.34	21.10	19.35	25.90	12.04	17.05	25.58	34.74	0	1.09	16.65
Ceriodaphnia reticulata	0	0	0	0	0	0	0	0	0	0	0	0
Bosmina longirostris	8.07	1.53	2.72	1.33	0	2.99	3.70	1.72	2.91	1.25	0.08	2.39
Chydorus sphaericus	0	0	0	0	0	0	0	0	0	0	0	0
Camptocercus rectirostrus	0	0	0	0	0	0	0	0	0	0	0	0
Graptoleberis testudinaria	0	0	0	0	0	0	0	0	0	0	0	0
Diaphanosoma leuchtenbergianum	0	0	0	0	0	0	3.75	0	5.06	0.82	0.96	0.96
Leptodora kindtii	0	0	0	0	0	0	0	0	0	0	0	0
Total Biomass	42.3	64.8	45.0	26.0	39.4	31.0	28.2	138.4	119.8	37.5	13.87	53.31

Table F.10. Mean monthly cladoceran biomass values (µg/L) for Pend Oreille River study sites during September, 1988.

SPECIES / SITES	1	2	3	4	5	6	7	8	9	10	11	$\bar{X}$
Daphnia galeata mendotae	0	4.82	2.98	1.05	0	12.07	5.64	4.16	4.17	0	2.99	3.44
Daphnia retrocurva	0.21	0	0	0	0	0	0	0	0	0	0	0.02
Ceriodaphnia reticulata	23.34	2.74	0.36	2.24	1.32	5.80	2.00	3.85	2.04	0.48	0.77	4.085
Bosmina longirostris	0	0.27	0.49	0.92	0	0.71	0.89	1.28	2.31	1.82	1.18	0.90
Chydorus sphaericus	0	0	0	0	0	0	0	0	0	0	0	0
Camptocercus rectirostrus	0	0	0	0	0	0	0	0	0	0	0	0
Graptoleberis testudinaria	0	0	0	0	0	0	0	0	0	0	0	0
Diaphanosoma leuchtenbergianum	0	6.90	0	0	17.01	5.78	0.77	2.47	1.37	6.32	2.64	3.93
Leptodora kindtii	0	0	0	3.89	0	0	0	0	0	0	0	0.35
Total Biomass	23.55	14.73	3.83	8.10	18.33	24.36	9.30	11.76	9.89	8.62	7.58	12.72

Table F.11. Mean monthly cladoceran biomass values (μg/L) for Pend Oreille River study sites during October, 1988.

SPECIES / SITES	1	2	3	4	5	6	7	8	9	10	11	$\bar{X}$
Daphnia galeata mendotae	4.42	8.15	2.41	4.31	18.76	13.13	23.31	16.20	24.84	35.68	24.21	15.95
Daphnia retrocurva	0	0	0	0	0	0	0	0	0	0	0	0
Ceriodaphnia reticulata	3.79	0.34	1.94	0	0	0	0	0	0	0	0	0.55
Bosmina longirostris	2.86	5.76	4.89	2.36	1.22	1.69	3.27	0.50	3.62	6.72	14.37	4.30
Chydorus sphaericus	0	0	0	0	0	0	0	0	0	0	0	0
Camptocercus rectirostrus	0	0	0	0	0	0	0	0	0	0	0	0
Graptoleberis testudinaria	0	0	0	0	0	0	0	0	0	0	0	0
Diaphanosoma leuchtenbergianum	0	0.73	2.61	0	1.86	3.23	0	3.39	0	2.25	0	1.28
Leptodora kindtii	0	0	0	0	0	0	0	0	0	0	0	0
Total Biomass	11.07	14.98	11.85	6.67	21.84	18.05	26.59	20.09	28.46	44.65	38.58	22.08

Table F.12. Percent composition of major cladoceran species present in the Pend Oreille River at each study site for each month, 1988.

	1	2	3	4	5	6	7	8	9	10	11	$\bar{X}$
APRIL												
Daphnia galeata mendotae	0	0	0	0	0	0	0	0	0	0	21.4	0.3
Bosmina longirostris	0	0	0	0	0	0	0	0	0	67.8	0	1.2
Chydorus sphaericus	100	100	100	100	100	100	100	100	0	32.2	78.6	98.5
JUNE												
Daphnia galeata mendotae	61.4	29.2	0	0	51.4	0	0	0	0	6.5	0	13.1
Daphnia retrocurva	0	0	11.0	2.0	14.3	0.	25.2	34.5	0	0	0	9.6
Bosmina longirostris	38.6	70.8	89.0	98.0	34.2	100	70.3	65.5	100	93.5	100	76.4
Diaphanosoma leuchtenbergianum	0	0	0	0	4.2	0	0	0	0	0	0	0.4
Leptodora kindtii	0	0	0	0	0	0	4.5	0	0	0	0	0.4
JULY												
Daphnia galeata mendotae	62.2	69.4	47.2	20.5	34.3	51.6	13.0	80.3	64.4	94.5	84.6	62.5
Daphnia retrocurva	18.8	28.3	46.9	74.4	65.7	38.8	60.5	18.5	29.0	0	7.9	31.2
Bosmina longirostris	19.1	2.3	6.0	5.1	0	9.6	13.1	1.2	2.4	3.3	0.6	4.5
Diaphanosoma leuchtenbergianum	0	0	0	0	0	0	13.3	0	4.2	2.2	6.9	1.8
SEPTEMBER												
Daphnia galeata mendotae	0	32.7	77.8	13.8	0	49.6	60.6	35.4	42.2	0	39.4	27.0
Daphnia retrocurva	0.9	0	0	0	0	0	0	0	0	0	0	0.2
Ceriodaphnia reticulata	99.1	18.6	9.4	27.6	7.2	23.8	21.5	32.7	20.6	5.6	10.2	32.1
Bosmina longirostris	0	1.8	12.8	11.4	0	2.9	9.6	10.9	23.4	21.1	15.6	7.1
Diaphanosoma leuchtenbergianum	0	46.8	0	0	92.8	23.7	8.3	21.0	13.8	73.3	34.8	30.9
Leptodora kindtii	0	0	0	48.0	0	0	0	0	0	0	0	2.1
OCTOBER												
Daphnia galeata mendotae	39.9	54.4	20.3	64.6	85.9	72.7	87.7	80.6	87.3	79.9	62.8	72.2
Ceriodaphnia reticulata	34.2	2.3	16.4	0	0	0	0	0	0	0	0	2.5
Bosmina longirostris	25.8	38.4	41.3	35.4	5.6	9.4	12.3	2.5	12.7	15.1	37.2	19.5
Diaphanosoma leuchtenbergianum	0	4.9	22.0	0	8.5	17.9	0	16.9	0	5.0	0	5.8

APPENDIX G

FEEDING HABITS OF FISH FOUND IN TRIBUTARIES OF THE PEND OREILLE RIVER

FEEDING HABITS OF FISH IN SKOOKUM CREEK

Table G.I. September feeding habits of 0+ brown trout (N=4) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Brachycentridae	0.3±0.5(4.2)	0.1 (1.4)	25.0	8.7
Ephemeroptera				
Ephemerellidae	0.3±0.5(4.2)	1.3 (17.6)	25.0	13.4
Baetidae	0.5±1.0(8.3)	0.5 (6.8)	25.0	11.5
Diptera				
Chironomidae larvae	0.5±1.0(8.30)	0.1 (1.4)	25.0	10.2
Terrestrial Organisms				
Trichoptera adult	4.5±8.4(74.7)	5.3 (71.6)	50.0	56.2

Table G.2. October feeding habits of 0+ brown trout (N=2) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Ephemeroptera				
Baetidae	3.0±1.4(50.0)	0.1 (2.0)	100.0	27.6
Heptageniidae	0.5±0.7(8.3)	0.1 (2.0)	50.0	11.0
Plecoptera				
Perlodidae	0.5±0.7(8.3)	0.1 (2.0)	50.0	11.0
Oligochaeta				
Lumbriculidae	0.5±0.7(8.3)	4.4 (89.8)	50.0	26.9
Ostracoda				
Cypridae	0.5±0.7(8.3)	0.1 (2.0)	50.0	11.0
Terrestrial Organisms				
Collembola				
Sminthuridae	1.0±1.4(16.7)	0.1 (2.0)	50.0	12.5

Table G.3. April feeding habits of 1+ brown trout (N=3) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydroptilidae	4.0±4.0(23.5)	0.5 (4.6)	66.7	23.7
Ephemeroptera				
Ephemerellidae	0.3±0.6(2.0)	6.0 (55.1)	33.3	22.6
Baetidae	12.0±12.0(70.6)	3.7 (33.9)	66.7	42.8
Diptera				
Simuliidae larvae	0.7±1.2(3.9)	0.7 (6.4)	33.3	10.9

Table G.4. September feeding habits of 1+ brown trout (N=3) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Brachycentridae	0.3±0.6(0.5)	0.1 (0.2)	33.3	7.8
Diptera				
Chironomidae larvae	0.3±0.6(0.5)	0.1 (0.2)	33.3	7.8
Simuliidae larvae	0.7±1.2(1.0)	0.1 (0.2)	33.3	8.0
Oligochaeta				
Lumbriculidae	0.3±0.6(0.5)	39.6 (87.8)	33.3	28.1
Terrestrial Organisms				
Trichoptera adult	0.3±0.6(0.5)	0.1 (0.2)	33.3	7.8
Homoptera				
Aphididae	67.7±114.6(97.1)	5.1 (11.3)	66.7	40.4

Table G.5. October feeding habits of 1+ brown trout (N=6) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	3.7±5.8(19.8)	21.7 (34.4)	50.0	15.6
Limnephilidae	2.0±2.3(10.8)	2.6 (4.1)	50.0	9.7
Brachycentridae	0.5±1.2(2.7)	0.1 (0.2)	16.7	2.9
Glossosomatidae	5.3±8.0(28.8)	9.8 (15.5)	83.3	19.1
Ephemeroptera				
Baetidae	3.2±3.6(17.1)	1.2 (1.9)	66.7	12.9
Heptageniidae	0.3±0.2(1.8)	0.1 (0.2)	33.3	5.3
Plecoptera				
Perlodidae	1.0±1.7(5.4)	1.1 (1.9)	33.3	6.1
Diptera				
Chironomidae larvae	0.7±1.0(3.6)	1.0 (1.6)	33.3	5.8
Empididae	0.2±0.4(0.9)	0.6 (1.0)	16.7	2.8
Coleoptera				
Elmidae adult	0.2±0.4(0.9)	1.7 (2.7)	16.7	3.0
Terrestrial Organisms				
Trichoptera adult	1.2±2.4(6.3)	20.4 (32.3)	33.3	10.8
Hymenoptera				
Formicidae	0.2±0.4(0.9)	1.9 (2.1)	16.7	2.9
Homoptera				
Aphididae	0.2±0.4(0.9)	1.4 (2.2)	16.7	3.0

Table G.6. September feeding habits of 2+ brown trout (N=2) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Ephemeroptera				
Limnephilidae	3.0±2.8(54.6)	0.4 (14.8)	100.0	33.9
Diptera				
Simuliidae larvae	0.5±0.7(9.1)	0.1 (3.7)	50.0	12.6
Terrestrial Organisms				
Hymenoptera				
Formicidae	1.0(18.2)	2.1 (77.8)	100.0	39.2
Diptera				
Empididae	1.0±1.4(18.2)	0.1 (3.7)	50.0	14.4

Table G.7. October feeding habits of 2+ brown trout (N=1) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	2.0(7.1)	5.1 (10.1)	100.0	11.8
Brachycentridae	2.0(7.1)	2.8 (5.6)	100.0	11.3
Glossosomatidae	17.0(60.7)	9.6(19.1)	100.0	17.7
Ephemeroptera				
Baetidae	2.0(7.1)	1.3 (2.6)	100.0	11.0
Diptera				
Chironomidae pupae	1.0(3.6)	1.5 (3.0)	100.0	10.7
Muscidae	1.0(3.6)	1.5 (3.0)	100.0	10.7
Oligochaeta				
Lumbriculidae	10.(3.6)	26.5 (52.7)	100.0	15.7
Terrestrial Organisms				
Hymenoptera				
Formicidae	22.0(7.1)	2.0 (4.0)	100.0	11.1

Table G.8. September feeding habits of 3+ brown trout (N=2) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Brachycentridae	0.5±0.7(50.0)	0.1 (2.0)	50.0	34.0
Terrestrial Organisms				
Dermaptera				
Forficulidae	0.5±0.7(50.0)	4.8 (98.0)	50.0	66.0

Table G.9. October feeding habits of 3+ brown trout (N=1) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg)	% %	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	1.0(33.3)	39.9 (25.9)	100.0	31.8
Plecoptera				
Perlodidae	1.0(3.3)	58.3 (37.8)	100.0	34.2
Terrestrial Organisms				
Araneida				
Arachnidae	1.0(33.3)	56.1 (36.4)	100.0	33.9

Table G.10. June feeding habits of 0+ brook trout (N=3) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	0.7±1.2(8.0)	0.7 (17.5)	33.3	11.0
Ephemeroptera				
Heptageniidae	0.7±1.2(8.0)	1.3 (32.5)	33.3	13.8
Hydracarina	0.3±0.6(4.0)	0.1 (2.5)	33.3	7.5
Diptera				
Chironomidae larvae	4.7±2.3(56.0)	0.4 (10.0)	100.0	31.1
Chironomidae pupae	1.0±1.7(12.0)	0.2 (5.0)	33.3	9.4
Ceratopogonidae	0.3±0.6(4.0)	0.7 (17.5)	33.3	10.3
Terrestrial Organisms				
Psocoptera				
Psocidae	0.67±0.58(8.0)	0.6 (15.0)	66.7	16.8

Table G.1 1. July feeding habits of 0+ brook trout (N=4) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	0.5±0.6(6.1)	0.1 (2.3)	50.0	11.7
Hydracarina	0.3±0.5(3.0)	0.6 (14.0)	25.0	8.4
Diptera				
Chironomidae larvae	4.8±4.9(57.6)	0.5 (11.6)	75.0	28.8
Chironomidae pupae	0.3±0.5(3.0)	0.1 (2.3)	25.0	6.1
Coleoptera				
Dytiscidae	1.3±1.5(15.15)	0.1 (2.33)	50.0	13.5
Terrestrial Organisms				
Trichoptera adult	0.5±1.0(6.1)	2.7 (62.8)	25.0	18.8
Araneida				
Arachnidae	0.5±1.0(6.1)	0.1 (2.3)	25.0	6.7
Hymenoptera				
Formicidae	0.3±0.5(3.0)	0.1 (2.3)	25.0	6.1

Table G.12. September feeding habits of 0+ brook trout (N=8) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Brachycentridae	0.5±1.4(2.4)	0.1 (0.2)	12.5	2.2
Ephemeroptera				
Ephemerellidae	0.1±0.4(0.6)	0.1(1.2)	12.5	4.7
Baetidae	0.6±0.9(3.0)	0.1 (0.2)	37.5	6.1
Plecoptera				
Perlodidae	0.1±0.4(0.6)	0.1 (0.2)	12.5	2.0
Hydracarina	0.1±0.4(0.6)	0.1 (0.2)	12.5	2.0
Diptera				
Chironomidae larvae	0.3±0.7(1.2)	0.1 (0.2)	12.5	2.1
Chironomidae pupae	0.9±1.6(4.2)	0.1 (0.2)	25.0	4.4
Nematoda	0.3±0.7(1.2)	3.9 (8.4)	12.5	3.3
Terrestrial Organisms				
Trichoptera adult	0.8±1.5(3.6)	1.2 (2.6)	25.0	4.7
Coleoptera				
Staphylinidae	0.1±0.4(0.6)	0.1 (0.2)	12.5	2.0
Pselaphidae	0.1±0.4(0.6)	0.1 (0.2)	12.5	2.0
Araneida				
Arachnidae	0.1±0.4(0.6)	0.1 (0.2)	12.5	2.0
Hymenoptera				
Formicidae	0.4±0.7(1.8)	0.6 (1.2)	25.0	4.2
Ichneumonidae	0.1±0.4(0.6)	0.1 (0.2)	12.5	2.0
Homoptera				
Cicadellidae	0.5±0.8(2.4)	1.1 (2.4)	37.5	6.4
Aphididae	2.0±3.4(9.7)	0.1 (0.2)	62.5	10.8
Diptera				
Empididae	10.9±13.4(52.7)	36.7 (78.8)	87.5	31.8
Sciaridae	1.5±3.0(7.1)	0.2 (0.4)	25.0	4.8
Bibionidae	1.3±2.6(6.3)	1.7 (3.7)	25.0	5.1

Table G.13. October feeding habits of 0+ brook trout (N=3) in Skookum Creek.

	Number	Weight		Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg)	%	%	%
Aquatic Organisms					
Ephemeroptera					
Ephemerellidae	0.7±1.2(13.3)	38.8	(94.9)	33.3	38.6
Baetidae	3.3±4.2(66.7)	0.1	(0.2)	66.7	36.4
Chironomidae					
Chironomidae pupae	1.0±1.0(20.0)	2.0	(4.9)	66.7	25.0

Table G.14. April feeding habits of 1+ brook trout (N=1) in Skookum Creek.

	Number	Weight		Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg)	%	%	%
Aquatic Organisms					
Hemiptera					
Corixidae	1.0(50.0)	0.3	(15.8)	100.0	41.4
Terrestrial Organisms					
Diptera					
Stratiomyidae	1.0(50.0)	1.6	(84.2)	100.0	58.6

Table G.15. June feeding habits of 1+ brook trout (N=5) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	0.8±0.8(7.8)	15.3 (4.9)	60.0	9.1
Limnephilidae	1.2±2.2(11.8)	9.2 (2.9)	40.0	6.9
Brachycentridae	1.0±1.4(9.2)	8.1 (2.6)	40.0	6.6
Ephemeroptera				
Ephemerellidae	0.4±0.9(3.9)	13.3 (4.2)	20.0	3.5
Baetidae	0.8±1.1(7.8)	7.6 (2.4)	40.0	6.3
Heptageniidae	1.2±1.6(11.8)	21.8 (7.0)	60.0	9.9
Diptera				
Chironomidae larvae	2.2±2.2(21.6)	7.9 (2.5)	80.0	13.1
Simuliidae larvae	0.4±0.6 (3.9)	7.7 (2.5)	40.0	5.8
Tipulidae	0.4±0.6(3.9)	13.0 (4.2)	40.0	6.0
Ceratopogonidae	0.4±0.6(3.9)	0.1 (0.03)	40.0	5.5
Muscidae	0.2±0.5(2.0)	7.3 (2.3)	20.0	3.0
Oligochaeta				
Lumbriculidae	0.2±0.5(2.0)	130.5 (41.6)	20.0	8.0
Terrestrial Organisms				
Coleoptera				
Curculionidae	0.2±0.5(2.0)	7.3 (2.3)	20.0	3.0
Araneida				
Arachnidae	0.2±0.5(2.0)	9.9 (3.2)	20.0	3.1
Unidentified	0.2±0.5(2.0)	22.3 (7.1)	20.0	3.6
Lepidoptera	0.2±0.5(2.0)	11.2 (3.6)	20.0	3.2
Homoptera	0.2±0.5(2.0)	13.4 (4.3)	20.0	3.3

Table G.16. July feeding habits of 1+ brook trout (N=3) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	1.3±1.2(28.6)	2.5 (11.4)	66.7	21.3
Limnephilidae	1.0±1.0(21.4)	0.8 (3.7)	66.7	18.4
Ephemeroptera				
Ephemerellidae	1.3±1.2(28.6)	11.9 (54.3)	66.7	29.9
Diptera				
Chironomidae larvae	0.3±0.6(7.1)	0.1 (0.5)	33.3	8.2
Gastropoda				
Planorbidae	0.3±0.6(7.1)	5.3 (24.2)	33.3	12.9
Terrestrial Organisms				
Hymenoptera				
Formicidae	0.3±0.6(7.1)	1.3 (5.9)	33.3	9.3

Table G.17. September feeding habits of 1+ brook trout (N=2) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Coleoptera				
Elmidae adult	0.5±0.7(25.0)	0.8 (0.8)	50.0	18.9
Terrestrial Organisms				
Hymenoptera				
Formicidae	0.5±0.7(25.0)	101.7(99.0)	50.0	43.5
Diptera				
Empididae	0.5±0.7(25.0)	0.1(0.1)	50.0	18.8
Chironomidae	0.5±0.7(25.0)	0.1 (0.1)	50.0	18.8

Table G.18. October feeding habits of 1+ brook trout (N=4) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	0.3±0.5(2.3)	3.0 (6.9)	25.0	5.4
Pupae	1.3±1.5(11.6)	6.7 (15.3)	50.0	12.1
Ephemeroptera				
Baetidae	1.5±1.0(14.0)	4.2 (9.6)	100.0	17.5
Diptera				
Chironomidae pupae	0.5±0.6(4.7)	1.7 (3.9)	50.0	9.2
Hemiptera				
Corixidae	0.5±0.6(4.7)	9.6 (22.0)	50.0	12.0
Terrestrial Organisms				
Coleoptera				
Lathridiidae	0.5±1.0(4.7)	2.7 (6.2)	25.0	5.6
Hymenoptera				
Formicidae	0.3±0.5(2.3)	2.7 (6.2)	25.0	5.2
Unidentified	0.8±1.5(7.0)	2.7 (6.2)	25.0	6.0
Hemiptera				
Corixidae	0.5±0.6(4.7)	9.6 (22.0)	50.0	12.0
Homoptera				
Aphididae	4.5±9.0(41.9)	2.3 (5.3)	25.0	11.3
Hymenoptera				
Ichneumonidae	0.3±0.5(2.3)	2.8 (6.4)	25.0	5.3
Chalcidae	0.3±0.5(2.3)	3.4 (7.8)	25.0	5.5
Collembola				
Sminthuridae	0.3±0.5(2.7)	1.9 (4.4)	25.0	5.0

Table G.19. April feeding habits of 2+ brook trout (N=1) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Decapoda				
Astacidae	1.0(33.3)	7.2 (14.7)	100.0	37.0
Hirudinea	2.0(66.7)	41.8 (85.3)	100.0	63.0

Table G.20. June feeding habits of 2+ brook trout (N=5) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	0.2±0.5(1.6)	7.3 (4.2)	20.0	3.4
Limnephilidae	4.2±5.0(34.4)	18.0 (10.4)	60.0	13.6
Brachycentridae	0.2±0.5(1.6)	6.4 (3.9)	20.0	3.3
Unidentified	0.2±0.5(1.6)	4.0 (2.3)	20.0	3.1
Ephemeroptera				
Ephemerellidae	0.2±0.5(1.6)	13.1 (7.6)	20.0	3.9
Baetidae	0.4±0.9(3.3)	3.6 (2.1)	20.0	3.3
Heptageniidae	0.2±0.5(1.6)	8.4 (4.9)	20.0	3.4
Diptera				
Chironomidae larvae	0.6±1.3(4.9)	5.0 (2.9)	20.0	3.6
Chironomidae pupae	0.2±0.5(1.6)	3.7 (2.1)	20.0	3.1
Ceratopogonidae	0.2±0.5(1.6)	4.6 (2.7)	20.0	3.2
Syrphidae	0.2±0.5(1.6)	6.5 (3.2)	20.0	3.3
Pelecypoda				
Sphaeriidae	0.2±0.5(1.6)	3.2 (1.9)	20.0	3.1
Terrestrial Organisms				
Trichoptera adult	0.4±0.9(3.3)	6.2 (3.6)	20.0	3.5
Diptera	0.4±0.6(3.3)	7.3 (4.2)	50.0	7.5
Coleoptera				
Carabidae	0.4±0.9(3.3)	8.8 (5.1)	20.0	3.7
Scarabaeidae	0.2±0.5(1.6)	5.1 (3.0)	20.0	3.2
Curculionidae	0.2±0.5(1.6)	3.7 (2.1)	20.0	3.1
Araneida				
Arachnidae	0.8±1.3(6.56)	12.6 (7.3)	40.0	7.0
Hymenoptera				
Formicidae	2.2±3.3(18.0)	37.1 (21.5)	80.0	15.0
Unidentified	0.2±0.5(1.64)	4.3 (2.5)	20.0	3.1
Lepidoptera	0.2±0.5(1.64)	3.9 (2.3)	20.0	3.1

Table G.21. July feeding habits of 2+ brook trout (N=4) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	1.6±2.9(5.4)	1.2 (0.5)	50.0	10.6
Limnephilidae	6.6±7.0(20.8)	93.7 (39.7)	100.0	30.6
Ephemeroptera				
Ephemerellidae	18.5±34.4(56.9)	127.9 (54.2)	50.0	30.7
Diptera				
Chironomidae larvae	4.3±8.5(13.1)	0.1 (0.04)	25.0	7.3
Simuliidae larvae	0.5±1.0(1.5)	0.6 (0.25)	25.0	5.1
Coleoptera	0.3±0.5(0.8)	12.4 (5.3)	25.0	5.9
Terrestrial				
Hymenoptera				
Formicidae	0.5±0.6(1.5)	0.1 (0.04)	50.0	9.8

Table G.22. October feeding habits of 2+ brook trout (N=2) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Pupae	7.0±1.4(82.4)	91.6 (89.2)	100.0	60.3
Ephemeroptera				
Baetidae	0.5±0.7(5.9)	2.6 (2.5)	50.0	13.0
Plecoptera				
Nemouridae	0.5±0.7(5.9)	2.0 (2.0)	50.0	12.9
Hemiptera				
Corixidae	0.5±0.7(5.9)	6.5 (6.3)	50.0	13.4

Table G.23. June feeding habits of 0+ cutthroat trout (N=1) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	2.0(20.0)	0.1 (5.0)	100.0	17.9
Trichoptera adult	2.0(20.0)	0.6 (30.0)	100.0	21.4
Diptera				
Chironomidae larvae	3.0(30.0)	0.7 (35.0)	100.0	23.6
Chironomidae pupae	2.0(20.0)	0.5 (25.0)	100.0	20.7
Oligochaeta				
Naididae	1.0(10.0)	0.1 (5.0)	100.0	16.4

Table G.24. July feeding habits of 0+ cutthroat trout (N=1) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	1.0(7.1)	1.7 (25.0)	100.0	16.6
Limnephilidae	3.0(21.4)	0.3 (4.4)	100.0	15.8
Ephemeroptera				
Ephemerellidae	14.0(28.6)	2.7 (39.7)	100.0	21.2
Diptera				
Chironomidae larvae	4.0(28.6)	0.1 (1.5)	100.0	16.4
Simuliidae larvae	1.0(7.1)	0.1 (1.5)	100.0	13.7
Terrestrial Organisms				
Coleoptera				
Carabidae	1.0(7.1)	1.9 (27.9)	100.0	16.4

Table G.25. September feeding habits of 0+ cutthroat trout (N=1) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Brachycentridae	1.0(3.9)	0.1 (1.1)	100.0	11.7
Ephemeroptera				
Ephemerellidae	1.0(3.9)	0.3 (3.4)	100.0	11.9
Diptera				
Chironomidae larvae	2.0(7.7)	0.1 (1.1)	100.0	12.0
Chironomidae pupae	3.0(11.5)	0.1 (1.1)	100.0	12.5
Terrestrial Organisms				
Diptera				
Unidentified	1.0(3.9)	0.9 (10.2)	100.0	12.7
Empididae	17.0(65.4)	7.2 (81.8)	100.0	27.5
Homoptera				
Cicadellidae	1.0(3.9)	0.1 (1.1)	100.0	11.7

Table G.26. June feeding habits of 1+ cutthroat trout (N=1) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Ephemeroptera				
Ephemerellidae	5.0(33.3)	13.5 (14.9)	100.0	14.8
Heptageniidae	1.0(6.7)	6.6 (7.3)	100.0	11.4
Diptera				
Chironomidae larvae	1.0(6.7)	0.3 (0.3)	100.0	10.7
Simuliidae larvae	1.0(6.7)	1.8 (2.0)	100.0	10.9
Terrestrial Organisms				
Trichoptera adult	1.0(6.7)	1.3 (1.4)	100.0	10.8
Araneida				
Arachnidae	3.0(20.0)	43.9 (48.6)	100.0	16.9
Hymenoptera				
Formicidae	2.0(13.3)	16.9 (18.7)	100.0	13.2
Lepidoptera	1.0(6.7)	6.1 (6.8)	100.0	11.3

Table G.27. September feeding habits of 1+ cutthroat trout (N=2) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Diptera				
Tipulidae	0.5(0.8)	0.1 (0.2)	50.0	4.1
Terrestrial Organisms				
Trichoptera adult	1.0(1.5)	0.4 (0.7)	100.0	8.3
Coleoptera				
Staphylinidae	1.0±1.4(1.5)	0.1 (0.2)	50.0	[illegible]
Araneida				
Arachnidae	1.5±0.7(2.2)	4.6 (7.7)	100.0	8.9
Hymenoptera				
Formicidae	2.5±2.1(3.6)	6.3 (10.5)	100.0	9.2
Ichneumonidae	2.0±1.4(2.9)	0.1 (0.2)	100.0	8.4
Bethylidae	1.0±1.4(1.5)	0.1 (0.2)	50.0	4.2
Hemiotera				
Pentatomidae	0.5±0.7(0.8)	2.2 (3.7)	50.0	4.4
Homoptera				
Cicadellidae	2.2±2.8(2.9)	0.8 (1.3)	50.0	4.4
Diptera				
Mycetophilidae	1.0±1.4(1.5)	0.1 (0.2)	50.0	4.2
Empididae	44.5±24.8(62.4)	41.9 (69.8)	100.0	17.8
Chironomidae	0.5±0.7(0.8)	0.1 (0.2)	50.0	4.1
Pharidae	0.5±0.7(0.8)	0.1 (0.2)	50.0	4.1
Sciaridae	8.5±12.0(12.5)	0.1(0.2)	50.0	4.8
Bibionidae	2.5±3.5(3.8)	2.8(4.7)	50.0	4.2
Collembola				
Sminthuridae	0.5±0.7(0.8)	0.1 (0.2)	50.0	4.1

Table G.28. September feeding habits of 2+ cutthroat trout (N=1) in Skookum Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Diptera				
Tipulidae	1.0(3.7)	4.3 (15.7)	100.0	7.5
Coleoptera				
Dytiscidae	1.0(3.7)	0.1 (0.4)	100.0	6.5
Limnichidae	1.0(3.7)	0.1 (0.4)	100.0	6.5
Terrestrial Organisms				
Araneida				
Arachnidae	1.0(3.7)	6.8 (24.8)	100.0	8.1
Hymenoptera				
Formicidae	3.0(11.1)	4.5 (16.4)	100.0	8.0
Ichneumonidae	2.0(7.4)	0.6 (2.2)	100.0	6.9
Sphecidae	1.0(3.7)	0.1 (0.4)	100.0	6.5
Lepidoptera	1.0(3.7)	2.7 (9.9)	100.0	7.1
Homoptera				
Cicadellidae	1.0(3.7)	0.1 (0.4)	100.0	6.5
Diptera				
Empididae	10.0(37.0)	6.2 (22.6)	100.0	10.0
Sciaridae	1.0(3.7)	0.1 (0.4)	100.0	6.5
Bibionidae	2.0(4.6)	1.4 (5.1)	100.0	6.9
Dryomyzidae	1.0(3.7)	0.3 (1.1)	100.0	6.6
Plecoptera				
Capniidae adult	1.0(3.7)	0.1 (0.4)	100.0	6.5

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Table G.29. April feeding habits of 0+ brown trout (N=3) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Ephemeroptera				
Ephemerellidae	0.7±1.2(6.3)	0.1 (0.3)	33.3	6.6
Baetidae	3.3±4.9(31.3)	2.6 (7.6)	66.7	17.6
Heptageniidae	2.3±4.0(21.9)	4.0 (11.6)	33.3	11.1
Plecoptera				
Perlodidae	1.7±2.9(15.6)	1.7 (4.9)	33.3	20.1
Diptera				
Chironomidae larvae	0.3±0.6(3.1)	2.3 (6.7)	33.3	7.2
Simuliidae larvae	1.7±1.2(15.6)	0.7 (2.3)	100.0	19.6
Gastropoda				
Lumbriculidae	0.7±1.2(6.3)	23.1 (67.2)	33.3	17.8

Table G.30. June feeding habits of 0+ brown trout (N=1) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Ephemeroptera				
Unidentified	3.0(42.9)	6.3 (63.6)	100.0	25.4
Diptera				
Ceratopogonidae	1.0(14.3)	0.6 (6.1)	100.0	18.1
Coleoptera				
Elmidae adult	1.0(14.3)	1.0 (10.1)	100.0	18.7
Terrestrial Organisms				
Hymenoptera				
Formicidae	1.0(14.3)	1.8 (18.2)	100.0	19.9
Psocoptera				
Psocidae	1.0(14.3)	0.2 (2.0)	100.0	18.1

Table G.31. July feeding habits of 0+ brown trout (N=4) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Ephemeroptera				
Ephemerellidae	0.5±1.0(10.5)	0.2 (40.0)	25.0	18.9
Baetidae	3.0±0.82(63.2)	0.1 (20.0)	100.0	45.8
Diptera				
Simuliidae larvae	0.5±1.0(10.5)	0.1 (20.0)	25.0	13.9
Coleoptera				
Elmidae adult	0.75±0.96(15.8)	0.1 (20.0)	50.0	21.4

Table G.32. September feeding habits of 0+ brown trout (N=2) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Ephemeroptera				
Baetidae	1.0±1.41(25.0)	0.3 (23.1)	50.0	19.6
Diptera				
Chironomidae larvae	0.5±0.71(12.5)	0.1 (7.7)	50.0	14.0
Simuliidae larvae	0.5±0.71(12.5)	0.1 (7.7)	50.0	14.0
Coleoptera				
Elmidae larvae	1.5±0.71(37.5)	0.7 (53.9)	100.0	38.3
Elmidae adult	0.5±0.71(12.5)	0.1 (7.7)	50.0	14.0

Table G.33. October feeding habits of 0+ brown trout (N=3) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	0.3±0.6(5.0)	0.1 (1.6)	33.3	7.9
Hydroptilidae	0.3±0.6(5.0)	0.2 (3.3)	33.3	8.3
Plecoptera				
Perlodidae	0.3±0.6(5.0)	2.4 (39.3)	33.3	15.6
Diptera				
Chironomidae larvae	2.7±4.6(40.0)	0.1 (1.6)	33.3	15.0
Pelecypoda				
Sphaeriidae	0.3±0.6(5.0)	0.1 (1.6)	33.3	7.9
Gastropoda				
Planorbidae	0.7±1.2(10.0)	2.1 (34.4)	33.3	15.6
Coleoptera				
Elmidae larvae	1.7±1.5(25.0)	1.0 (16.4)	66.7	21.7
Terrestrial Organisms				
Coleoptera				
Staphylinidae	0.3±0.6(5.0)	0.1 (1.6)	33.3	7.9

Table G.34. April feeding habits of 1+ brown trout (N=3) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	I RI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	1.3±2.31(6.1)	31.9 (21.7)	33.3	8.0
Rhyacophilidae	3.3±4.16(15.2)	0.9 (0.6)	66.7	10.8
Limnephilidae	1.3±2.31(6.1)	10.7 (7.3)	33.3	6.1
Lepidostomatidae	0.3±0.58(1.5)	2.1 (1.4)	33.3	4.7
Ephemeroptera				
Ephemerellidae	4.3±0.58(19.7)	8.8 (6.0)	100.0	16.4
Baetidae	0.7±1.15(3.0)	1.0 (0.7)	33.3	4.0
Heptageniidae	6.0±10.4(27.3)	5.9 (4.0)	33.3	8.4
Plecoptera				
Perlodidae	0.3±0.6(1.5)	0.7 (0.5)	33.3	4.0
Diptera				
Chironomidae larvae	3.0±3.5(13.6)	0.3 (0.2)	100.0	14.9
Culicidae	0.7±1.2(3.0)	0.4 (0.3)	33.3	4.8
Oligochaeta				
Lumbriculidae	0.3±0.6(1.5)	80.5 (54.8)	33.3	11.7
Terrestrial Organisms				
Unidentified	0.3±0.6(1.5)	3.7 (2.52)	33.3	4.9

Table G.35. June feeding habits of 1+ brown trout (N=3) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	1.0±1.0(11.1)	0.9 (4.0)	66.7	12.3
Brachycentridae	1.7±2.1(18.5)	0.1 (0.5)	66.7	13.0
Ephemeroptera				
Ephemerellidae	1.7±1.5(18.5)	9.3 (41.9)	66.7	19.0
Baetidae	1.0±1.7(11.11)	0.1 (0.5)	33.3	6.9
Ephem parts	0.3±0.6(3.7)	11.2 (50.5)	33.3	12.8
Diptera				
Chironomidae larvae	1.0±1.7(11.7)	0.1 (0.5)	33.3	6.9
Simuliidae larvae	0.7±1.2(7.4)	0.1 (0.5)	33.3	6.2
Coleoptera				
Elmidae larvae	0.7±1.2(7.4)	0.1 (0.5)	33.3	6.2
Elmidae adult	0.3±0.6(3.7)	0.1 (0.5)	33.3	5.6
Terrestrial Organisms				
Hymenoptera				
Formicidae	0.3±0.6(3.7)	0.1 (0.5)	33.3	5.6
Diptera adult	0.3±0.6(3.7)	0.1 (0.5)	33.3	5.6

Table G.36. July feeding habits of 1+ brown trout (N=2) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean (mg)%	%	%
Aquatic Organisms				
Trichoptera				
Hydroptilidae	1.0±1.4(22.2)	0.1 (2.1)	50.0	18.6
Diptera				
Simuliidae larvae	0.5±0.7(11.1)	0.1 (2.1)	50.0	15.8
Gastropoda				
Planorbidae	0.5±0.7(11.1)	0.1 (2.1)	50.0	15.8
Coleoptera				
Haliplidae	2.5±3.5(55.6)	4.4 (93.6)	50.0	49.8

Table G.37. September feeding habits of 1+ brown trout (N=4) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Brachycentridae	0.3±0.5(1.5)	0.3 (0.2)	25.0	4.3
Ephemeroptera				
Baetidae	4.5±3.4(26.8)	1.6 (1.2)	100.0	20.4
Plecoptera				
Perlodidae	1.3±0.5(7.5)	7.7 (5.6)	100.0	18.1
Diptera				
Chironomidae larvae	1.0±2.0(6.0)	0.1 (0.1)	25.0	5.0
Simullidae larvae	7.7±15.5(46.3)	5.3 (3.8)	25.0	12.0
Gastropoda				
Lymnaeidae	0.3±0.5(1.5)	0.4 (0.3)	25.0	4.3
Coleoptera				
Elmidae adult	0.7±1.0(4.5)	2.7 (2.0)	25.0	5.0
Terrestrial Organisms				
Homoptera				
Cicadellidae	0.3±5.0(1.5)	0.5 (0.4)	25.0	4.3
Hymenoptera				
Unidentified	0.3±0.5(1.5)	8.2 (6.3)	25.0	5.2
Diptera				
Empididae adult	0.5±1.0(3.0)	1.3 (0.9)	25.0	4.6
Orthoptera				
Acrididae	0.3±0.5(1.5)	109.4 (79.2)	25.0	16.9

Table G.38. October feeding habits of 1+ brown trout (N=2) in Cee Cee Ah Creek.

PREY ITEM	Number Mean(±SD)%	Weight Mean(mg) %	Occurrence %	IRI %
Aquatic Organisms				
Trichoptera				
Limnephilidae	0.5±0.7(5.3)	0.1 (3.9)	50.0	8.4
Brachycentridae	4.5±6.7(47.4)	1.3 (50.0)	50.0	21.1
Hydroptilidae	1.0±0.0(10.5)	0.1 (3.9)	100.0	16.3
Pelecypoda				
Sphaeriidae	1.0±0.0(10.5)	0.1 (3.9)	100.0	16.3
Gastropoda				
Planorbidae	0.5±0.7(5.3)	0.7 (26.9)	50.0	11.7
Physidae	0.5±0.7(5.3)	0.1 (3.9)	50.0	8.4
Coleoptera				
Elmidae adult	1.0±1.4(10.5)	0.1 (3.9)	50.0	9.2
Terrestrial Organisms				
Plecoptera				
Nemouridae adult	0.5±0.7(5.3)	0.1 (3.9)	50.0	8.4

Table G.39. April feeding habits of 2+ brown trout (N=2) in Cee Cee Ah Creek.

PREY ITEM	Number Mean(±SD)%	Weight Mean(mg)	Occurrence % %	IRI %
Aquatic Organisms				
Trichoptera				
Hydropsychidae	1.0±1.4(8.0)	6.7 (2.0)	50.0	6.3
Rhyacophiiidae	0.5±0.7(4.0)	2.5 (0.7)	50.0	5.8
Limnephiiidae	0.5±0.7(4.0)	3.8 (1.1)	50.0	5.8
Brachycentridae	2.0±2.8(16.0)	2.0 (0.6)	50.0	7.0
Ephemeroptera				
Ephemereliidae	1.5±0.7(12.0)	11.8 (3.4)	100.0	12.2
Baetidae	0.5±0.7(4.0)	0.1 (0.03)	50.0	5.7
Tricorythidae	0.5±0.7(4.0)	0.6 (0.2)	50.0	5.7
Diptera				
Chironomidae larvae	0.5±0.7(4.0)	0.2 (0.1)	50.0	5.7
Tipulidae	0.5±0.7(4.0)	12.1 (3.5)	50.0	6.1
Tabanidae	1.5±2.1(12.0)	85.0 (24.7)	50.0	9.1
Gastropoda				
Unidentified	1.0±0.0(8.0)	9.1 (2.6)	100.0	11.7
Osteichthyes				
Unidentified	0.5±0.7(4.0)	22.5 (6.5)	50.0	6.4
Oligochaeta				
Lumbriculidae	2.0±2.8(16.0)	187.7 (54.6)	50.0	12.7

Table G.40. June feeding habits of 2+ brown trout (N=1) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	0.5±0.7(7.1)	1.5 (2.5)	50.0	11.3
Limnephilidae	3.0±2.8(41.2)	24.0 (42.9)	100.0	34.8
Brachycentridae	1.5±2.1(21.4)	0.1 (0.2)	50.0	13.5
Ephemeroptera				
Ephemerellidae	0.5±0.7(7.1)	6.1 (10.3)	50.0	12.8
Terrestrial Organisms				
Orthoptera				
Tetrigidae	0.5±0.7(7.1)	4.8 (8.1)	50.0	12.3
Hymenoptera				
Formicidae	0.5±0.7(7.1)	10.7 (18.7)	50.0	14.3
Oligochaeta				
Lumbriculidae	0.5±0.71(7.1)	11.6 (19.6)	50.0	13.0

Table G.41. July feeding habits of 2+ brown trout (N=3) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	15.7±7.5(60.3)	56.4 (52.8)	100.0	37.6
Brachycentridae	8.0±12.2(30.8)	38.7 (36.2)	66.7	23.6
Diptera				
Chironomidae larvae	0.3±0.6(1.28)	0.1 (0.1)	33.3	6.1
Gastropoda				
Unidentified	0.3±0.6(1.28)	10.7 (10.1)	33.3	7.9
Coleoptera				
Elmidae adult	0.7±1.2(2.6)	0.7 (0.7)	33.3	6.4
Haliplidae	0.3±0.6(1.3)	0.1 (0.09)	33.3	6.1
Terrestrial Organisms				
Araneida				
Arachnida	0.3±1.2(1.3)	0.1 (0.1)	33.3	6.1
Hymenoptera				
Formicidae	0.3±0.6(1.3)	0.1 (0.1)	33.3	6.1

Table G.42. September feeding habits of 2+ brown trout (N=2) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Ephemeroptera				
Baetidae	6.5±7.8(40.6)	6.3 (8.4)	100.0	18.6
Diptera				
Chironomidae pupae	2.5±3.6(15.6)	0.1 (0.1)	50.0	8.2
Coleoptera				
Haliplidae	0.5±0.7(3.1)	0.1 (0.1)	50.0	6.7
Terrestrial				
Orthoptera				
Tetrigidae	0.5±0.7(3.1)	56.9 (76.2)	50.0	16.2
Hymenoptera				
Formicidae	1.5±0.7(9.4)	5.4 (7.2)	100.0	14.6
Homoptera				
Cicadellidae	2.0±2.8(12.5)	3.0 (4.0)	50.0	8.3
Diptera				
Mycetophilidae adult	1.0±1.4(6.3)	1.2 (1.6)	50.0	7.2
Anthomyzidae adult	0.5±0.7(3.1)	0.1 (0.1)	50.0	6.7
Dolichopodidae adult	0.5±0.7(3.1)	1.4 (1.9)	50.0	6.9
Amphipoda				
Gammaridae	0.5±0.7(3.1)	0.1 (0.1)	50.0	6.7

Table G.43. October feeding habits of 2+ brown trout (N=4) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	1.0±1.4(4.0)	2.4 (0.4)	50.0	5.3
Brachycentridae	1.3±1.5(5.0)	2.2 (0.3)	50.0	5.4
Hydroptilidae	0.5±1.0(2.0)	0.1 (0.01)	25.0	2.6
Diptera				
Chironomidae pupae	1.7±3.5(7.0)	0.1 (0.01)	25.0	3.1
Simuliidae larvae	0.5±1.0(2.0)	0.1 (0.01)	25.0	2.6
Osteichthyes				
Salmonidae	0.5±1.0(2.0)	585.7 (85.2)	25.0	11.0
Hemiptera				
Gerridae	0.3±0.5 (1.0)	4.4 (0.6)	25.0	2.6
Terrestrial Organisms				
Coleoptera				
Staphylinidae	1.0±2.0(4.0)	0.1 (0.01)	25.0	2.8
Carabidae	0.3±0.5(1.0)	0.4 (0.1)	25.0	2.5
Araneida				
Arachnida	0.5±0.6(2.0)	3.0 (0.4)	50.0	5.1
Hymenoptera				
Formicidae	2.7±4.3(11.0)	8.1 (1.2)	50.0	6.1
Unidentified	6.3±6.4(25.0)	47.6 (6.9)	100.0	12.9
Hemiptera				
Nabidae	0.3±0.5(1.0)	0.6 (0.1)	25.0	2.5
Pentatomidae	0.3±0.5(1.0)	3.1 (0.5)	25.0	2.6
Homoptera				
Cicadellidae	0.3±0.5(1.0)	1.4 (0.2)	25.0	2.6
Cercopidae	1.5±3.0(6.0)	10.3 (1.5)	25.0	3.2
Aphididae	4.5±4.4(18.0)	0.1 (0.01)	75.0	9.1
Adelgidae	0.3±0.5(1.0)	0.1 (0.01)	25.0	2.6
Diptera				
Empididae adult	0.3±0.5(1.0)	0.1 (0.01)	25.0	2.5
Muscidae adult	0.3±0.5(1.0)	3.5 (0.5)	25.0	2.6
Sciaridae adult	0.3±0.5(1.0)	0.1 (0.01)	25.0	2.6
Dryomyzidae adult	0.3±0.5(1.0)	2.2 (0.3)	25.0	2.6
Thysanura				
Machilidae	0.3±0.5(1.0)	1.6 (0.2)	25.0	2.6
Trichoptera				
Brachycentridae adult	0.3±0.5(1.0)	5.1 (0.7)	25.0	2.6

Table G.44. June feeding habits of 3+ brown trout (N=3) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	3.0±2.0(37.5)	37.0 (52.9)	100.0	30.1
Brachycentridae	1.7±2.1(20.8)	3.6 (5.2)	66.7	14.6
Ephemeroptera				
Unidentified	0.3±0.6(4.17)	2.1 (3.0)	33.3	6.4
Diptera				
Chironomidae larvae	0.3±0.6(4.2)	1.3 (1.9)	33.3	6.2
Gastropods				
Unidentified	0.3±0.6(4.2)	6.0 (8.6)	33.3	7.3
Coleoptera				
Elmidae adult	0.3±0.6(4.2)	1.3 (1.9)	33.3	6.2
Terrestrial				
Hymenoptera				
Formicidae	0.7±1.2(8.3)	4.0 (5.7)	33.3	7.5
Psocoptera				
Psocidae	0.3±0.6(4.2)	2.0 (2.9)	33.3	6.4
Homoptera				
Cicadellidae	0.3±0.6(4.2)	9.6 (13.7)	33.3	8.1
Hymenoptera				
Unidentified	0.7±1.2(8.3)	3.0 (4.3)	33.3	7.3

Table G.45. July feeding habits of 3+ brown trout (N=3) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean (mg)%	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	0.7±3.8(58.6)	18.6 (47.8)	100.0	34.4
Brachycentridae	0.3±0.6(3.5)	0.1 (0.3)	33.3	6.2
Diptera				
Chironomidae larvae	0.3±0.6(3.5)	0.1 (0.3)	33.3	6.2
Ceratopogonidae	0.3±0.6(3.5)	0.1 (0.3)	33.3	6.2
Tabanidae	0.3±0.6(3.5)	16.7 (42.9)	33.3	13.3
Bivalvia				
Sphaeriidae	1.0±1.7(10.3)	0.1 (0.3)	33.3	7.3
Coleoptera				
Elmidae adult	0.3±0.6(3.5)	0.1 (0.3)	33.3	6.2
Haliplidae	0.3±0.6(3.5)	0.3 (0.8)	33.3	6.3
Terrestrial				
Trichoptera adult	0.3±0.6(3.5)	2.7 (6.9)	33.3	7.3
Hymenoptera				
Formicidae	0.7±1.2(6.9)	0.1 (0.3)	33.3	6.7

Table G.46. June feeding habits of 4+ brown trout (N=1) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	1.0(14.3)	0.1 (0.5)	100.0	23.0
Limnephilidae	5.0(71.4)	0.1 (0.5)	100.0	34.4
Oligochaeta				
Lumbriculidae	1.0(14.0)	20.5 (99.0)	100.0	42.7

Table G.47. July feeding habits of 4+ brown trout (N=1) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	8.0(72.7)	9.8 (99.0)	100.0	67.9
Terrestrial Organisms				
Hymenoptera				
Formicidae	3.0(27.3)	0.01 (1.0)	100.0	32.1

Table G.48. June feeding habits of 5+ brown trout (N=1) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg)	% %	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	4.0(100.0)	7.3(100.0)	100.0	100.0

Table G.49. September feeding habits of 0+ brook trout (N=4) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	0.3±0.5(1.8)	0.1 (4.2)	25.0	4.6
Limnephilidae	0.3±0.5(1.8)	0.1 (4.2)	25.0	4.6
Brachycentridae	0.3±0.5(1.8)	0.1 (4.2)	25.0	4.6
Ephemeroptera				
Ephemerellidae	0.3±0.5(1.8)	0.1 (4.2)	25.0	4.6
Baetidae	5.0±3.4(36.4)	0.3 (12.5)	100.0	22.1
Hydracarina	3.0±5.3(21.8)	0.1 (4.2)	50.0	11.3
Diptera				
Chironomidae larvae	2.7±2.4(20.0)	0.1 (4.2)	100.0	18.4
Plecoptera				
Perlodidae	0.7±1.5(5.5)	0.1 (4.2)	25.0	5.1
Terrestrial				
Hymenoptera				
Formicidae	0.3±0.5(1.8)	1.1 (45.8)	25.0	10.8
Homoptera				
Aphididae	0.3±0.5(1.8)	0.1 (4.2)	25.0	4.6
Hymenoptera				
Ichneumonidae	0.3±0.5(1.8)	0.1 (4.2)	25.0	4.6
Diptera				
Sciaridae adult	0.3±0.5(1.8)	0.1 (4.2)	25.0	4.6

Table G.50. October feeding habits of 0+ brook trout (N=5) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	0.4±0.9(5.1)	0.9 (3.0)	20.0	4.8
Rhyacophilidae	1.8±3.5(23.1)	14.0 (47.0)	40.0	18.8
Limnephilidae	2.0±1.9(25.7)	1.4 (4.7)	60.0	15.4
Brachycentridae	0.2±0.5(2.6)	0.5 (1.7)	20.0	4.1
Ephemeroptera				
Ephemerellidae	0.2±0.5(2.6)	0.2 (0.7)	20.0	4.0
Baetidae	0.8±1.3(10.3)	0.1 (0.3)	40.0	8.6
Plecoptera				
Peltoperlidae	0.2±0.5(2.6)	0.1 (0.3)	20.0	3.9
Perlodidae	0.2±0.5(2.6)	0.1 (0.3)	20.0	3.9
Hydracarina	0.4±0.6(5.2)	0.1 (0.3)	40.0	7.8
Diptera				
Chironomidae larvae	0.4±0.9(5.2)	0.4 (1.3)	25.0	5.4
Oligochaeta				
Lumbriculidae	0.2±0.5(2.6)	9.4 (31.5)	20.0	9.2
Terrestrial Organisms				
Homoptera				
Aphididae	0.2±0.5(2.6)	0.1 (0.3)	20.0	3.9
Glomerida	0.8±1.1(10.3)	2.5 (8.3)	40.0	10.0

Table G.51. June feeding habits of 1+ brook trout (N=1) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Plecoptera				
Chloroperlidae	1.0(33.3)	0.1 (14.3)	100.0	31.4
Hydracarina	1.0(33.3)	0.5 (71.4)	100.0	43.6
Terrestrial Organisms				
Coleoptera				
Carabidae	1.0(33.3)	0.1 (14.3)	100.0	31.4

Table G.52. July feeding habits of 1+ brook trout (N=2) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	4.0±5.7(32.0)	0.1 (2.0)	50.0	14.0
Limnephilidae	0.5±0.7(4.0)	0.1 (2.0)	50.0	9.3
Ephemeroptera				
Baetidae	1.0(8.0)	0.1 (2.0)	100.0	18.3
Hydracarina	5.5±3.5(44.0)	0.1 (2.0)	100.0	24.3
Diptera				
Simuliidae larvae	1.0±1.4(8.0)	0.5 (9.8)	50.0	11.3
Coleoptera				
Scarabaeidae	0.5±0.7(4.0)	4.2 (82.4)	50.0	22.7

Table G.53. September feeding habits of 1+ brook trout (N=8) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	0.1±0.4(2.8)	0.1 (0.1)	12.5	3.1
Limnephilidae	1.3±2.2(27.8)	1.2 (1.6)	37.5	13.5
Brachycentridae	0.3±0.5(5.6)	0.1 (0.1)	25.0	6.2
Ephemeroptera				
Baetidae	0.3±0.5(5.6)	0.1 (0.1)	25.0	6.2
Plecoptera				
Perlodidae	0.5±0.78(11.1)	45.7 (60.7)	37.5	22.1
Nemouridae	0.5±1.1(11.1)	0.1 (0.1)	25.0	7.3
Diptera				
Chironomidae larvae	0.3±0.5(5.6)	0.1 (0.1)	25.0	6.2
Tipulidae	0.2±0.4(2.8)	6.0 (8.0)	12.5	4.7
Gastropoda				
Pyralidae	0.2±0.4(2.8)	0.9 (1.2)	12.5	3.3
Coleoptera				
Elmidae larvae	0.1±0.4(2.8)	5.3 (7.0)	12.5	4.5
Elmidae adult	0.1±0.4(2.8)	0.9 (1.2)	12.5	3.3
Terrestrial Organisms				
Trichoptera adult	0.1±0.4(2.8)	3.4 (4.5)	12.5	4.0
Hymenoptera				
Formicidae	0.1±0.4(2.8)	0.3 (0.4)	12.5	3.2
Apidae	0.1±0.4(2.8)	9.9 (13.2)	12.5	5.7
Homoptera				
Cicadellidae	0.1±0.4(2.8)	0.4 (0.5)	12.5	3.2
Glomerida	0.1±0.4(2.8)	0.8 (1.1)	12.5	3.3

Table G.54. October feeding habits of 1+ brook trout (N=5) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	0.4±0.6(3.8)	0.8 (1.7)	40.0	7.1
Limnephilidae	2.2±3.9(20.8)	3.3 (6.9)	40.0	7.7
Brachycentridae	0.8±1.8(7.6)	0.1 (0.2)	20.0	4.3
Ephemeroptera				
Baetidae	0.6±0.6(5.7)	0.1 (0.2)	60.0	10.3
Heptageniidae	0.2±0.5(1.9)	0.1 (0.2)	20.0	3.4
Plecoptera				
Peltoperlidae	0.6±0.6(5.7)	3.2 (6.7)	60.0	11.3
Diptera				
Chironomidae larvae	2.8±6.3(26.4)	1.9 (4.0)	20.0	7.9
Simuliidae larvae	0.6±1.3(5.7)	0.1 (0.2	20.0	4.0
Pelecypoda				
Sphaeriidae	0.6±1.3(5.7)	0.1 (0.2)	20.0	4.0
Fish eggs	0.4±0.9(3.8)	10.2 (21.4)	20.0	7.0
Oligochaeta				
Lumbriculidae	0.2±0.5(1.9)	12.5 (26.2)	20.0	7.5
Terrestrial Organisms				
Lepidoptera	0.2±0.5(1.9)	9.5 (19.9)	20.0	6.5
Hemiptera				
Nabidae	0.2±0.5(1.9)	0.5 (1.1)	20.0	3.6
Homoptera				
Cicadellidae	0.2±0.5(1.9)	0.3 (0.6)	20.0	3.5
Glomerida	0.2±0.5(1.9)	4.1 (8.6)	20.0	4.8
Diptera				
Dixidae adult	0.2±0.5(1.9)	0.6 (1.3)	20.0	3.6
Plecoptera				
Nemouridae adult	0.2±0.5(1.9)	0.2 (0.4)	20.0	3.5

Table G.55. June feeding habits of 2+ brook trout (N=1) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	14.0(100.0)	12.0 (100.0)	100.0	100.0

Table G.56. June feeding habits of 3+ brook trout (N=1) in Cee Cee Ah Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	3.0 (60.0)	16.5 (50.3)	100.0	43.6
Brachycentridae	1.0(20.0)	1.8 (5.5)	100.0	22.3
Plecoptera				
Unidentified	1.0(20.0)	14.5 (44.2)	100.0	34.1

FEEDING HABITS OF FISH IN TACOMA CREEK

Table G.57. April feeding habits of 0+ brook trout (N=7) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	0.3±0.5(2.3)	3.4 (1.6)	28.6	6.0
Brachycentridae	0.1±0.4(1.1)	0.3 (0.1)	14.3	2.9
Ephemeroptera				
Ephemerellidae	2.1±2.1(17.1)	22.5 (10.8)	57.2	15.7
Plecoptera				
Nemouridae	5.7±5.1(45.5)	6.6 (3.2)	85.8	24.9
Diptera				
Chironomidae larvae	1.4±1.4(11.4)	2.5 (1.2)	71.5	15.6
Simuliidae larvae	1.6±3.7(12.5)	1.0 (0.5)	28.6	7.7
Ceratopogonidae	0.1±0.4(1.1)	0.1 (0.1)	14.3	2.9
Oligochaeta				
Lumbriculidae	0.9±1.5(6.8)	171.4(82.2)	42.9	24.4

Table G.58. June feeding habits of 0+ brook trout (N=5) in Tacoma Creek.

	Number	Weight	Occurrence	I R I
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	1.6±3.58(16.7)	"	20.0	6.9
Limnephilidae	0.2±0.45(2.1)	3.3 (2.4)	20.0	4.0
Unidentified	0.2±0.45(2.1)	9.2 (7.4)	20.0	4.7
Ephemeroptera				
Baetidae	0.2±0.45(2.1)	3.5 (2.8)	20.0	4.0
Heptageniidae	0.2±0.45(2.1)	2.2 (1.8)	20.0	3.8
Unidentified	0.2±0.45(2.1)	5.1 (4.1)	20.0	4.2
Hydracarina	0.2±0.45(2.1)	0.1 (7.7)	20.0	4.8
Diptera				
Chironomidae larvae	3.8±5.22(39.6)	5.6 (44.3)	40.0	19.9
Chironomidae pup	0.6±0.89(6.3)	2.0 (1.6)	20.0	4.5
Simuliidae larvae	1.0±1.73(10.4)	1.8 (1.5)	40.0	8.3
Tipulidae	0.2±0.45(2.1)	4.4 (3.6)	20.0	4.1
Coleoptera				
Elmidae adult	0.2±0.45(2.1)	4.1 (3.3)	20.0	4.1
Oligochaeta				
Lumbriculidae	0.2±0.45(2.1)	60.2 (48.7)	20.0	11.4
Terrestrial Organisms				
Trichoptera adult	0.2±0.45(2.1)	2.1 (1.7)	20.0	3.8
Unidentified	0.2±0.45(2.1)	3.6 (2.9)	20.0	4.0
Lepidoptera	0.2±0.45(2.1)	1.7 (1.4)	20.0	3.8
Hemiptera	0.2±0.45(2.1)	0.1 (0.4)	20.0	3.6

Table G.59. July feeding habits of 0+ brook trout (N=2) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Brachycentridae	1.0±1.4(8.0)	0.1 (14.3)	50.0	13.5
Diptera				
Chironomidae larvae	5.0±2.8(40.0)	0.1 (14.3)	100.0	28.8
Chironomidae pupae	0.5±0.7(4.0)	0.1 (14.3)	50.0	12.7
Empididae	0.5±0.7(4.0)	0.1 (14.3)	50.0	12.7
Terrestrial Organisms				
Psocoptera				
Psocidae	4.5±6.4(36.0)	0.1 (14.3)	50.0	18.7
Hymenoptera	1.0±1.4(8.0)	0.1 (14.3)	50.0	13.5

Table G. 60. September feeding habits of 0+ brook trout (N=2) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Brachycentridae	4.5±3.5(81.8)	0.1 (33.3)	100.0	53.8
Ephemeroptera				
Baetidae	0.5±0.7(9.1)	0.1 (33.3)	50.0	23.1
Coleoptera				
Elmidae adult	0.5±0.7(9.1)	0.1 (33.3)	50.0	23.1

Table G.61. October feeding habits of 0+ brook trout (N=4) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	0.3±0.5(2.3)	0.1 (7.7)	25.0	5.9
Brachycentridae	0.3±0.5(2.3)	0.1 (7.7)	25.0	5.9
Ephemeroptera				
Baetidae	1.8±1.5(15.9)	0.1 (7.7)	100.0	20.8
Hydracarina	0.5±0.7(4.6)	0.1 (7.7)	50.0	10.5
Diptera				
Chironomidae larvae	0.2±2.8(18.2)	0.1 (7.7)	50.0	12.8
Chironomidae pupae	3.3±2.8(29.6)	0.1 (7.7)	75.0	18.9
Pelecypoda				
Sphaeriidae	0.3±0.5(2.3)	0.1 (7.7)	25.0	5.9
Terrestrial Organisms				
Homoptera				
Cicadellidae	0.3±0.5(2.3)	0.1 (7.7)	25.0	5.9
Aphididae	2.5±3.3(22.7)	0.1 (7.7)	50.0	13.5

Table G.62. April feeding habits of 1+ brook trout (N=5) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	0.8±1.1(1.2)	3.6 (0.8)	20.0	2.6
Limnephilidae	2.4±2.7(3.7)	33.1 (7.9)	80.0	10.9
Brachycentridae	0.2±0.5(0.3)	0.1 (0.02)	20.0	2.8
Ephemeroptera				
Ephemerellidae	4.4±6.3(6.8)	39.8 (9.4)	60.0	9.1
Heptageniidae	1.2±2.7(1.9)	1.4 (0.3)	20.0	2.7
Unidentified	0.2±0.5(0.3)	1.8 (0.4)	20.0	2.5
Plecoptera				
Perlodidae	1.0±2.2(1.6)	0.8 (0.2)	20.0	2.6
Nemouridae	10.2±11.7(15.8)	6.5 (1.5)	80.0	11.8
Hydracarina	0.4±0.5(0.6)	2.9 (0.7)	40.0	5.0
Diptera				
Chironomidae larvae	2.0±2.9(3.1)	1.1 (0.3)	60.0	7.7
Simuliidae larvae	0.6±0.9(0.9)	2.6 (0.6)	40.0	5.0
Ceratopogonidae	0.6±0.9(0.9)	0.1 (0.02)	40.0	5.0
Tabanidae	0.2±0.5(0.3)	0.9 (0.2)	20.0	2.5
Oligochaeta				
Lumbriculidae	1.0±0.7(1.6)	309.0 (73.3)	80.0	17.4
Terrestrial Organisms				
Hymenoptera				
Formicidae	0.2±0.5(0.3)	1.9 (0.5)	20.0	2.5
Unidentified	37.8±84.0(58.7)	15.5 (3.8)	20.0	9.9

Table G.63. June feeding habits of 1+ brown trout (N=7) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	1.9±4.108(11.6)	151.9 (55.3)	28.6	18.9
Limnephilidae	0.23±0.8(1.8)	10.1 (3.7)	14.3	4.0
Brachycentridae	0.1±0.4(0.9)	4.7 (1.7)	14.3	3.5
Unidentified	0.1±0.4(0.9)	4.2 (1.5)	14.3	3.4
Ephemeroptera				
Ephemerellidae	0.3±0.5(1.8)	6.9 (2.5)	28.6	6.8
Unidentified	0.3±0.5(1.8)	4.7 (1.7)	28.6	6.6
Hydracarina	0.3±0.8(1.8)	0.6 (0.2)	14.3	3.4
Diptera				
Chironomidae larvae	1.6±2.6(9.8)	7.1 (2.6)	42.9	11.4
Simuliidae larvae	1.7±4.9(11.6)	9.3 (3.4)	14.3	6.0
Simuliidae pupae	7.1±18.9(44.6)	26.2 (9.5)	14.3	14.0
Coleoptera				
Elmidae adult	0.3±0.5(1.8)	6.5 (2.4)	28.6	6.7
Oligochaeta				
Lumbriculidae	0.1±0.4(0.9)	26.9 (9.8)	14.3	5.0
Naididae	0.1±0.4(0.9)	5.4 (2.0)	14.3	3.5
Terrestrial Organisms				
Lepidoptera	0.1±0.4(0.9)	7.2 (2.6)	14.3	3.6
Hymenoptera	0.1 ±0.4(0.9)	2.1 (0.8)	14.3	3.3

Table G.64. July feeding habits of 1+ brook trout (N=5) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	0.8±1.3(5.8)	3.0 (8.1)	40.0	8.2
Limnephilidae	1.0±1.4(7.3)	2.6 (7.0)	40.0	8.3
Brachycentridae	3.4±3.4(24.6)	0.1 (0.3)	60.0	12.9
Ephemeroptera				
Ephemerellidae	0.2±0.5(1.5)	0.1 (0.3)	20.0	3.3
Heptageniidae	0.4±0.9(2.9)	5.5 (14.9)	20.0	5.8
Plecoptera	0.4±0.6(2.9)	4.1 (11.1)	40.0	8.2
Diptera				
Chironomidae larvae	3.0±3.7(21.7)	0.1 (0.3)	60.0	12.5
Coleoptera				
Elmidae adult	2.0±3.4(14.5)	0.2 (0.5)	60.0	11.4
Unidentified	0.6±1.4(4.4)	20.8 (56.2)	20.0	12.3
Oligochaeta				
Naididae	0.2±0.5(1.5)	0.1 (0.3)	20.0	3.3
Terrestrial Organisms				
Trichoptera adult	0.4±0.9(2.9)	0.1 (0.3)	20.0	3.5
Hymenoptera				
Formicidae	0.2±0.5(1.5)	0.1 (0.3)	20.0	3.3
Unidentified	0.2±0.5(1.5)	0.1 (0.3)	20.0	3.3
Homoptera	0.4±0.9(2.9)	0.1 (0.3)	20.0	3.5

Table G.65. September feeding habits of 1+ brook trout (N=7) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Brachycentridae	2.7±6.7(32.8)	1.8 (7.1)	28.6	14.2
Ephemeroptera				
Baetidae	2.3±3.1(26.2)	1.0 (4.0)	57.2	18.1
Diptera				
Chironomidae larvae	0.1±0.4(1.6)	0.6 (2.4)	14.3	3.8
Pelecypoda				
Sphaeriidae	0.1±0.4(1.6)	0.1 (0.4)	14.3	3.4
Coleoptera				
Elmidae adult	0.6±0.5(6.6)	0.1 (0.4)	57.2	13.3
Terrestrial Organisms				
Diptera	1.0±1.9(11.5)	13.7 (54.3)	28.6	19.4
Araneida				
Arachnidae	0.3±0.5(3.3)	6.3 (25.0)	28.6	11.7
Hymenoptera				
Formicidae	1.0±1.5(11.5)	1.3 (5.2)	42.9	12.3
Homoptera				
Aphididae	0.3±0.8(3.3)	0.1 (0.4)	14.3	3.7

Table G.66. October feeding habits of 1+ brook trout (N=4) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Brachycentridae	0.8±1.0(7.9)	0.1 (0.1)	50.0	8.3
Hydroptilidae	1.0±2.0(10.5)	0.1 (0.1)	25.0	5.1
Ephemeroptera				
Ephemerellidae	1.5±1.3(15.8)	0.8 (0.7)	75.0	13.1
Baetidae	1.0±0.8(10.5)	0.1 (0.1)	75.0	12.3
Heptageniidae	0.5±1.0(5.3)	0.1 (0.1)	25.0	4.4
Plecoptera				
Perlodidae	0.3±0.5(2.6)	1.1 (0.9)	25.0	4.1
Nemouridae	1.5±1.9(15.8)	0.1 (0.1)	50.0	9.5
Coleoptera				
Elmidae adult	1.3±1.5(13.2)	0.4 (0.4)	50.0	9.1
Hemiptera				
Corixidae	0.3±0.5(2.6)	101.6 (86.1)	25.0	16.3
Terrestrial Organisms				
Hymenoptera				
Formicidae	0.5±1.0(5.3)	4.4 (3.7)	25.0	4.9
Hemiptera				
Pentatomidae	0.3±0.5(2.6)	8.2 (7.0)	25.0	5.0
Homoptera				
Aphididae	0.5±0.6(5.3)	0.1 (0.1)	50.0	7.9

Table G.67. June feeding habits of 2+ brook trout (N=1) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	1.0(16.7)	3.8 (8.2)	100.0	20.8
Limnephilidae	1.0(16.7)	37.7 (81.6)	100.0	33.0
Ephemeroptera				
Baetidae	3.0(50.0)	2.4 (5.19)	100.0	25.9
Terrestrial Organisms				
Araneida				
Arachnida	1.0(16.7)	2.3 (5.0)	100.0	20.3

Table G. 68. July feeding habits of 2+ brook trout (N=4) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	0.5±0.6(6.7)	1.4 (1.9)	50.0	9.3
Brachycentridae	0.3±0.5(3.3)	0.1 (0.1)	25.0	4.5
Ephemeroptera				
Ephemerellidae	1.3±1.9(16.7)	20.4 (27.8)	50.0	15.0
Coleoptera				
Elmidae adult	0.8±1.0(10.0)	4.5 (6.1)	50.0	10.5
Oligochaeta				
Lumbriculidae	0.5±1.0(6.7)	0.4 (0.6)	25.0	5.1
Naididae	1.3±1.0(16.7)	0.1 (0.1)	75.0	14.6
Terrestrial Organisms				
Hemiptera	0.3±0.5(3.3)	0.1 (0.1)	25.0	4.5
Hymenoptera				
Formicidae	0.5±1.0(6.7)	0.1 (0.1)	25.0	5.1
Diptera				
Unidentified	1.8±3.5(23.3)	0.1 (0.1)	25.0	7.7
Chironomidae	0.3±0.5(3.3)	0.1 (0.1)	25.0	4.5
Lepidoptera	0.3±0.5(3.3)	45.9 (62.6)	25.0	14.5
Homoptera				
Cicadellidae	0.3±0.5(3.3)	0.1 (0.1)	25.0	4.5

Table G.69. September feeding habits of 2+ brook trout (N=1) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Terrestrial Organisms				
Coleoptera				
Carabidae	1.1(20.0)	0.5 (71.4)	100.0	38.3
Homoptera				
Aphididae	2.0(40.0)	0.1 (14.3)	100.0	30.9
Diptera				
Chironomidae	2.0(40.0)	0.1 (14.3)	100.0	30.9

Table G.70. September feeding habits of 0+ cutthroat trout (N=2) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	0.5(16.7)	0.1 (25.0)	50.0	20.1
Limnephilidae	0.5(16.7)	0.1 (25.0)	50.0	20.1
Diptera				
Chironomidae larvae	1.0(33.3)	0.1 (25.0)	50.0	29.2
Coleoptera				
Elmidae larvae	1.0(33.3)	0.1 (25.0)	50.0	29.2

Table G.71. September feeding habits of 1+ cutthroat trout (N=3) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	0.7±0.6(4.2)	0.1 (1.8)	66.7	10.4
Brachycentridae	6.7±6.5(41.7)	1.7 (29.8)	66.7	19.7
Ephemeroptera				
Baetidae	0.3±0.6(2.1)	0.1 (1.8)	33.3	5.3
Diptera				
Chironomidae larvae	1.3±1.5(8.3)	0.1 (1.8)	66.7	11.0
Simuliidae larvae	0.3±0.6(2.1)	0.1 (1.8)	33.3	5.3
Coleoptera				
Elmidae larvae	1.3±1.2(8.3)	0.1 (1.8)	66.7	11.0
Elmidae adult	1.3±1.2(8.3)	0.1 (1.8)	66.7	11.0
Terrestrial Organisms				
Hymenoptera				
Formicidae	0.3±0.6(2.1)	0.5 (8.8)	33.3	6.3
Unidentified	3.7±3.2(22.9)	2.9 (50.9)	66.7	20.1

Table G.72. October feeding habits of 1+ cutthroat trout (N=2) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	0.5±0.7(3.2)	1.4 (50.0)	50.0	10.9
Brachycentridae	0.5±0.7(3.2)	0.1 (3.6)	50.0	6.0
Hydroptilidae	1.5±2.1(9.7)	0.2 (7.1)	50.0	7.0
Ephemeroptera				
Ephemerellidae	2.0(12.9)	0.1 (3.6)	100.0	12.3
Baetidae	0.5±0.7(3.2)	0.1 (3.6)	50.0	6.0
Heptageniidae	1.0±1.4(6.5)	0.1 (3.6)	50.0	6.3
Plecoptera				
Perlodidae	3.0±4.2(19.4)	0.1 (3.6)	50.0	7.7
Diptera				
Chironomidae pupae	1.0(6.5)	0.1 (3.6)	100.0	11.6
Tipulidae	0.5±0.7(3.2)	0.1 (3.6)	50.0	6.0
Coleoptera				
Elmidae larvae	1.0(6.5)	0.1 (3.6)	100.0	11.6
Elmidae adult	3.5 (22.6)	0.1 (3.6)	50.0	8.0
Terrestrial Organisms				
Hymenoptera				
Formicidae	0.5±0.7(3.2)	0.3 (10.7)	50.0	6.7

Table G.73. September feeding habits of 2+ cutthroat trout (N=4) in Tacoma Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Brachycentridae	0.3±0.5(2.4)	0.1 (2.4)	25.0	4.6
Ephemeroptera				
Baetidae	1.8±2.2(17.1)	0.1 (2.4)	75.0	14.5
Diptera				
Chironomidae larvae	0.5±1.0(4.9)	0.1 (2.4)	25.0	5.0
Coleoptera				
Elmidae larvae	0.5±1.0(4.9)	0.1 (2.4)	25.0	5.0
Terrestrial Organisms				
Trichoptera adult	0.5±0.6(4.9)	1.2 (29.3)	50.0	13.0
Hymenoptera				
Formicidae	1.0±0.8(9.8)	1.6 (39.0)	75.0	19.0
Ichneumonidae	0.8±1.0(7.3)	0.1 (2.4)	50.0	9.2
Diptera				
Mycetophilidae	0.8±1.5(7.3)	0.1 (2.4)	25.0	5.4
Chironomidae	3.5±7.0(34.2)	0.1 (2.4)	25.0	9.5
Sciaridae	0.3±0.5(2.4)	0.1 (2.4)	25.0	4.6
Simuliidae	0.3±0.5(2.4)	0.4 (9.8)	25.0	5.7
Tabanidae	0.3±0.5(2.4)	0.1 (2.4)	25.0	4.6

FEEDING HABITS OF FISH IN LECLERC CREEK

Table G.74. June feeding habits of 1+ brown trout (N=2) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	1.5±2.12(13.0)	0.1 (0.7)	50.0	12.4
Brachycentridae	0.5±0.71(4.4)	0.1 (0.7)	50.0	10.7
Unident Trichoptera	0.5±0.71(4.4)	0.1 (0.7)	50.0	10.7
Ephemeroptera				
Ephemerellidae	1.0±1.41(8.7)	9.7 (71.3)	50.0	25.2
Baetidae	0.5±0.71(4.4)	0.1 (0.7)	50.0	10.7
Ephemeroptera parts	1.0±1.41(8.7)	0.6 (4.4)	50.0	11.5
Diptera				
Chironomidae larvae	3.0±4.24(26.1)	0.1 (0.7)	50.0	14.9
Terrestrial Organisms				
Hymenoptera				
Formicidae	3.5±0.71(30.5)	2.8 (20.6)	100.0	29.3

Table G.75. September feeding habits of 1+ brown trout (N=3) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	3.33±4.04(47.6)	6.1 (79.2)	100.0	52.9
Brachycentridae	2.67±3.06(38.1)	1.4 (18.2)	66.7	28.7
Ephemeroptera				
Baetidae	0.33±0.58(4.8)	0.1 (1.3)	33.3	9.2
Heptageniidae	0.33±0.58(4.8)	0.1 (1.3)	33.3	9.2

Table G.76. October feeding habits of 1+ brown trout (N=2) in LeClerc Creek

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	0.5±0.71(7.7)	2.1 (22.8)	50.0	17.9
Limnephilidae	4.5±6.36(69.2)	5.2 (56.5)	50.0	39.1
Ephemeroptera				
Ephemerellidae	1.0(15.4)	1.3 (14.1)	100.0	28.8
Plecoptera				
Perlodidae	0.5±0.71(7.7)	0.6 (6.5)	50.0	14.3

Table G.77. June feeding habits of 2+ brown trout (N=3) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	0.67±1.15(4.3)	4.1 (1.9)	33.3	5.9
Limnephilidae	0.33±0.58(2.1)	3.6 (1.7)	33.3	5.6
Brachycentridae	8.0±9.17(51.1)	13.3 (6.1)	66.7	18.6
Ephemeroptera				
Ephemerellidae	1.0±1.73(6.4)	35.2 (16.1)	33.3	8.4
Baetidae	0.67±1.15(4.3)	3.2 (1.5)	33.3	5.9
Osteichthyes				
Unidentified	0.33±058(2.1)	43.6 (20.0)	33.3	8.3
Coleoptera				
Elmidae larvae	1.0±1.0(6.4)	2.1 (1.0)	66.7	11.1
Oligochaeta				
Lumbriculidae	0.67±1.15(4.3)	75.9 (34.8)	33.3	10.9
Terrestrial Organisms				
Coleoptera				
Cerambycidae	0.33±0.58(2.1)	4.2 (1.9)	33.3	5.6
Hymenoptera				
Formicidae	1.0±1.0(6.4)	2.4 (1.1)	33.3	6.1
Lepidoptera	1.67±1.53(10.6)	25.9 (11.9)	66.7	13.4

Table G.78. July feeding habits of 2+ brown trout (N=1) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Ephemeroptera				
Ephemerellidae	1.0(33.3)	0.3 (6.1)	100.0	27.9
Diptera				
Simuliidae larvae	1.0(33.3)	0.1 (2.0)	100.0	27.1
Osteichthyes	1.0(33.3)	4.5 (91.8)	100.0	45.0

Table G.79. September feeding habits of 2+ brown trout (N=3) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	0.33±0.58(3.7)	3.0 (0.4)	33.3	7.4
Limnephilidae	1.33±2.31(14.8)	1.2 (0.16)	33.3	9.6
Brachycentridae	2.0±3.46(22.2)	3.0 (0.4)	33.3	11.1
Ephemeroptera				
Ephemerellidae	3.67±3.51(40.7)	11.2 (1.5)	66.7	21.6
Baetidae	1.33±1.53(14.8)	1.3 (0.17)	66.7	16.2
Osteichthyes				
Cottidae	0.33±0.58(3.7)	730.0(97.3)	33.3	26.7
Terrestrial Organisms				
Diptera				
Mycetophilidae	0.33±0.58(3.7)	0.3 (0.04)	33.3	7.3

Table G.80. June feeding habits of 3+ brown trout (N=3) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Unident Trichoptera	2.0±2.0(40.0)	2.3 (0.34)	66.7	19.0
Ephemeroptera				
Ephemerellidae	0.33±0.58(6.7)	14.8 (2.2)	33.3	7.5
Baetidae	0.33±0.58(6.7)	2.2 (0.33)	33.3	7.1
Unidentified	0.33±0.58(6.7)	20.1 (3.0)	33.3	7.6
Osteichthyes				
Cottidae	0.33±0.58(6.7)	540.8 (79.9)	33.3	21.3
Unidentified	0.33±0.58(6.7)	36.5 (5.4)	33.3	8.0
Elmidae larvae	0.33±0.58(6.7)	8.4 (1.2)	33.3	7.3
Terrestrial Organisms				
Trichoptera				
Trichoptera adult	0.33±0.58(6.7)	0.1 (0.01)	33.3	7.1
Coleoptera				
Carabidae	0.33±0.58(6.7)	34.8 (5.1)	33.3	8.0
Hymenoptera				
Formicidae	0.33±0.58(6.7)	1.1 (0.2)	33.3	7.1

Table G.81. July feeding habits of 3+ brown trout (N=1) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	3.0(100.0)	1.9 (100.0)	100.0	100.0

Table G.82. October feeding habits of 2+ brown trout (N=3) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	0.33±0.58(2.3)	0.1 (0.2)	33.3	5.4
Rhyacophilidae	0.33±0.58(2.3)	2.0 (3.5)	33.3	5.9
Limnephilidae	5.0±4.35(34.9)	8.7 (15.0)	66.7	17.5
Brachycentridae	1.33±2.31(9.3)	1.7 (2.9)	33.3	6.8
Ephemeroptera				
Ephemerellidae	2.0±2.65(14.0)	2.6 (4.5)	66.7	12.8
Baetidae	5.67±2.08(35.6)	4.8 (8.3)	100.0	20.1
Heptageniidae	0.67±1.15(4.7)	0.5 (0.9)	33.3	5.8
Plecoptera				
Perlodidae	0.33±0.58(2.3)	2.7 (4.7)	33.3	6.0
Coleoptera				
Elmidae adult	0.33±0.58(2.3)	0.2 (0.4)	33.3	5.4
Oligochaeta				
Lumbriculidae	0.33±0.58(2.3)	34.6 (59.8)	33.3	14.3

Table G.83. September feeding habits of 2+ cutthroat trout (N=1) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Ephemeroptera				
Ephemerellidae	3.0(7.3)	1.4 (1.7)	100.0	6.4
Coleoptera				
Elmidae adult	1.0(2.4)	2.1 (2.5)	100.0	6.2
Lepidoptera				
Pyralidae	1.0(2.4)	1.6 (1.9)	100.0	6.1
Terrestrial Organisms				
Trichoptera adult	1.0(2.4)	0.1 (0.1)	100.0	6.0
Coleoptera				
Pselaphidae	1.0(2.4)	0.1(0.1)	100.0	6.0
Araneida				
Arachnida	1.0(2.4)	0.1 (0.1)	100.0	6.0
Hymenoptera				
Formicidae	8.0(19.5)	1.7 (2.0)	100.0	7.1
Ichneumonidae	4.0(9.8)	6.4 (7.7)	100.0	6.9
Chalcidae	1.0(2.4)	0.1 (0.1)	100.0	6.0
Homoptera				
Aphididae	3.0(7.3)	0.1 (0.1)	100.0	6.3
Diptera				
Empididae	9.0(22.0)	3.9 (4.7)	100.0	7.4
Bibionidae	1.0(2.4)	1.7 (2.0)	100.0	6.1
Neuroptera				
Chrysopidae	1.0(2.4)	0.1 (0.1)	100.0	6.0
Collembola				
Entomobryidae	1.0(2.4)	1.4 (1.7)	100.0	6.1
Unidentified	6.0(14.6)	62.9 (75.2)	100.0	11.2

Table G.84. June feeding habits of 3+ mountain whitefish (N=1) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	72.0(90.0)	305.7 (98.2)	100.0	48.0
Ephemeroptera				
Ephemerellidae	1.0(1.3)	1.8 (0.6)	100.0	17.0
Baetidae	1.0(1.3)	2.7 (0.9)	100.0	17.0
Diptera				
Chironomidae larvae	6.0(7.5)	1.0 (0.3)	100.0	18.0

Table G.85. July feeding habits of 3+ mountain whitefish (N=2) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	1.0±1.41(0.4)	28.5 (1.3)	50.0	5.5
Rhyacophilidae	0.5±0.71(0.2)	1.4 (0.1)	50.0	5.3
Limnephilidae	189.0±69.3(78.9)	1230 (94.2)	100.0	28.9
Brachycentridae	21.0±24.04(8.8)	14.5 (1.1)	100.0	11.6
Ephemeroptera				
Ephemerellidae	0.5±0.71(0.2)	13.9 (1.1)	50.0	5.4
Baetidae	21.5±21.92(9.0)	6.7 (0.5)	100.0	11.5
Heptageniidae	2.5±3.54(1.0)	1.8 (0.1)	50.0	5.4
Plecoptera				
Perlodidae	1.5±2.12(0.6)	6.7 (0.5)	50.0	5.4
Diptera				
Chironomidae larvae	1.0±0(0.4)	0.1 (0.01)	100.0	10.6
Simuliidae larvae	0.5±0.71(0.2)	0.1 (0.01)	50.0	5.3
Terrestrial Organisms				
Lepidoptera	0.5±0.71(0.2)	1.7 (0.1)	50.0	5.3

Table G.86. July feeding habits of 4+ mountain whitefish (N=1) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	7.0(1.5)	807.0 (90.1)	100.0	24.0
Limnephilidae	33.0(6.8)	83.6 (9.3)	100.0	14.5
Ephemeroptera				
Ephemerellidae	1.0(0.2)	1.6 (0.2)	100.0	12.6
Baetidae	1.0(0.2)	0.1 (0.01)	100.0	12.5
Heptageniidae	4.0(0.8)	0.5 (0.1)	100.0	12.6
Diptera				
Simuliidae larvae	437.0(90.5)	2.7(0.3)	100.0	23.9

Table G.87. October feeding habits of 3+ brown trout (N=2) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Brachycentridae	0.5±0.71(11.1)	1.5 (2.9)	50.0	10.0
Diptera				
Muscidae	1.0±1.41(22.2)	10.6 (20.1)	50.0	14.4
Osteichthyes				
Unidentified	0.5±0.71(11.1)	31.7(60.2)	50.0	19.0
Coleoptera				
Elmidae adult	0.5±0.71(11.1)	0.1 (0.2)	50.0	9.6
Terrestrial Organisms				
Araneida				
Arachnidae	0.5±0.71(11.1)	0.3 (0.6)	50.0	9.6
Hymenoptera				
Formicidae	0.5±0.71(11.1)	0.1 (0.2)	50.0	8.0
Hemiptera				
Pentatomidae	0.5±0.71(11.1)	6.8 (12.9)	50.0	11.6
Homoptera				
Cicadellidae	0.5±0.71(11.1)	1.6 (52.7)	50.0	17.8

Table G.88. June feeding habits of 4+ biown trout (N=2) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	5.0±4.24(24.4)	37.4 (14.9)	100.0	11.6
Brachycentridae	5.0±4.24(24.4)	22.0 (8.7)	100.0	11.1
Leptoceridae	0.5±0.71(2.4)	0.2 (0.1)	50.0	4.4
Unidentified	0.5±0.71(2.4)	0.9 (0.4)	50.0	4.4
Ephemeroptera				
Ephemerellidae	0.5±0.71(2.4)	1.3 (0.5)	50.0	4.3
Baetidae	1.0±1.41(4.9)	0.1 (0.04)	50.0	4.6
Diptera				
Tipulidae	0.5±0.71(2.4)	2.7 (1.1)	50.0	4.4
Nematoda	0.5±0.71(2.4)	0.1 (0.04)	50.0	4.4
Osteichthyes				
Unidentified	1.0(4.9)	156.0(61.7)	100.0	13.9
Terrestrial Organisms				
Trichoptera adult	0.5±0.71(2.4)	4.0 (1.6)	50.0	4.5
Diptera				
Unidentified	0.5±0.71(2.4)	0.1 (0.4)	50.0	4.4
Coleoptera				
Cerambycidae	0.5±0.71(2.4)	1.2 (0.5)	50.0	4.4
Staphylinidae	0.5±0.71(2.4)	0.1 (0.04)	50.0	4.4
Hymenoptera				
Formicidae	0.5±0.71(2.4)	1.9 (0.8)	50.0	4.8
Hemiptera				
Unidentified	0.5±0.71(2.4)	0.9 (0.4)	50.0	4.4
Lepidoptera	2.0±1.41(9.8)	24.1 (9.5)	100.0	9.9

Table G.89. July feeding habits of 4+ brown trout (N=1) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	1.0(14.3)	0.4 (0.04)	100.0	14.3
Limnephilidae	1.0(14.3)	380.0 (40.1)	100.0	19.3
Brachycentridae	1.0(14.3)	0.1 (0.01)	100.0	14.3
Osteichthyes				
Cottidae	1.0(14.3)	255.7 (27.0)	100.0	17.7
Unidentified	1.0(14.3)	271.1 (28.6)	100.0	17.7
Terrestrial Organisms				
Lepidoptera	2.0(28.6)	39.3 (4.2)	100.0	16.6

Table G.90. July feeding habits of 0+ brook trout (N=1) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Diptera				
Chironomidae larvae	5.0(83.3)	0.1 (50.0)	100.0	58.3
Simuliidae larvae	1.0(16.7)	0.1 (50.0)	100.0	41.7

Table G.91. September feeding habits of 0+ brook trout (N=6) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Hydropsychidae	0.17±0.14(0.7)	1.4 (4.8)	16.7	2.4
Limnephilidae	1.83±2.32(8.0)	3.0 (10.3)	66.7	9.2
Brachycentridae	1.17±1.33(5.1)	0.6 (2.1)	50.0	6.2
Hydracarina	2.17±2.64(9.5)	0.1 (0.3)	66.7	8.2
Diptera				
Chironomidae larvae	7.33±5.99(32.1)	0.1 (0.3)	83.3	12.5
Coleoptera				
Elmidae larvae	0.17±0.41(0.7)	0.1 (0.3)	16.7	2.3
Elmidae adult	0.67±1.21(2.9)	0.4 (1.4)	33.3	4.1
Terrestrial Organisms				
Trichoptera adult	0.67±0.82(2.9)	0.7 (2.4)	50.0	6.0
Araneida				
Arachnidae	0.33±0.82(1.5)	0.1 (0.3)	16.7	2.0
Hymenoptera				
Formicidae	1.17±1.83(5.1)	1.4 (4.8)	33.3	4.7
Homoptera				
Cicadellidae	0.17±0.41(0.7)	0.1 (0.3)	16.7	2.3
Aphididae	1.85±1.47(8.0)	0.1 (0.3)	66.7	8.1
Hymenoptera				
Ichneumonidae	1.0±1.55(4.4)	0.4 (1.4)	33.3	4.2
Diptera				
Empididae	2.83±2.64(12.4)	4.8 (16.6)	66.7	10.3
Neuroptera				
Chrysopidae	0.17±0.41(0.7)	1.2 (4.1)	16.7	2.3
Collembola				
Entomobryidae	0.17±0.41(0.7)	0.1 (0.3)	16.7	2.3
Unidentified	1.0±1.1(4.4)	14.4 (49.7)	66.7	13.1

Table G.92. October feeding habits of 0+ brook trout (N=5) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	0.6±0.89(7.5)	1.4 (29.2)	40.0	12.8
Brachycentridae	2.0±2.92(25.0)	1.5 (31.3)	60.0	19.5
Ephemeroptera				
Ephemerellidae	0.2±0.45(2.5)	0.3 (6.3)	20.0	4.8
Baetidae	1.0±1.22(12.5)	0.5 (10.4)	60.0	13.9
Diptera				
Chironomidae larvae	0.8±1.1(10.0)	0.5 (10.4)	40.0	10.0
Coleoptera				
Elmidae adult	0.4±.89(5.0)	0.1 (2.1)	20.0	4.5
Terrestrial Organisms				
Hymenoptera	0.6±0.89(7.5)	0.2 (4.2)	40.0	8.6
Homoptera				
Aphididae	0.2±0.45(2.5)	0.1 (2.1)	20.0	4.1
Unidentified	2.2±2.17(27.5)	0.1 (2.1)	100.0	21.7

Table G.93. July feeding habits of 1+ brook trout (N=9) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	0.22±0.44(2.3)	1.6 (0.5)	22.2	3.5
Limnephilidae	0.89±1.96(9.0)	10.4 (3.0)	33.3	6.4
Brachycentridae	1.67±2.6(16.9)	9.5 (2.7)	55.6	10.6
Ephemeroptera				
Baetidae	0.11±0.33(1.1)	0.1 (0.03)	11.1	1.7
Heptageniidae	0.11±0.33(1.1)	0.1 (0.03)	11.1	1.7
Diptera				
Chironomidae larvae	0.67±0.87(6.7)	0.1 (0.03)	44.4	7.2
Simuliidae larvae	0.22±0.44(2.3)	0.1 (0.03)	22.2	3.5
Gastropoda				
Planorbidae	0.11±0.33(1.1)	33 (9.3)	11.1	3.1
Osteichthyes				
Unidentified	0.11±0.33(1.1)	6.1 (1.7)	11.1	1.9
Coleoptera				
Elmidae adult	0.11±0.33(1.1)	0.1 (0.03)	11.1	1.7
Oligochaeta				
Lumbriculidae	0.11±0.33(1.1)	43.0 (12.2)	11.1	3.5
Terrestrial Organisms				
Trichoptera adult	0.22±0.67(2.3)	9.6 (2.7)	11.1	2.3
Coleoptera				
Carabidae	0.78±1.09(7.9)	1.2 (0.3)	44.4	7.4
Scarabaeidae	0.22±0.44(2.3)	3.2 (0.9)	22.2	3.6
Araneida				
Arachnidae	0.67±1.0(6.7)	11.5 (3.3)	44.4	7.7
Hymenoptera				
Formicidae	0.33±0.71(3.4)	11.7 (3.3)	22.2	4.1
Lepidoptera	2.22±2.17(22.5)	201.4 (56.9)	77.8	22.2
Psocoptera				
Psocidae	0.11±0.33(1.12)	0.1 (0.03)	11.1	1.7
Homoptera				
Cicadellidae	0.11±0.33(1.1)	0.1 (0.03)	11.1	1.7
Cercopidae	0.78±0.97(7.9)	10.5 (3.0)	44.4	7.8
Diptera				
Empididae	0.11±0.33(1.1)	0.3 (0.1)	11.1	1.7

Table G.94. September feeding habits of 1+ brook trout (N=3) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Rhyacophilidae	0.3±0.6(2.3)	1.1 (8.7)	33.3	7.1
Limnephilidae	0.7±1.2(4.5)	1.5 (11.8)	33.3	8.5
Ephemeroptera				
Ephemerellidae	1.0±1.7(6.8)	3.2 (25.2)	33.3	11.1
Baetidae	4.3±7.5(29.3)	3.1 (24.4)	33.3	14.8
Diptera				
Chironomidae larvae	7.0±10.4(47.2)	2.0 (15.8)	100.0	27.8
Coleoptera				
Elmidae larvae	0.3±0.6(2.2)	0.1 (3.2)	33.3	6.6
Elmidae adult	0.3±0.6(2.2)	0.1 (0.8)	33.3	6.2
Terrestrial Organisms				
Trichoptera adult	0.3±0.6(2.3)	1.2 (9.5)	33.3	11.2
Homoptera	0.3±0.6(2.2)	0.1 (0.8)	33.3	6.2

Table G.95. October feeding habits of 1+ brook trout (N=3) in LeCierc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	1.67±2.08 (50.0)	11.0 (66.7)	66.7	42.3
Ephemeroptera				
Baetidae	0.33±0.58(10.0)	0.1 (0.6)	33.3	10.1
Coleoptera				
Amphizoidae	0.33±0.58(10.0)	0.6 (3.6)	33.3	10.8
Terrestrial Organisms				
Trichoptera adult	0.33±0.58(10.0)	0.2 (1.2)	33.3	10.0
Lepidoptera	0.67±0.39(20.0)	4.6 (27.9)	66.6	26.4

Table G.96. July feeding habits of 2+ brook trout (N=1) in LeCierc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	10.0(90.9)	12.8 (1.2)	100.0	48.0
Brachycentridae	1.0(9.1)	1100.5(98.9)	100.0	52.0

Table G.97. September feeding habits of 2+ brook trout (N=2) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	1.5±0.71(8.3)	0.1 (0.3)	100.0	10.3
Hydracarina	1.0±1.41(5.6)	0.1 (0.3)	50.0	5.3
Diptera				
Chironomidae larvae	2.0±1.41(11.1)	0.1 (0.3)	100.0	10.6
Coleoptera				
Elmidae larvae	0.5±0.71(2.8)	0.1 (0.3)	50.0	5.1
Elmidae adult	0.5±0.71(2.8)	0.1 (0.3)	50.0	5.1
Oligochaeta				
Naididae	0.5±0.71(2.8)	0.1 (0.3)	50.0	5.1
Terrestrial Organisms				
Diptera	0.5±0.71(2.8)	0.4 (1.0)	50.0	5.1
Empididae	4.5±6.36(25.0)	2.1 (5.5)	50.0	7.7
Hymenoptera				
Formicidae	0.5±0.71(2.8)	1.0 (2.6)	50.0	5.3
Ichneumonidae	2.5±3.54(13.9)	1.1 (2.9)	50.0	6.4
Apidae	0.5±0.71(2.8)	12.1 (31.4)	50.0	8.0
Unidentified	0.5±0.71(2.8)	20.6 (53.5)	50.0	10.1
Hemiptera				
Nabidae	0.5±0.71(2.8)	0.1 (0.3)	50.0	5.1
Homoptera				
Aphididae	2.0±2.83(11.1)	0.2 (0.5)	50.0	5.9
Glomerida	0.5±0.71(2.8)	0.1 (0.3)	50.0	5.1

Table G.98. September feeding habits of 2+ brook trout (N=2) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	1.5±0.71(8.3)	0.1 (0.3)	100.0	10.3
Hydracarina	1.0±1.41(5.6)	0.1 (0.3)	50.0	5.3
Diptera				
Chironomidae larvae	2.0±1.41(11.1)	0.1 (0.3)	100.0	10.6
Coleoptera				
Elmidae larvae	0.5±0.71(2.8)	0.1 (0.3)	50.0	5.1
Elmidae adult	0.5±0.71(2.8)	0.1 (0.3)	50.0	5.1
Olinochaeta				
Naididae	0.5±0.71(2.8)	0.1 (0.3)	50.0	5.1
Terrestrial Organisms				
Diptera	0.5±0.71(2.8)	0.4 (1.0)	50.0	5.1
Empididae	4.5±6.36(25.0)	2.1 (5.5)	50.0	7.7
Hymenoptera				
Formicidae	0.5±0.71(2.8)	1.0 (2.6)	50.0	5.3
Ichneumonidae	2.5±3.54(13.9)	1.1 (2.9)	50.0	6.4
Apidae	0.5±0.71(2.8)	12.1 (31.4)	50.0	8.0
Unidentified	0.5±0.71(2.8)	20.6 (53.5)	50.0	10.1
Hemiptera				
Nabidae	0.5±0.71(2.8)	0.1 (0.3)	50.0	5.1
Homoptera				
Aphididae	2.0±2.83(11.1)	0.2 (0.5)	50.0	5.9
Glomerida	0.5±0.71(2.8)	0.1 (0.3)	50.0	5.1

Table G.99. October feeding habits of 2+ brook trout (N=2) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Trichoptera				
Limnephilidae	4.0±1.41(18.6)	3.3 (5.6)	100.0	13.1
Glossosomatidae	1.0±1.41(4.7)	0.1 (0.2)	50.0	5.8
Ephemeroptera				
Baetidae	1.0±1.41(4.7)	0.3 (0.5)	100.0	11.1
Plecoptera				
Perlodidae	1.0±1.41(4.7)	0.9 (1.5)	100.0	11.2
Diptera				
Chironomidae larvae	2.0±1.41(9.3)	0.1 (0.2)	100.0	11.5
Terrestrial Organisms				
Unidentified	10.0±4.24(46.5)	46.8 (79.2)	100.0	23.8
Lepidoptera	0.5±0.71(2.3)	3.9 (6.6)	50.0	6.2
Homoptera				
Cercopidae	0.5±0.71(2.3)	3.4 (5.8)	50.0	6.0
Hymenoptera				
Sphecidae	1.0±1.41(4.7)	0.1 (2.0)	50.0	5.8
Diptera				
Empididae	0.5±0.71(2.3)	0.2 (0.3)	50.0	5.5

Table G.lOO. June feeding habits of 0+ brown trout (N=1) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Ephemeroptera				
Ephemerellidae parts	2.0(20.0)	3.5 (18.9)	100.0	23.2
Hydracarina	5.0(50.0)	2.8 (15.4)	100.0	27.6
Terrestrial Organisms				
Hymenoptera				
Formicidae	2.0(20.0)	5.0 (27.0)	100.0	24.5
Lepidoptera	1.0(10.0)	7.2 (38.9)	100.0	24.8

Table G.lO1 July feeding habits of 0+ brown trout (N=2) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg)	% %	%
Aquatic Organisms				
Ephemeroptera				
Ephemerellidae	5.5±3.54(33.3)	11.6 (73.4)	100.0	37.7
Baetidae	7.0±1.41(42.4)	1.3 (8.2)	100.0	27.5
Diptera				
Chironomidae larvae	0.5±0.71(3.0)	1.1 (6.96)	50.0	10.9
Simuliidae larvae	3.5±3.54(21.2)	1.6 (10.1)	100.0	23.9

Table G.102. October feeding habits of 0+ brown trout (N=3) in LeClerc Creek.

	Number	Weight	Occurrence	IRI
PREY ITEM	Mean(±SD)%	Mean(mg) %	%	%
Aquatic Organisms				
Ephemeroptera				
Ephemerellidae	0.33±0.58(5.6)	1.1 (73.3)	33.3	25.9
Heptageniidae	0.33±0.58(5.6)	0.1 (6.7)	33.3	10.5
Diptera				
Chironomidae larvae	4.0±4.36(66.7)	0.1 (6.7)	100.0	40.0
Terrestrial Organisms				
Unidentified	0.33±0.58(5.6)	0.1 (6.7)	33.3	10.5
Diptera				
Tabanidae	1.0±1.73(16.7)	0.1 (6.7)	33.3	13.1

APPENDIX H

MONTHLY FEEDING HABITS OF FISH FOUND IN THE PEND OREILLE RIVER

MONTHLY FEEDING HABITS OF YELLOW PERCH

Table H.l. April feeding habits of 2+ yellow perch (n=11) in the Pend Oreiiie River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.4 ± 1.2 (2.2)	0.03 ± 0.1 (1.5)	9.1	2.6
EPHEMEROPTERA				
Baetidae	2.7 ± 4.6 (16.1)	5.3 ± 14.6 (21.8)	45.4	16.7
Ephemerellidae	0.1 ± 0.3 (0.5)	0.01 ± 0.04 (0.1)	9.1	1.9
ODONATA				
Lestidae	1.7 ± 4.5 (10.2)	3.1 ± 7.0 (13.0)	27.3	10.1
COLEOPTERA				
Elmidae	2.3 ± 6.3 (13.4)	0.5 ± 1.5 (2.1)	27.3	8.6
DIPTERA				
Chironomidae larvae	1.0 ± 1.8 (5.9)	0.9 ± 1.2 (3.4)	27.3	7.3
Chironomidae pupae	1.0 ± 2.5 (6.0)	1.0 + 2.3 (4.4)	36.3	9.4
Tipulidae	0.3 ± 0.6 (1.6)	0.1 ± 0.2 (0.4)	18.2	4.0
Ceratopogonidae	0.1 ± 0.3 (0.5)	0.03 ± 0.1 (0.1)	9.1	1.9
COPEPODA				
Cyclopoid	3.3 ± 7.4 (19.4)	0.1 ± 0.3 (0.5)	36.4	11.3
Calanoid	3.3 ±10.8 (19.4)	0.01 ± 0.04 (0.1)	9.1	5.7
CLADOCERA				
Chydoridae	0.3 ± 0.6 (1.6)	0.1 ± 0.1 (0.3)	18.2	4.0
AMPHIPODA				
Gammaridae	0.1 ± 0.3 (0.5)	0.01 ± 0.04 (0.1)	9.1	1.9
GASTROPODA				
Planorbidae	0.4 ± 1.5 (2.7)	12.9 ± 35.0 (50.9)	18.2	14.4

Table H.2. April feeding habits of 3+ yellow perch (n=38) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.1 ± 0.2 (0.1)	0.02 ± 0.1 (0.04)	5.3	1.1
Leptoceridae	0.03 ± 0.2 (0.1)	0.1 ± 0.3 (0.2)	2.6	0.6
EPHEMEROPTERA				
Baetidae	6.3 ± 21.2 (14.5)	39.1 ± 78.2 (70.3)	50.0	28.5
ODONATA				
Coenagrilidae	0.4 ± 2.4 (0.0)	1.8 ± 5.0 (3.1)	2.6	1.4
Lestidae	0.8 ± 2.2 (l.Q)	3.4 ± 8.0 (6.1)	28.8	7.8
COLEOPTERA				
Elmidae	5.9 ± 36.0 (13.7)	3.6 ± 13.0 (6.5)	5.3	6.4
HYDRACARINA	0.6 ± 2.5 (1.6)	0.3 ± 0.6 (0.5)	16.4	4.4
DIPTERA				
Chironomidae larvae	2.8 ± 12.6 (6.6)	3.4 ± 8.0 (6.2)	21.1	7.2
Chironomidae pupae	3.6 ± 12.8 (8.3)	0.6 ± 0.8 (0.1)	39.5	10.3
Ceratopogonidae	0.3 ± 1.0 (0.7)	0.02 ± 0.04 (0.03)	10.5	2.4
COPEPODA				
Cyclopoid	17.0 ± 76.7 (39.1)	0.3 ± 0.9 (0.5)	23.7	13.4
Calanoid	0.2 ± 1.0 (0.5)	0.2 ± 0.02 (0.03)	5.3	1.2
CLADOCERA				
Daphnidae	0.4 ± 1.5 (0.9)	0.01 ± 0.03 (0.01)	7.9	1.8
Chydoridae	1.3 ± 6.0 (3.0)	0.1 ± 0.2 (0.2)	13.2	3.5
AMPHIPODA				
Talitridae	1.7 ± 9.1 (3.8)	0.4 ± 0.6 (0.8)	15.8	4.3
OSTRACODA	0.03 ± 0.2 (0.1)	0.04 ± 0.1 (0.1)	2.6	0.6
GASTROPODA				
Planorbidae	0.7 ± 2.6 (1.6)	1.5 ± 5.1 (2.7)	15.8	4.2
OSTEICHTHYES	0.03 ± 0.2 (0.1)	0.2 ± 0.7 (0.3)	2.6	0.6
FISH EGGS	0.9 ± 5.4 (2.0)	0.8 ± 2.4 (1.5)	2.8	1.3

Table H.3. April feeding habits of 4+ yellow perch (n=18) In the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Limnephilidae	0.1 ± 0.2 (0.4)	0.1 ± 0.3 (0.1)	5.6	1.5
Lepidostomatidae	0.1 ± 0.5 (0.8)	0.01 ± 0.03 (0.01)	5.6	1.6
EPHEMEROPTERA				
Baetidae	0.2 ± 0.4 (1.2)	1.2 ± 2.6 (2.1)	16.7	4.9
Ephemerellidae	0.1 ± 0.2 (0.4)	0.01 ± 0.03 (0.01)	5.6	1.5
ODONATA				
Lestidae	4.3 ±10.4 (30.5)	20.1 ±72.6 (36.0)	27.8	23.2
Libellulidae	0.3 ± 0.7 (2.0)	24.6 ±73.8 (44.0)	16.7	15.4
HYDRACARINA	0.2 ± 0.9 (1.6)	0.1 ± 0.1 (0.1)	5.6	1.8
LEPIDOPTERA				
DIPTERA				
Chironomidae larvae	0.4 ± 1.0 (3.2)	0.2 ± 0.4 (0.3)	22.2	8.3
Chironomidae pupae	6.4 ±14.6 (45.4)	1.1 ± 2.6 (2.0)	27.8	18.5
Ceratopogonidae	0.4 ± 1.6 (2.8)	0.1 ± 0.2 (0.1)	5.6	2.1
COPEPODA				
Cyclopoid	0.2 ± 0.7 (1.2)	0.3 ± 1.1 (0.5)	5.6	1.8
Calanoid	0.1 ± 0.5 (0.8)	0.01 ± 0.04 (0.03)	5.6	1.6
CLADOCERA				
Chydoridae	0.7 ± 2.8 (4.7)	0.1 ± 0.2 (0.1)	5.6	2.6
AMPHIPODA				
Gammaridae	0.3 ± 0.7 (2.8)	2.0 ± 5.1 (3.3)	22.2	7.0
GASTROPODA				
Planorbidae	0.2 ± 0.5 (1.2)	4.2 ±13.9 (7.5)	11.1	4.9
OSTEICHTHYES	0.1 ± 0.2 (0.4)	1.9 ± 7.0 (3.3)	5.6	2.3
OLIGOCHAETA	0.1 ± 0.2 (0.4)	0.1 ± 0.5 (0.2)	5.6	1.5

Table H.4. April feeding habits of 5+ yellow perch (n=3) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.3 ± 0.6 (1.3)	0.2 ± 0.3 (0.3)	33.3	5.5
EPHEMEROPTERA				
Baetidae	14.7 ±15.6 (58.7)	19.0 ±37.9 (36.3)	66.7	25.6
ODONATA				
Lestidae	3.3 ± 3.5 (13.3)	2.6 ± 5.2 (5.0)	66.7	13.4
Libellulidae	0.3 ± 0.6 (1.3)	48.4 ±12.1 (23.2)	33.3	9.1
COLEOPTERA				
Chrysomelidae	3.3 ± 3.5 (13.3)	12.0 ±20.8 (17.8)	66.7	15.5
DIPTERA				
Chironomidae pupae	1.3 ± 2.3 (5.3)	0.3 ± 0.4 (0.5)	33.3	6.2
Chydoridae	0.3 ± 0.6 (1.3)	0.1 ± 0.1 (0.2)	33.3	5.5
AMPHIPODA				
Gammaridae	0.7 ± 1.2 (2.7)	0.03 ± 0.1 (0.1)	33.3	5.7
OLIGOCHAETA	0.3 ± 0.6 (1.3)	8.1 ±16.1 (15.4)	33.3	7.9
TERRESTRIAL INSECTA	0.3 ± 0.6 (1.3)	0.3 ± 0.5 (0.5)	33.3	5.5

Table H.5. June feeding habits of 3+ yellow perch (n=14) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.1 ± 0.3 (0.1)	0.2 ± 0.5 (7.0)	7.1	2.8
ODONATA				
Coenagriidae	0.1 ± 0.3 (0.7)	0.7 ± 1.6 (26.6)	7.1	6.9
HYDRACARINA	0.4 ± 0.8 (0.3)	0.03 ± 0.1 (0.9)	21.4	4.5
DIPTERA				
Chironomidae larvae	5.8 ± 7.4 (5.5)	0.4 ± 0.6 (12.9)	57.1	15.1
Chironomidae pupae	1.1 ± 2.1 (1.0)	0.1 ± 0.1 (2.0)	28.6	6.3
Tipulidae	0.1 ± 0.3 (0.1)	0.01 ± 0.04 (0.4)	7.1	1.5
COPEPODA				
Cyclopoid	17.9 ±32.4 (17.0)	0.3 ± 0.6 (10.7)	42.8	14.1
Calanoid	0.1 ± 0.5 (0.1)	0.01 ± 0.04 (0.4)	7.1	1.5
CLADOCERA				
Chydoridae	76.4 ±170.0 (72.9)	0.9 ± 1.8 (36.1)	57.1	33.2
AMPHIPODA				
Gammaridae	0.3 ± 0.6 (0.3)	0.1 ± 0.1 (2.0)	21.4	4.7
OSTRACODA	2.6 ± 5.1 (2.5)	0.04 ± 0.1 (1.5)	42.8	9.3

Table H.6. June feeding habits of 4+ yellow perch (n=34) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.1 ± 0.5 (0.1)	0.02 ± 0.04 (0.1)	5.9	1.1
Leptoceridae	0.4 ± 1.9 (0.2)	0.02 ± 0.04 (0.1)	8.8	1.7
EPHEMEROPTERA				
Baetidae	0.03 ± 0.2 (0.02)	0.1 ± 0.2 (0.5)	5.9	1.2
ODONATA				
Coenagriidae	0.2 ± 0.6 (0.2)	1.5 ± 2.3 (13.5)	14.7	5.3
Libellulidae	0.03 ± 0.2 (0.02)	0.4 ± 1.6 (4.0)	5.9	1.9
HYDRACARINA	1.0 ± 2.4 (0.7)	0.1 ± 0.1 (0.5)	20.6	4.1
DIPTERA				
Chironomidae larvae	1.8 ± 4.7 (1.0)	0.4 ± 1.0 (3.4)	26.5	5.8
Chironomidae pupae	0.9 ± 2.3 (0.5)	0.1 ± 0.3 (1.3)	29.4	5.9
Tipulidae	0.6 ± 3.3 (0.4)	0.1 ± 0.3 (0.8)	5.9	1.3
Muscidae	0.03 ± 0.2 (0.02)	0.01 ± 0.03 (0.1)	5.9	1.1
COPEPODA				
Cyclopoid	144.2 ± 230.4 (77.3)	5.3 ±10.6 (48.3)	67.6	36.2
Calanoid	1.0 ± 3.6 (0.5)	0.02 ± 0.04 (0.1)	8.8	1.8
CLADOCERA				
Daphnidae	21.8 ±127.8 (11.7)	0.6 ± 2.2 (5.5)	2.9	3.8
Chydoridae	12.3 ±27.5 (6.6)	0.4 ± 0.7 (3.3)	61.8	13.5
AMPHIPODA				
Gammaridae	0.6 ± 1.5 (0.4)	0.2 ± 0.3 (1.4)	20.8	4.2
OSTRACODA	0.5 ± 1.5 (0.3)	0.03 ± 0.1 (0.3)	17.6	3.4
GASTROPODA				
Planorbidae	0.9 ± 2.6 (0.6)	0.7 ± 2.1 (6.4)	17.6	4.6
OLIGOCHAETA				
Lumbriculidae	0.03 ± 0.2 (0.02)	1.1 ± 4.1 (10.3)	2.9	2.5
NEMATODA	0.03 ± 0.2 (0.02)	0.01 ± 0.03 (0.1)	2.9	.6

Table H.7. June feeding habits of 5+ yellow perch (n=39) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.3 ± 1.8 (1.1)	0.1 ± 0.03 (0.04)	2.5	.7
Leptoceridae	0.3 ± 1.0 (1.0)	0.02 ± 0.1 (0.1)	10.2	2.0
Brachycentridae	0.03 ± 0.2 (0.1)	0.1 ± 0.2 (0.5)	2.5	.6
EPHEMEROPTERA				
Baetidae	0.1 ± 0.5 (0.4)	0.02 ± 0.04 (0.1)	5.1	1.0
ODONATA				
Coenagriidae	0.9 ± 2.2 (3.5)	5.6 ± 8.8 (29.7)	38.5	13.0
Lestidae				
Libellulidae	0.1 ± 0.2 (0.2)	6.5 ±23.0 (34.6)	5.1	7.2
HYDRACARINA	10.4 ±24.1 (39.3)	3.7 ± 6.9 (19.7)	53.8	20.4
LEPIDOPTERA				
DIPTERA				
Chironomidae larvae	1.3 ± 3.8 (5.1)	0.1 ± 0.2 (0.7)	43.6	8.9
Chironomidae pupae	0.7 ± 2.0 (2.5)	0.1 ± 0.2 (0.7)	25.6	5.2
Tipulidae	0.2 ± 0.8 (0.7)	0.5 ± 1.8 (2.9)	7.7	2.0
Ceratopogonidae				
Muscidae	0.03 ± 0.2 (0.1)	0.01 ± 0.03 (0.04)	2.5	.5
Simulidae	0.03 ± 0.2 (0.1)	0.01 ± 0.03 (0.04)	2.5	.5
COPEPODA				
Cyclopoid	1.8 ± 4.2 (6.8)	0.1 ± 0.1 (0.2)	30.8	6.8
Calanoid	0.5 ± 2.1 (1.8)	0.01 ± 0.03 (0.04)	10.2	2.2
CLADOCERA				
Daphnidae	0.03 ± 0.2 (0.1)	0.01 ± 0.03 (0.04)	2.5	.5
Chydoridae	6.1 ±19.6 (22.9)	0.3 ± 0.8 (1.6)	41.0	11.9
AMPHIPODA				
Gammaridae	2.2 ± 6.6 (8.2)	0.3 ± 0.6 (1.8)	28.2	6.9
OSTRACODA	0.1 ± 0.3 (0.4)	0.1 ± 0.2 (0.5)	10.2	2.0
GASTROPODA				
Planorbidae	1.2 ± 4.2 (4.4)	0.1 ± 0.4 (0.7)	10.2	2.8
Lymnaeidae	0.1 ± 0.4 (0.3)	0.7 ± 2.6 (3.9)	5.1	1.9
OSTEICHTHYES	0.03 ± 0.2 (0.1)	0.01 ± 0.03 (0.04)	2.5	.5
OLIGOCHAETA				
Lumbriculidae	0.03 ± 0.2 (0.1)	0.02 ± 0.1 (0.1)	2.5	.5
TERRESTRIAL INSECTA	0.2 ± 0.6 (0.7)	0.2 ± 0.8 (1.2)	10.2	2.2

Table H.8. June feeding habits of 6+ yellow perch (n=36) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.2 ±0.7 (0.4)	0.01 ± 0.03 (0.01)	7.7	1.6
Leptoceridae	0.3 ± 1.5 (0.8)	0.2 ± 0.7 (0.3)	7.7	1.7
Phryganeidae	0.03 ± 0.2 (0.1)	2.5 ± 9.6 (3.8)	7.7	2.3
EPHEMEROPTERA				
Baetidae	0.03 ± 0.2 (0.1)	0.01 ± 0.03	(0.1)	
2.5	.5			
ODONATA				
Coenagriidae	0.5 ± 1.0 (1.1)	1.8 ± 3.8 (2.7)	23.1	5.3
Libellulidae	0.1 ± 0.4 (0.3)	9.6 ±27.1 (14.2)	7.7	4.3
COLEOPTERA				
Elmidae	0.4 ± 1.6 (1.0)	0.1 ± 0.2 (0.1)	12.8	2.7
HYDRACARINA	8.7 ±15.2 (20.5)	2.3 ± 4.1 (3.4)	66.7	17.7
LEPIDOPTERA	0.1 ± 0.3 (0.3)	0.4 ± 1.6 (0.6)	10.2	2.2
DIPTERA				
Chironomidae larvae	0.8 ± 1.4 (2.0)	0.1 ± 0.2 (0.7)	38.5	8.1
Chironomidae pupae	0.3 ± 0.8 (0.8)	0.2 ± 0.4 (0.9)	17.9	3.8
Tipulidae	0.03 ± 0.2 (0.1)	0.01 ± 0.03 (0.01)	2.5	.5
COPEPODA				
Cyclopoid	0.4 ± 1.4 (0.9)	0.03 ± 0.1 (0.04)	11.1	2.3
CLADOCERA				
Daphnidae	0.1 ± 0.2 (0.1)	0.01 ± 0.04 (0.02)	5.6	1.1
Chydoridae	7.7 ±31.6 (18.0)	0.1 ± 0.3 (0.2)	22.2	7.9
AMPHIPODA				
Gammaridae	0.1 ± 0.3 (0.3)	0.1 ± 0.2 (0.11)	11.1	2.2
OSTRACODA	0.2 ± 0.5 (0.4)	0.03 ±0.1 (0.04)	11.1	2.3
GASTROPODA				
Planorbidae	2.2 ±11.3 (5.1)	2.0 ± 6.2 (3.0)	13.9	4.3
Lymnaeidae	0.2 ± 0.6 (0.5)	2.1 ± 5.2 (3.1)	16.7	4.0
OSTEICHTHYES	0.1 ± 0.3 (0.2)	36.2 ±135.2(52.3)	8.3	11.9
NEMATODA	0.1 ± 0.3 (0.1)	0.04 ± 0.1 (0.1)	2.8	.6
FISH EGGS	19.4 ±116.3 (47.0)	9.8 ±36.8 (14.5)	2.8	12.6

Table H.9. June feeding habits of 7+ yellow perch (n=7) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Leptoceridae	0.1 ± 0.4 (1.8)	0.02 ± 0.04 (0.3)	14.3	3.1
ODONATA				
Coenagriidae	0.9 ± 1.2 (11.1)	2.4 ± 5.2 (36.8)	42.8	17.2
HYDRACARINA	2.7 ± 2.4 (35.2)	0.1 ± 0.04 (1.2)	85.7	23.1
DIPTERA				
Chironomidae larvae	0.9 ± 1.1 (11.1)	0.1 ± 0.1 (0.9)	57.1	13.1
Chironomidae pupae	0.9 ± 1.5 (11.1)	0.04 ± 0.1 (0.6)	42.9	10.3
CLADOCERA				
Daphnidae	0.1 ± 0.4 (1.8)	0.02 ± 0.04 (0.3)	14.3	3.1
AMPHIPODA				
Gammaridae	1.0 ± 1.9 (12.9)	0.02 ± 0.04 (0.3)	28.6	7.9
GASTROPODA				
Planorbidae	0.9 ± 1.2 (11.1)	2.0 ± 4.4 (31.8)	14.3	10.8
TERRESTRIAL INSECTA	0.1 ± 0.4 (1.8)	0.02 ± 0.04 (0.3)	14.3	3.1
BIVALVE				
Sphaeridae	0.1 ± 0.4 (1.8)	1.8 ± 3.9 (27.4)	14.3	8.2

Table H.10. July feeding habits of 1+ yellow perch (n=11) In the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ±SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA	6.6 ± 9.5 (4.5)	0.5 ± 0.9 (18.2)	63.6	12.5
EPHEMEROPTERA				
Baetidae	0.1 ± 0.3 (0.1)	0.02 ± 0.04 (0.7)	9.1	1.5
ODONATA				
Coenagriidae	0.2 ± 0.4 (0.1)	0.04 ± 0.05 (1.5)	18.2	2.9
HYDRACARINA	0.3 ± 0.5 (0.2)	0.02 ± 0.04 (0.7)	27.3	4.1
LEPIDOPTERA				
DIPTERA				
Chironomidae larvae	4.6 ± 4.1 (3.1)	0.1 ± 0.0 (3.6)	90.9	14.1
Chironomidae pupae	0.3 ± 0.6 (0.2)	0.1 ± 0.1 (2.2)	18.2	3.0
COPEPODA				
Cyclopoid	15.2 ± 35.6 (10.2)	0.1 ± 0.1 (3.6)	45.4	8.6
CLADOCERA				
Daphnidae	60.9 ±121.5 (41.0)	0.9 ± 1.2 (34.3)	63.6	20.1
Chydoridae	51.8 ± 74.3 (34.9)	0.4 ± 0.5 (13.1)	54.5	14.8
AMPHIPODA				
Gammaridae	2.9 ± 5.2 (1.9)	0.2 ± 0.4 (7.3)	45.4	7.9
OSTRACODA	1.9 ± 4.5 (1.3)	0.1 ± 0.1 (2.2)	27.3	4.5
GASTROPODA				
Planorbidae	3.6 ± 9.9 (2.4)	0.3 ± 0.7 (11.7)	18.2	4.7
Lymnaeidae	0.1 ± 0.3 (0.1)	0.02 ± 0.04 (0.7)	9.1	1.4

Table H.1 1. July feeding habits of 2+ yellow perch (n=6) in the Pend Oreille River.

	Number		Weiaht		Occurrence	IRI
	Mean ± SD	(%)	Mean ± SD	(%)	%	%
TRICHOPTERA						
Hydroptlldae	3.2 ± 6.3	(0.3)	0.1 ± 0.04	(1.6)	66.7	12.1
Leptoceridae	0.2 ± 0.4	(0.021	0.2 ± 0.4	(4.4)	16.7	3.7
HYDRACARINA	1.5 ± 3.2	(0.1)	0.02 ± 0.04	(0.4)	33.3	6.0
DIPTERA						
Chironomidae larvae	2.7 ± 4.3	(0.2)	0.04 ± 0.1	(0.9)	50.0	9.0
Chironomidae pupae	0.3 ± 0.8	(0.03)	0.2 ± 0.4	(4.4)	16.7	3.7
COPEPODA						
Cyclopoid	41.0 ±100.4	(3.9)	0.4 ± 1.0	(9.6)	16.7	5.3
CLADOCERA						
Daphnidae	968.8±1507.1	(91.9)	2.4 ± 5.4	(53.1)	33.3	31.5
Chydorldao	31.2 ≃74.4	(2.9)	0.3 ± 0.5	(5.7)	50.0	10.3
AMPHIPODA						
Gammaridae	0.5 ± 1.2	(0.1)	0.02 ± 0.04	(0.4)	33.3	6.0
OSTRACODA	3.8 ± 9.4	(0.4)	0.02 ± 0.04	(0.4)	16.7	3.1
GASTROPODA						
Planorbidae	0.2 ± 0.4	(0.02)	0.2 ± 0.4	(3.9)	16.7	3.6
Phyridae	0.2 ± 0.4	(0.02)	0.7 ± 1.5	(14.9)	16.7	5.6

Table H.12. July feeding habits of 3+ yellow perch (n=33) in the Pend Oreille River.

	Number		Weight		Occurrence	IRI
	Mean ± SD	(%)	Mean ± SD	(%)	%	%
TRICHOPTERA						
Hydroptilidae	4.8 ±10.0	(1.5)	0.3 ± 0.5	(1.8)	54.5	7.4
Limnephilidae	.1 ± .4	(0.02)	0.01 ± 0.02	(0.04)	3.0	.4
Leptoceridae	0.1 ± 0.6	(0.04)	0.01 ± 0.03	(0.1)	6.1	.8
Phryganeidae	0.1 ± 0.4	(0.02)	0.1 ± 0.4	(0.6)	3.0	.5
EPHEMEROPTERA						
Baetidae	0.2 ± 0.6	(0.1)	0.1 ± 0.2	(0.3)	9.1	1.2
Ephemerellidae	0.2 ± 0.7	(0.1)	0.1 ± 0.3	(0.4)	6.1	.8
Tricorythidae	0.3 ± 1.2	(0.1)	0.2 ± 0.7	(1.5)	6.1	1.0
ODONATA						
Coenagrilidae	0.8 ± 2.3	(0.2)	1.6 ± 4.2	(9.8)	24.2	4.4
Anisoptera	0.1 ± 0.5	(0.1)	2.8 ± 9.9	(17.2)	3.0	2.6
HYDRACARINA	2.8 ± 5.6	(0.9)	0.4 ± 0.9	(2.4)	42.4	5.9
DIPTERA						
Chironomidae larvae	10.1 ±23.8	(3.1)	0.7 ± 1.8	(4.4)	72.7	10.3
Chironomidae pupae	0.3 ± 0.7	(0.1)	0.5 ± 1.1	(2.8)	21.2	3.1
Tipulidae	0.03 ± 0.2	(0.01)	0.01 ± 0.02	(0.04)	3.0	.4
Ceratopogonidae	2.5 ± 6.7	(0.8)	0.2 ± 0.7	(1.2)	24.2	3.4
COPEPODA						
Cyclopoid	9.6 ±21.8	(3.0)	0.3 ± 0.9	(2.1)	39.4	5.7
Calanoid	0.1 ± 0.4	(0.02)	0.01 ± 0.02	(0.04)	3.0	.4
CLADOCERA						
Daphnidae	151.8 ±409.4	(47.1)	2.3 ± 5.1	(13.7)	45.4	13.6
Chydoridae	119.9 ±352.8	(37.2)	1.9 ± 3.6	(11.8)	69.7	15.3
AMPHIPODA						
Talitridae	1.3 ± 7.7	(0.4)	0.01 ± 0.03	(0.1)	3.0	.4
Gammaridae	1.4 ± 2.8	(0.4)	1.2 ± 4.4	(7.3)	36.4	5.7
OSTRACODA	9.7 ±24.4	(3.0)	0.1 ± 0.2	(0.6)	42.4	5.9
GASTROPODA						
Planorbidae	2.7 ± 6.5	(0.8)	1.8 ± 3.3	(10.9)	36.4	6.2
Lymnaeidae	0.4 ± 1.4	(0.1)	1.6 ± 5.7	(9.8)	15.2	3.2
Physidae	0.1 ± 0.7	(0.04)	0.1 ± 0.5	(0.7)	3.0	.5
TERRESTRIAL INSECTA	1.4 ± 7.7	(0.4)	0.1 ± 0.2	(0.5)	6.1	.9

Table H.13. July feeding habits of 4+ yellow perch (n=33) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	4.6 ± 10.6 (1.5)	0.3 ± 0.4 (1.4)	42.4	6.5
Limnephilidae	0.1 ± 0.2 (0.02)	0.01 ± 0.03 (0.03)	6.1	.9
Leptoceridae	0.2 ± 0.4 (0.1)	0.3 ± 0.7 (1.4)	12.1	2.0
EPHEMEROPTERA				
Baetidae	0.6 ± 1.5 (0.2)	0.1 ± 0.2 (0.3)	12.1	1.8
Ephemerellidae	0.2 ± 0.5 (0.1)	0.1 ± 0.3 (0.4)	9.1	1.4
Tricorythidae	0.2 ± 0.9 (0.1)	0.2 ± 0.7 (1.5)	3.0	.7
ODONATA				
Coenagriidae	0.2 ± 0.6 (0.1)	1.6 ± 4.2 (9.8)	15.2	3.6
Libellulidae	0.1 ± 0.7 (0.04)	2.8 ± 9.9 (17.2)	3.0	2.9
HYDRACARINA	2.1 ± 5.2 (0.7)	0.4 ± 0.9 (2.4)	33.3	5.2
DIPTERA				
Chironomidae larvae	11.6 ± 27.7 (3.8)	0.7 ± 1.8 (4.4)	66.7	10.8
Chironomidae pupae	1.4 ± 2.6 (0.4)	0.5 ± 1.1 (2.8)	27.3	4.4
Ceratopogonidae	1.0 ± 2.5 (0.3)	0.2 ± 0.7 (1.2)	18.2	2.8
COPEPODA				
Cyclopoid	11.8 ± 32.7 (3.9)	0.3 ± 1.0 (2.0)	27.3	4.8
CLADOCERA				
Daphnidae	16.1 ± 39.8 (5.3)	2.3 ± 5.1 (13.7)	45.4	9.3
Chydoridae	234.9 ± 817.8 (78.0)	2.0 ± 3.6 (11.8)	51.5	20.4
AMPHIPODA				
Gammaridae	3.4 ± 10.6 (1.1)	1.2 ± 4.4 (7.3)	27.3	5.2
OSTRACODA	1.5 ± 3.5 (0.5)	0.1 ± 0.2 (0.6)	36.4	5.4
GASTROPODA				
Planorbidae	10.3 ± 21.4 (3.4)	1.8 ± 3.3 (10.9)	42.4	8.2
Lymnaeidae	0.1 ± 0.4 (0.02)	1.6 ± 5.7 (9.8)	3.0	1.8
TERRESTRIAL INSECTA	0.4 ± 1.1 (0.1)	0.1 ± 0.2 (0.5)	12.1	1.8

Table H.14. July feeding habits of 5+ yellow perch (n=31) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	4.3 ±17.4 (1.6)	1.8 ± 4.7 (10.8)	25.8	6.2
Limnephilidae	0.3 ± 1.3 (0.1)	0.01 ± 0.03 (0.04)	6.1	1.0
Lepidostomatidae	0.03 ± 0.2 (0.01)	0.1 ± 0.4 (0.6)	6.1	1.1
Leptoceridae	0.2 ± 0.5 (0.1)	0.2 ± 0.4 (0.9)	12.9	2.2
Phryganeidae	0.4 ± 2.0 (0.1)	0.4 ± 1.5 (2.3)	6.1	1.4
Hydropsychidae	0.03 ± 0.2 (0.01)	0.03 ± 0.1 (0.2)	6.1	1.0
EPHEMEROPTERA				
Ephemerellidae	0.1 ± 0.7 (0.1)	0.3 ± 1.2 (1.8)	6.1	1.3
ODONATA				
Coenagriidae	0.4 ± 1.0 (0.2)	1.2 ± 2.0 (7.2)	16.1	3.8
HYDRACARINA	6.6 ±14.1 (2.5)	0.8 ± 1.4 (4.7)	58.1	10.5
DIPTERA				
Chironomidae larvae	5.1 ±11.8 (1.9)	0.7 ± 0.9 (4.1)	38.7	7.2
Chironomidae pupae	1.4 ± 5.0 (0.6)	1.7 ± 5.2 (10.2)	22.6	5.4
Ceratopogonidae	0.2 ± 0.9 (0.1)	0.01 ± 0.03 (0.1)	9.7	1.6
COPEPODA				
Cyclopoid	1.4 ± 5.9 (0.5)	0.03 ± 0.5 (0.2)	9.7	1.7
CLADOCERA				
Daphnidae	29.9 ±146.3 (11.4)	1.1 ± 4.2 (6.7)	19.4	6.0
Chydoridae	202.4 ±552.4 (77.3)	2.2 ± 3.6 (13.1)	58.1	23.9
AMPHIPODA				
Talitridae	0.2 ± 0.8 (0.1)	0.2 ± 0.6 (0.9)	6.4	1.2
Gammaridae	1.3 ± 3.0 (0.5)	0.2 ± 0.5 (1.2)	25.8	4.4
OSTRACODA	0.4 ± 1.3 (0.2)	0.04 ± 0.1 (0.3)	16.1	2.7
GASTROPODA				
Planorbidae	4.9 ± 9.9 (1.9)	3.3 ± 9.0 (20.3)	35.5	9.3
Lymnaeidae	1.2 ± 4.6 (0.5)	1.8 ± 3.4 (10.9)	19.4	5.0
TERRESTRIAL INSECTA	0.8 ± 3.4 (0.3)	0.6 ± 2.2 (3.4)	16.1	3.2

Table H.15. July feeding habits of 6+ yellow perch (n=19) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.6 ± 1.5 (0.2)	0.1 ± 0.1 (0.2)	21.1	3.4
Leptoceridae	1.2 ± 2.3 (0.4)	1.5 ± 1.1 (2.0)	26.3	4.6
Phryganeidae	0.2 ± 0.7 (0.1)	0.01 ± 0.03 (0.04)	5.3	.9
EPHEMEROPTERA				
Baetidae	0.1 ± 0.2 (0.02)	0.01 ± 0.03 (0.04)	5.3	.9
Ephemerellidae	0.5 ± 1.4 (0.2)	0.02 ± 0.1 (0.1)	26.3	4.2
Tricorythidae	0.1 ± 0.5 (0.04)	0.04 ± 0.1 (0.2)	5.3	.9
ODONATA				
Coenagriidae	2.0 ± 4.9 (0.7)	3.2 ±10.6 (13.1)	13.9	4.4
HYDRACARINA	0.2 ± 0.5 (0.9)	0.2 ± 0.5 (0.9)	21.1	3.6
DIPTERA				
Chironomidae larvae	1.6 ± 2.3 (0.5)	0.1 ± 0.1 (0.3)	47.4	7.7
Chironomidae pupae	1.5 ± 2.3 (0.5)	0.2 ± 0.5 (0.9)	47.4	7.7
COPEPODA				
Cyclopoid	0.6 ± 1.6 (0.2)	0.02 ± 0.04 (0.1)	31.6	5.1
CLADOCERA				
Daphnidae	40.7 ±176.6 (13.7)	1.6 ± 4.3 (6.5)	15.8	5.7
Chydoridae	233.6 ±616.6 (78.7)	2.2 ± 3.6 (8.3)	52.6	22.2
AMPHIPODA				
Gammaridae	0.2 ± 0.5 (0.1)	0.4 ± 0.1 (.2)	10.5	1.7
OSTRACODA	0.3 ± 0.6 (0.1)	0.1 ± 0.1 (0.2)	21.1	3.4
GASTROPODA				
Planorbidae	9.6 ±18.1 (3.2)	1.9 ± 4.4 (7.7)	57.9	10.9
Lymnaeidae	0.6 ± 2.3 (0.2)	14.5 ±39.3 (59.2)	10.5	11.1
TERRESTRIAL INSECTA	0.1 ± 0.2 (0.02)	0.02 ±0.04 (0.1)	10.5	1.7

Table H.16. September feeding habits of 3+ yellow perch (n=35) In the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.58 ± 1.50 (0.2)	0.08 ± 0.06 (0.2)	37.1	4.7
EPHEMEROPTERA				
Baetidae	3.51 ± 6.80 (0.9)	2.55 ± 6.85 (7.0)	48.6	7.1
ODONATA				
Coenagrilidae	0.46 ± 2.37 (0.1)	0.06 ± 0.14 (0.2)	8.6	1.1
Libellulidae	0.03 ± 0.17 (0.01)	0.01 ± 0.03 (0.02)	2.8	.4
HYDRACARINA	1.80 ± 4.0 (0.5)	0.18 ± 0.39 (0.5)	37.1	4.8
DIPTERA				
Chironomidae larvae	19.89 ±31.55 (5.3)	17.29 ±46.21(47.4)	91.4	18.2
Chironomidae pupae	0.63 ± 1.61 (0.2)	0.08 ± 0.14 (0.2)	28.6	3.7
Ceratopogonidae	0.03 ± 0.17 (0.01)	0.01 ± 0.03 (0.02)	2.8	.4
COPEPODA				
Cyclopoid	3.86 ± 6.45 (1.0)	0.38 ± 0.63 (1.0)	51.4	6.7
CLADOCERA				
Daphnidae	321.97 ±803.15(85.83)	9.70 ±17.46(26.6)	94.3	26.0
Chydoridae	14.80 ±34.34 (4.0)	0.58 ± 1.35 (1.6)	57.1	7.9
AMPHIPODA				
Talitridae	1.52 ± 4.87 (0.40)	.22 ± .48 (0.6)	34.3	4.4
Gammaridae	0.29 ± 1.18 (0.10)	0.01 ± 0.03 (0.02)	5.7	.7
OSTRACODA	2.80 ± 4.82 (0.6)	0.25 ± 0.42 (0.7)	54.3	7.0
GASTROPODA				
Planorbidae	1.03 ± 3.37 (0.3)	5.04 ±16.99(13.8)	22.6	4.6
TERRESTRIAL INSECTA	0.43 ± 1.80 (0.1)	0.06 ± 0.17 (0.2)	11.4	1.5

Table H.17. September feeding habits of 4+ yellow perch (n=69) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	1.25 ± 2.61 (0.3)	0.56 ± 0.94 (0.3)	42.0	5.1
Leptoceridae	0.16 ± 0.92 (0.04)	0.35 ± 1.22 (0.2)	4.3	.5
EPHEMEROPTERA				
Baetidae	7.22 ±13.45 (1.8)	3.78 ± 4.98 (2.0)	55.1	7.0
Tricorythidae	0.03 ± 0.17 (0.01)	0.02 ± 0.04 (0.01)	2.9	.3
ODONATA				
Coenagriidae	0.45 ± 1.37 (0.1)	1.03 ± 2.47 (0.6)	15.9	2.0
HYDRACARINA	1.67 ±3.45 (0.4)	2.32 ± 7.42 (1.2)	43.5	5.4
LEPIDOPTERA				
DIPTERA				
Chironomidae larvae	24.72 ±29.47 (6.3)	11.63 ±13.96 (6.2)	89.8	12.2
Chironomidae pupae	1.94 ± 3.35 (0.5)	0.62 ± 1.25 (0.3)	37.7	4.6
COPEPODA				
Cyclopoid	4.58 ± 8.73 (1.2)	0.55 ± 1.08 (0.3)	52.2	6.4
CLADOCERA				
Daphnidae	334.8 ±1034.95(84.9)	32.15 ±45.16(17.0)	91.3	23.0
Chydoridae	6.94 ±10.67 (1.8)	7.56 ±15.64 (4.0)	44.9	6.0
AMPHIPODA				
Talitridae	1.02 ±4.45 (0.3)	.77 ± 2.48 (0.4)	31.8	3.9
Gammaridae	0.23 ± 0.77 (0.1)	0.92 ± 3.04 (0.5)	11.6	1.5
OSTRACODA	1.28 ± 2.30 (0.3)	0.25 ± 0.40 (0.1)	42.0	5.0
GASTROPODA				
Planorbidae	5.97 ±16.48 (1.5)	121.45±355.24(64.2)	37.7	12.3
Lymnaeidae	0.14 ± 0.71 (0.04)	4.77±17.20 (2.5)	5.8	1.0
TERRESTRIAL INSECTA	1.03 ± 2.22 (0.3)	0.35 ± 0.66 (0.2)	31.9	3.9

Table H.18. September feeding habits of 5+ yellow perch (n=36) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	7.81 ±22.66 (2.9)	4.37 ± 8.35 (2.9)	30.6	4.5
EPHEMEROPTERA				
Baetidae	7.50 ±21.94 (2.8)	5.80 ±10.23 (3.9)	44.4	6.3
ODONATA				
Coenagrildae	0.17 ± 1.00 (0.1)	1.01 ± 2.15 (0.7)	2.8	.4
HYDRACARINA	2.47 ± 5.03 (0.9)	0.26 ± 0.37 (0.2)	61.1	7.7
LEPIDOPTERA				
DIPTERA				
Chironomidae larvae	19.28 ±23.77 (7.3)	13.86 ±29.28 (9.4)	86.1	12.7
Chironomidae pupae	1.58 ± 3.27 (0.6)	0.14 ± 0.21 (0.1)	27.8	3.5
Tipulidae				
Ceratopogonidae	0.03 ± 0.17 (0.01)	0.01 ± 0.03 (0.1)	2.8	.3
COPEPODA				
Cyclopoid	4.06 ± 8.12 (1.5)	0.33 ± 0.50 (0.2)	44.4	5.7
Calanoid	18.86 ±62.83 (7.1)	0.01 ± 0.03 (0.01)	11.1	2.3
CLADOCERA				
Daphnidae	179.69 ±445.41(67.7)	44.60 ±111.48(30.0)	86.1	22.7
Chydoridae	5.19 ±14.05 (2.0)	0.22 ± 0.52 (0.2)	22.2	3.0
AMPHIPODA				
Talitridae	4.34 ±17.27 (1.6)	1.52 ± 4.5 (1.0)	30.6	4.1
Gammaridae	0.14 ± 0.59 (.1)	0.57 ± 1.66 (0.4)	5.6	.8
OSTRACODA	1.67 ± 4.44 (0.6)	2.12 ± 6.25 (1.4)	30.6	4.0
GASTROPODA				
Planorbidae	9.72 ±27.91 (3.7)	52.98 ±96.73(35.6)	55.6	11.7
Lymnaeidae	0.39 ± 1.02 (0.2)	17.2 ±29.2 (11.6)	19.4	3.9
Physidae				
OSTEICHTHYES	0.19 ± 1.17 (0.1)	2.56 ± 7.67 (1.7)	2.8	.6
Terrestrial Insecta	2.5 ± 5.3 (1.0)	1.04 ± 1.71 (.7)	44.4	5.7

Table H.19. September feeding habits of 6+ yellow perch (n=9) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	20.56 ±58.71 (9.6)	11.08 ±24.72(45.2)	22.2	14.7
Leptoceridae	0.11 ± 0.33 (0.1)	0.18 ± 0.40 (.7)	11.1	2.3
EPHEMEROPTERA				
Baetidae	9.22 ±25.10 (4.3)	4.9 ±10.13(20.0)	33.3	11.0
HYDRACARINA	0.33 ± 1.0 (0.2)	0.10 ± 0.17 (0.4)	11.1	2.2
DIPTERA				
Chironomidae larvae	11.44 ±18.76 (5.3)	0.66 ± 0.99 (2.7)	44.4	10.0
Chironomidae pupae	4.67 ±10.67 (2.2)	0.18 ± 0.30 (0.7)	33.3	6.9
COPEPODA				
Calanoid	2.89 ± 8.67 (1.4)	0.04 ± 0.09 (0.2)	11.1	2.4
CLADOCERA				
Daphnidae	151.11 ±437.4 (70.4)	3.56 ± 5.10(14.5)	44.4	24.8
Chydoridae	2.0 ± 3.71 (1.0)	0.06 ± 0.05 (0.2)	33.3	6.6
AMPHIPODA				
Talitridae	1.33 ± 4.0 (0.6)	1.38 ± 3.09 (5.6)	11.1	3.3
GASTROPODA				
Planorbidae	3.22 ± 8.23 (1.5)	0.58 ± 1.24 (2.4)	33.3	7.1
OSTEICHTHYES	0.11 ± 0.33 (0.1)	0.82 ± 1.83 (3.3)	11.1	2.8
TERRESTRIAL INSECTA	7.78 ±19.86 (3.6)	1.00 ± 2.24 (4.1)	22.2	5.7

Table H.20. October feeding habits of 1+ yellow perch (n=3) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
COPEPODA				
Cyclopoid	0.3 ± 0.6 (7.7)	0.1 ± 0.0 (25.0)	33.3	19.8
CLADOCERA				
Chydoridae	1.0 ± 1.7 (23.1)	0.1 ± 0.0 (25.0)	33.3	24.4
AMPHIPODA				
Talitridae	0.3 ± 0.6 (7.7)	0.1 ± 0.0 (25.0)	33.3	19.8
OSTRACODA	2.7 ± 4.6 (61.5)	0.1 ± 0.0 (25.0)	33.3	35.9

Table H.21. October feeding habits of 2+ yellow perch (n=5) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	6.2±13.9 (32.3)	1.6 ± 2.2 (37.9)	(20.0)	20.5
EPHEMEROPTERA				
Baetidae	2.2 ± 4.9 (11.5)	1.0 ± 1.4 (24.1)	(20.0)	12.6
DIPTERA				
Chironomidae larvae	0.4 ± 0.9 (2.1)	0.1 ± 0.1 (1.7)	(20.0)	5.4
COPEPODA				
Cyclopoid	3.8 ± 8.5 (19.8)	0.1 ± 0.1 (1.7)	(20.0)	9.4
CLADOCERA				
Daphnidae	3.0 ± 4.1 (15.6)	0.1 ± 0.0 (3.4)	(60.0)	18.0
Chydoridae	0.8 ± 1.8 (4.2)	0.2 ± 0.3 (6.9)	(20.0)	7.1
OSTRACODA	1.2 ± 2.2 (6.2)	0.1 ± 0.1 (1.7)	(40.0)	10.9
GASTROPODA				
Planorbidae	1.6 ± 3.1 (8.3)	0.6 ± 0.9 (22.4)	40.0	16.1

Table H.22. October feeding habits of 3+ yellow perch (n=21) In the Pend Oreilie River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.7 ± 1.5 (1.5)	0.1 ± 0.1 (0.8)	23.8	4.1
Leptoceridae	0.2 ± 0.5 (0.5)	0.03 ± 0.1 (0.4)	19.0	3.1
EPHEMEROPTERA				
Baetidae	6.5 ± 10.3 (14.7)	3.9 ± 9.2 (53.0)	57.1	19.5
Ephemerellidae	0.3 ± 1.3 (0.6)	0.2 ± 0.7 (2.5)	4.8	1.2
ODONATA				
Coenagriidae	0.2 ± 0.7 (0.5)	0.1 ± 0.2 (1.2)	14.3	2.5
Lestidae	0.1 ± 0.2 (0.1)	0.04 ± 0.1 (0.5)	4.8	0.8
HYDRACARINA	0.2 ± 0.5 (0.5)	0.1 ± 0.2 (1.6)	19.0	2.5
DIPTERA				
Chironomidae larvae	0.6 ± 1.0 (1.4)	0.1 ± 0.1 (1.3)	38.1	6.4
COPEPODA				
Cyclopoid	1.0 ± 1.8 (2.2)	0.1 ± 0.1 (0.6)	28.6	4.9
Calanoid	0.3 ± 1.3 (0.6)	0.01 ± 0.03 (0.1)	4.8	0.8
CLADOCERA				
Daphnidae	19.1 ± 36.0 (42.9)	0.6 ± 1.0 (7.9)	61.9	17.6
Chydoridae	11.3 ± 12.8 (25.4)	0.8 ± 1.0 (10.6)	71.4	16.8
Leptodoridae	0.1 ± 0.2 (0.1)	0.01 ± 0.03 (0.1)	4.8	0.8
AMPHIPODA				
Talitridae	3.1 ± 5.1 (4.1)	1.1 ± 3.9 (15.7)	33.3	8.3
Gammaridae	0.5 ± 2.0 (1.1)	0.1 ± 0.3 (1.5)	9.5	1.9
OSTRACODA	0.7 ± 1.5 (1.6)	0.1 ± 0.2 (1.2)	28.6	4.9
GASTROPODA				
Planorbidae	0.4 ± 1.5 (1.0)	0.1 ± 0.2 (0.7)	14.3	2.4

Table H.23. October feeding habits of 4+ yellow perch (n=34) in the Pend Oreiiie River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptlllidae	2.2 ± 6.0 (2.4)	0.6 ± 1.1 (2.4)	36.2	6.6
Limnephlllidae	0.9 ± 4.9 (0.9)	0.5 ± 1.6 (2.2)	5.9	1.4
Phrvaaneldae	0.2 ± 0.6 (0.2)	0.01 ± 0.03 (0.031)	5.9	1.0
EPHEMEROPTERA				
Baetldae	9.6 ± 14.3 (10.4)	10.1 ± 6.6 (43.5)	76.5	20.6
ODONATA				
Coenagrlldae	0.5 ± 1.5 (0.5)	0.7 ± 1.5 (2.9)	14.7	2.9
HYDRACARINA	0.3 ± 0.7 (0.3)	0.04 ± 0.1 (0.2)	20.6	3.3
DIPTERA				
Chlronomldae larvae	2.6 ± 9.9 (2.8)	0.6 ± 2.0 (3.3)	38.2	7.0
Chlronomldae pupae	1.0 ± 4.0 (1.0)	0.02 ± 0.04 (0.1)	11.6	2.0
COPEPODA				
Cyolopold	0.6 ± 3.1 (0.8)	0.1 ± 0.2 (0.4)	14.7	2.5
Calanold	0.2 ± 0.6 (0.2)	0.1 ± 0.03 (0.03)	6.8	1.4
CLADOCERA				
Daphnldae	18.6 ± 61.3 (19.7)	0.7 ± 1.6 (3.1)	44.1	10.6
Chydorldae	50.6 ± 220.8 (53.4)	1.3 ± 1.8 (5.7)	58.8	18.6
AMPHIPODA				
Talltrldae	2.4 ± 11.3 (2.6)	1.2 ± 3.6 (5.4)	20.6	4.5
Gammarldae	1.0 ± 3.3 (1.1)	0.01 ± 0.03 (0.03)	17.6	3.0
OSTRACODA	0.2 ± 0.9 (0.3)	0.1 ± 0.2 (0.3)	8.8	1.5
GASTROPODA				
Planorbldae	3.0 ± 7.5 (3.2)	4.3 ± 6.2 (18.6)	29.4	8.1
Lymnaeldae	0.1 + 0.4 (0.1)	1.3 + 4.4 (5.7)	8.8	2.3
Physldae	0.1 + 0.4 (0.1)	1.3 + 2.8 (5.5)	5.9	1.8

Table H.24. October feeding habits of 5+ yellow perch (n=24) in the Pend Oreiiie River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	14.6 ±49.4 (21.1)	4.4 ±14.3 (9.4)	29.2	9.7
Phryganeidae	0.4 ± 1.5 (0.5)	0.9 ± 3.0 (2.0)	12.5	2.4
EPHEMEROPTERA				
Baetidae	21.8 ±28.2 (31.5)	30.8 ±50.0 (65.1)	79.2	28.7
ODONATA				
Coenagriidae	0.5 ± 1.1 (0.7)	0.3 ± 0.9 (0.7)	16.7	3.0
COLEOPTERA				
Elmidae	0.7 ± 2.3 (1.0)	0.2 ± 0.8 (0.5)	8.3	1.6
HYDRACARINA	0.9 ± 4.1 (1.3)	0.1 ± 0.4 (0.3)	12.5	2.3
DIPTERA				
Chironomidae larvae	1.6 ± 3.1 (2.3)	0.4 ± 0.9 (0.9)	41.7	7.3
Chironomidae pupae	0.1 ± 0.3 (0.1)	0.02 ± 0.04 (0.04)	8.3	1.4
Ceratopogonidae	0.04 ± 0.2 (0.1)	0.01 ± 0.03 (0.02)	4.2	0.7
COPEPODA				
Cyclopoid	0.2 ± 0.5 (0.3)	0.1 ± 0.2 (0.1)	16.7	2.8
CLADOCERA				
Daphnidae	18.9 ±62.9 (27.3)	0.4 ± 0.8 (0.9)	29.2	9.4
Chydoridae	4.0 ± 7.0 (5.8)	0.3 ± 0.4 (0.7)	45.8	8.5
AMPHIPODA				
Talitridae	1.1 ± 2.6 (1.6)	0.1 ± 0.2 (0.2)	29.2	5.1
Gammaridae	0.5 ± 1.7 (0.7)	0.2 ± 0.4 (0.4)	16.7	2.9
OSTRACODA	0.1 ± 0.3 (0.1)	0.03 ± 0.1 (0.1)	8.3	1.4
GASTROPODA				
Planorbidae	3.6 ±14.3 (5.2)	3.0 ± 8.0 (6.4)	29.2	6.7
Lymnaeidae	0.2 ± 0.5 (0.2)	1.6 ± 4.7 (3.5)	12.5	2.6
OLIGOCHAETA				
Lumbriculidae	0.1 ± 0.4 (0.1)	0.5 ± 1.7 (2.0)	8.3	1.7

Table H.25. October feeding habits of 6+ yellow perch (n=2) in the Pend Oreiiie River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	1.5 ± 2.1 (50.0)	1.0 ± 1.3 (1.8)	50.0	29.1
OSTEICHTHYES	1.0 ± 1.4 (33.3)	29.3 ± 41.1 (56.6)	50.0	35.2
Yellow perch	0.5 ± 0.7 (17.7)	21.6 ± 30.5 (41.6)	50.0	35.7

MONTHLY FEEDING HABITS OF LARGEMOUTH BASS

Table H.26. April feeding habits of 2+ largemouth bass (n=1) in the Pend Oreiile River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	9 ± 0.0 (69.2)	4.4 ± 5.3 (95.3)	100.0	52.9
ODONATA				
Coenagriidae	3.0 ± 0.0 (23.1)	0.2 ± 0.2 (3.5)	100.0	25.3
AMPHIPODA				
Talitridae	1.0 ± 0.0 (7.7)	0.1 ± 0.1 (1.2)	100.0	21.9

Table H.27. April feeding habits of 3+ largemouth bass (n=16) in the Pend Oreiiie River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	3.6 ± 9.1 (57.0)	7.6 ±14.0 (12.7)	56.2	31.5
ODONATA				
Coenagriidae	0.8 ± 2.1 (13.0)	2.1 ± 2.8 (3.6)	25.0	10.4
Libellulidae	0.4 ± 1.1 (6.0)	2.3 ± 4.6 (3.8)	18.8	7.2
COLEOPTERA				
Elmidae	0.1 ± 0.2 (1.0)	0.9 ± 2.4 (1.4)	6.2	2.2
DIPTERA				
Chironomidae larvae	0.2 ± 0.4 (3.0)	0.04 ± 0.1 (0.1)	18.8	5.5
Chironomidae pupae	0.2 ± 0.6 (4.0)	0.03 ± 0.1 (0.04)	18.8	5.7
CLADOCERA				
Daphnidae	0.4 ± 1.0 (6.0)	0.04 ± 0.1 (0.1)	18.8	6.2
AMPHIPODA				
Talitridae	0.4 ± 0.8 (7.0)	0.6 ± 1.4 (0.9)	25.0	8.2
OSTEICHTHYES	0.1 ± 0.3 (2.0)	46.4 ±131.2(77.4)	12.5	23.0

Table H.28. April feeding habits of 4+ largemouth bass (n=2) in the Pend Oreiile River.

	Number	Weight	Occurrence	I RI .
	Mean ±SD (%)	Mean ±SD (%)	%	%
ODONATA				
Coenagriidae	0.5 ± 0.7 (33.3)	0.5 ± 7.1 (0.04)	50.0	23.8
OSTEICHTHYES	1.0 ± 0.0 (66.7)	1150.8 ±1627.6(99.9)	100.0	76.2

Table H.29. April feeding habits of 5+ largemouth bass (n=4) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	0.2 ± 0.5 (20.0)	0.9 ± 0.0 (0.03)	25.0	13.9
OSTEICHTHYES	0.2 ± 0.5 (20.0)	627.6 ± 0.0 (19.9)	25.0	20.0
Yellow perch	0.8 ± 0.5 (60.0)	2510.5± (80.0)	75.0	66.2

Table H.30. April feeding habits of 6+ largemouth bass (n=4) in the Pend Oreiile River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
FROG	0.5 ± 0.7 (50.0)	278.1f390.5 (21.2)	50.0	40.4
OSTEICHTHYES				
Yellow perch	0.5±0.7 (50.0)	'028f 1454 (78.8)	50.0	59.6

Table H.31. April feeding habits of 7+ largemouth bass (n=1) in the Pend Oreiiie River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
OSTEICHTHYES				
Yellow perch	2.0 ± 0.0 (100.0)	2064.8 ± 0.0(100.0)	100.0	100.0

Table H.32. April feeding habits of 8+ largemouth bass (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
OSTEICHTHYES	1.0 ± 0.0 (100.0)	4281.8 ± 0.0(100.0)	100.0	100.0

Table H.33. April feeding habits of 9+ largemouth bass (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
OSTEICHTHYES	0.5 ± 0.7 (33.3)	1584 ± 0.0 (33.3)	50.0	33.3
Yellow perch	1.0 ± 0.0 (66.7)	3172 ± 0.0 (66.7)	100.0	86.7

Table H.34. June feeding habits of 1+ largemouth bass (n=1) in the Pend Oreiiie River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
Chydorldae	1045 + 0.0 (100.0)	5.0 + 0.0(100.0)	100.0	100.0

Table H.35. June feeding habits of 2+ largemouth bass (n=11) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
ODONATA				
Coenagrlidae	0.9 ± 2.7 (0.8)	2.8 ± 6.2 (41.5)	18.2	15.1
DIPTERA				
Chironomidae larvae	0.4 ± 0.7 (0.3)	0.04 ± 0.1 (0.6)	27.3	7.1
Chironomidae pupae	0.2 ± 0.4 (0.2)	0.3 ± 0.6 (4.2)	18.2	5.7
COPEPODA				
Cyclopoid	0.3 ± 0.9 (0.2)	0.04 ± 0.1 (0.6)	9.1	2.5
Calanoid	4.4 ± 14.4 (3.9)	0.04 ± 0.05 (0.6)	18.2	5.7
CLADOCERA				
Chydoridae	105.2 ±244.9 (91.9)	1.9 ± 4.0 (28.1)	36.4	39.1
AMPHIPODA				
Gammaridae	1.0 ± 2.7 (0.9)	0.6 ± 1.0 (9.0)	18.2	7.0
OSTEICHTHYES	0.4 ± 1.2 (0.3)	0.02 ± 0.04 (0.3)	9.1	2.4
TERRESTRIAL INSECTA	1.7 ± 3.2 (1.5)	1.0 ± 2.1 (14.9)	45.4	15.5

Table H.36. June feeding habits of 3+ largemouth bass (n=23) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Ephemerellidae	0.04 ± 0.2 (0.1)	0.8 ± 2.7 (1.0)	4.3	1.4
ODONATA				
Coenagriidae	0.6 ± 1.1 (1.2)	2.4 ± 4.9 (2.9)	26.1	7.9
Libellulidae	0.04 ± 0.2 (0.1)	10.7 ±33.8 (13.3)	4.3	4.6
COLEOPTERA				
Elmidae	0.3 ± 1.2 (0.5)	0.6 ± 1.3 (0.7)	4.3	1.4
DIPTERA				
Chironomidae larvae	0.3 ± 0.5 (0.5)	0.04 ± 0.1 (0.1)	21.7	5.8
Chironomidae pupae	0.1 ± 0.3 (0.3)	0.02 ± 0.04 (0.02)	13.0	3.5
Tipulidae	0.04 ± 0.2 (0.1)	0.02 ± 0.1 (0.02)	4.3	1.2
Simulidae	0.04 ± 0.2 (0.1)	0.01 ± 0.03 (0.01)	4.3	1.2
COPEPODA				
Calanoid	0.1 ± 0.4 (0.2)	0.01 ± 0.03 (0.01)	4.3	1.2
CLADOCERA				
Daphnidae	1.1 ± 5.2 (2.2)	0.01 ± 0.03 (0.01)	4.3	1.7
Chydoridae	42.8 ±205.2 (87.0)	1.1 ± 3.5 (1.4)	8.7	25.4
AMPHIPODA				
Gammaridae	0.1 ± 0.5 (0.3)	0.03 ± 0.1 (0.04)	8.7	2.4
OSTEICHTHYES	0.6 ± 2.1 (1.3)	56.2 ±174.8(69.8)	17.4	23.2
TERRESTRIAL INSECTA	2.1 ± 3.9 (4.3)	8.4 ±19.2 (10.4)	52.2	17.5
FISH EGGS	0.8 ± 3.9 (1.7)	0.2 + 0.5 (0.1)	4.3	1.6

Table H.37. June feeding habits of 4+ largemouth bass (n=9) In the Pend Oreilie River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.1 ± 0.3 (2.1)	0.02 ± 0.04 (0.01)	11.1	3.4
EPHEMEROPTERA				
Baetidae	0.1 ± 0.3 (2.1)	0.7 ± 1.6 (0.6)	11.1	3.6
ODONATA				
Coenagriidae	2.2 ± 4.4 (42.6)	7.6 ±15.5 (6.7)	33.3	21.3
Libellulidae	0.3 ± 0.7 (6.4)	19.9 ±48.4 (17.6)	22.2	11.9
HYDRACARINA	0.1 ± 0.3 (2.1)	0.02 ± 0.04 (0.01)	11.1	3.4
DIPTERA				
Chironomidae larvae	0.1 ± 0.3 (2.1)	0.02 ± 0.04 (0.01)	11.1	3.4
CLADOCERA				
Chydoridae	0.1 ± 0.3 (2.1)	0.02 ± 0.04 (0.01)	11.1	3.4
AMPHIPODA				
Gammaridae	0.1 ± 0.3 (2.1)	0.02 ± 0.04 (0.01)	11.1	3.4
OSTEICHTHYES	1.1 ± 2.9 (21.3)	84.7 ±189.8(74.6)	22.2	30.4
TERRESTRIAL INSECTA	0.8 ± 1.3 (14.9)	0.4 ± 0.6 (0.4)	33.3	12.5
FISH EGGS	0.1 ± 0.3 (2.1)	0.02 ± 0.04 (0.01)	11.1	3.4

Table H.38. June feeding habits of 5+ largemouth bass (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	I RI
	Mean ± SD (%)	Mean ± SD (%)	%	%
OSTEICHTHYES				
Yellow perch	1.0 + 0.0 (100.0)	719.1 + 0.0(100.0)	100.0	100.0

Table H.39. June feeding habits of 6+ largemouth bass (n=3) in the Pend Oreiiie River.

	Number	Weight	Occurrence	I RI
	X (±SD) %	X (±SD) %	%	%
OSTEICHTHYES	0.7 ± 0.6 (66.7)	3434.4 ± 0.0 (66.7)	66.7	66.7
Yellow perch	0.3 ± 0.6 (33.3)	1715.3 ± 0.0 (33.3)	33.3	33.3

Table H.40. June feeding habits of 7+ largemouth bass (n=1) in the Pend Oreiiie River.

	Number	Weight	Occurrence	I RI
	Mean ±SD (%)	Mean ± SD (%)	%	%
OSTEICHTHYES				
Yellow perch	1.0 ± 0.0 (100.0)	504.6 ± 0.0(100.0)	100.0	100.0

Table H.41. June feeding habits of 9+ largemouth bass (n=1) in the Pend Oreiiie River.

	Number	Weight	Occurrence	IRI
	X (±SD) %	X (±SD) %	%	%
HYDRACARINA	1.0 ± 0.0 (33.3)	0.001± 0.0 (0.2)	100.0	26.7
OSTEICHTHYES				
Yellow perch	1.0 ± 0.0 (33.3)	0.5 ± 0.0 (99.6)	100.0	46.6
BIVALVE				
Sphaeridae	1.0 ± 0.0 (33.3)	0.001± 0.0 (0.2)	100.0	26.7

Table H.42. June feeding habits of 10+ largemouth bass (n=1) in the Pend Oreiile River.

	Number	Weight	Occurrence	I RI
	Mean ± SD (%)	Mean ± SD (%)	%	%
OSTEICHTHYES	1 ± 0.0 (100.0)	67.3 ± 0.0(100.0)	100.0	100.0

Table H.43. July feeding habits of 1+ largemouth bass (n=12) in the Pend Oreiile River.

	Number			Weight			Occurrence	IRI
	Mean	±SD	(%)	Mean	±SD	(%)	%	%
EPHEMEROPTERA								
Baetidae	0.1	± 0.3	(0.3)	0.3	± 0.9	(3.4)	8.3	2.4
ODONATA								
Coenagriidae	0.3	± 1.2	(1.4)	0.8	± 1.9	(8.1)	8.3	3.6
Libellulidae	0.8	± 1.4	(3.1)	1.5	± 4.3	(15.8)	33.3	10.4
DIPTERA								
Chironomidae larvae	0.8	± 1.5	(3.4)	0.03	± 0.1	(3.5)	41.7	9.7
Chironomidae pupae	0.9	± 1.3	(3.8)	0.2	± 0.4	(2.1)	41.7	9.5
COPEPODA								
Cyclopoid	0.2	± 0.4	(1.0)	0.1	± 0.1	(2.1)	25.0	5.6
CLADOCERA								
Daphnidae	3.3	± 11.6	(13.8)	0.2	± 0.7	(2.6)	8.3	4.9
Chydoridae	14.0	± 38.1	(57.7)	0.7	± 1.2	(6.3)	50.0	22.8
AMPHIPODA								
Gammaridae	1.6	± 2.5	(6.5)	0.1	± 0.2	(1.2)	33.3	8.2
OSTRACODA	0.2	± 0.6	(0.7)	0.01	± 0.04	(0.1)	8.3	1.8
OSTEICHTHYES	0.3	± 0.6	(1.4)	2.8	± 7.8	(26.6)	25.0	10.6
TERRESTRIALS INSECTA	1.3	± 4.6	(5.5)	2.6	± 7.2	(25.8)	8.3	7.9
Corixidae	0.2	± 0.6	(0.7)	0.3	± 1.0	(3.0)	8.3	2.4

Table H.44. July feeding habits of 2+ largemouth bass (n=30) in the Pend Oreiiie River.

	Number			WCtight			occurrence	IRI
	Mean	± SD	(%)	Mean	±SD	(%)	%	%
EPHEMEROPTERA								
Ephemerellidae	0.2	± 0.6	(0.1)	0.7	± 2.9	(2.9)	6.7	2.1
ODONATA								
Coenagriidae	1.4	± 7.1	(0.7)	10.0	±34.7	(36.5)	6.7	9.9
Libellulidae	0.2	± 0.9	(0.1)	10.4	±26.3	(40.1)	6.7	10.1
HYDRACARINA	0.03	± 0.2	(0.02)	0.01	± 0.03	(0.03)	3.3	0.7
DIPTERA								
Chironomidae larvae	1.9	± 3.2	(1.0)	0.4	± 1.0	(1.7)	43.3	9.9
Chironomidae pupae	1.7	± 2.7	(0.9)	0.1	± 0.3	(0.4)	40.0	8.9
COPEPODA								
Cyclopoid	5.4	± 20.0	(2.8)	0.2	± 0.3	(0.6)	26.7	6.5
CLADOCERA								
Daphnidae	1.4	± 4.6	(0.7)	0.1	± 0.1	(0.2)	20.0	4.5
Chvdoridtae	160.3	±536.6	(92.3)	2.4	± 6.6	(9.4)	40.0	30.6
AMPHIPODA								
Gammaridae	0.5	± 1.2	(0.2)	0.1	± 0.2	(0.3)	20.0	4.4
OSTRACODA	0.1	± 0.3	(0.1)	0.02	± 0.04	(0.1)	10.0	2.2
OSTEICHTHYES								
Yellow perch	0.1	± 0.3	(0.1)	0.1	± 0.2	(0.4)	13.3	3.0
TERRESTRIALS INSECTA	1.4	± 6.0	(0.7)	0.8	± 2.7	(3.1)	23.3	5.8
Gerridae	0.2	± 1.1	(0.1)	0.6	± 2.2	(2.4)	3.3	1.3

Table H.45. July feeding habits of 3+ largemouth bass (n=30) in the Pend Oreiiie River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	0.1 ± 0.6 (0.1)	0.01 ± 0.04 (0.04)	3.3	.8
Ephemerellidae	0.1 ± 0.4 (0.1)	0.1 ± 0.4 (0.3)	3.3	.8
Tricorythidae	0.03 ± 0.2 (0.1)	0.01 ± 0.03 (0.02)	3.3	.8
ODONATA				
Coenagriidae	1.1 ± 2.6 (1.5)	7.4 ±14.1 (21.8)	30.0	11.7
Libellulidae	0.1 ± 0.3 (0.1)	3.7 ± 9.5 (11.0)	10.0	4.6
HYDRACARINA	0.1 ± 0.4 (0.2)	0.1 ± 0.4 (0.3)	10.0	2.3
DIPTERA				
Chironomidae larvae	1.4 ± 2.8 (1.9)	0.6 ± 1.2 (1.9)	30.0	7.4
Chironomidae pupae	2.3 ± 4.5 (3.2)	2.2 ± 6.2 (5.9)	36.7	10.1
Ceratopogonidae	1.4 ± 5.7 (2.0)	0.6 ± 2.3 (1.8)	10.0	3.0
COPEPODA				
Cyclopoid	0.2 ± 0.8 (0.3)	0.02 ± 0.04 (0.1)	13.3	3.0
CLADOCERA				
Daphnidae	0.7 ± 2.6 (1.0)	0.2 ± 0.4 (0.5)	20.0	4.7
Chydoridae	57.0 ±209.9 (78.4)	1.3 ± 4.4 (4.0)	10.0	20.3
AMPHIPODA				
Gammaridae	0.9 ± 3.1 (1.3)	4.2 ±15.7 (12.4)	16.7	6.7
OSTEICHTHYES	0.1 ± 0.4 (0.1)	3.4 ±12.3 (9.2)	3.3	2.8
TERRESTRIALS INSECTA	7.0 ±28.4 (9.6)	6.8 ±15.6 (20.0)	53.3	18.2
BIVALVE				
Gerridae	0.1 ± 0.4 (0.1)	3.3 ± 6.0 (9.7)	3.3	2.9

Table H.46. July feeding habits of 4+ largemouth bass (n=1) in the Pend Oreiiie River.

	Number	Weight	Occurrence	I RI
	Mean ± SD (%)	Mean ± SD (%)	%	%
OSTEICHTHYES	1.0 + 0.0 (100.0)	997.7 + 0.0(100.0)	100.0	100.0

Table H.47. July feeding habits of 5+ largemouth bass (n=3) in the Pend Oreiiie River.

	Number	Weight	(Occurrence	IRI
	X (±SD) %	X (±SD) %	%	%
ODONATA				
Coenagriidae	0.3 ± 0.6 (11.1)	14.6 ± 0.0 (0.4)	33.3	11.2
OSTEICHTHYES	1.3 ± 0.6 (44.4)	3496.4 ± 0.0 (99.0)	100.0	60.9
TERRESTRIALS INSECTA	1.0 ± 1.7 (33.3)	14 ± 0.0 (0.3)	33.3	16.7
CESTODA	0.3 ± 0.6 (11.1)	5.2 ± 0.0 (0.1)	33.3	11.1

Table H.48. July feeding habits of 6+ largemouth bass (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
OSTEICHTHYES	0.50 ± 0.71 (4.2)	1221.15±1726.97(99>6)	50.0	51.3
TERRESTRIALS INSECTS	11.5 ± 2.12 (95.8)	4.35 ± 6.15 (0.4)	50.0	48.7

Table H.49. July feeding habits of 7+ largemouth bass (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae larvae	38 ± 0.0 (95.0)	2.9 ± 0.0 (96.7)	100.0	58.3
CLADOCERA				
Daphnidae	1.0 ± 0.0 (2.5)	0.01 ± 0.0 (0.1)	100.0	20.5
TERRESTRIALS INSECTA	1.0 ± 0.0 (2.5)	0.09 ± 0.0 (3.2)	100.0	21.1

Table H.50. July feeding habits of 9+ largemouth bass (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
OSTEICHTHYES				
Yellow perch	1 ± 0.0 (100.0)	2053 ± 0.0(100.0)	100.0	100.0

Table H.51. July feeding habits of 10+ largemouth bass (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
OSTEICHTHYES				
Yellow perch	1.0 ± 0.0 (100.0)	6030.1 ± 0.0(100.0)	100.0	100.0

Table H.52. July feeding habits of 12+ largemouth bass (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae pupae	1.0 ± 0.0 (33.3)	0.1 ± 0.0 (0.1)	100.0	33.4
OSTEICHTHYES	2.0 ± 0.0 (66.7)	4681.4 ± 0.0 (99.9)	100.0	66.7

Table H.53. July feeding habits of 13+ largemouth bass (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
OSTEICHTHYES	1.0 ± 0.0 (100.0)	997.7 ± 0.0(100.0)	100.0	100.0

Table H.54. September feeding habits of 0+ largemouth bass (n=11) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	2.36 ± 2.91 (6.3)	2.23 ± 5.27(59.8)	54.5	24.1
Tricorythidae	0.18 ± 0.60 (0.5)	0.02 ± 0.04 (0.5)	18.2	3.8
HYDRACARINA	0.09 ± 0.30 (0.2)	0.02 ± 0.04 (0.5)	18.2	3.8
DIPTERA				
Chironomidae larvae	3.91 ± 8.65 (10.4)	0.07 ± 0.05 (1.8)	54.5	13.3
Chironomidae pupae	1.27 ± 3.29 (3.4)	0.22 ± 0.48(58.0)	27.3	7.3
COPEPODA				
Cyclopoid	0.73 ± 2.41 (1.9)	0.57 ± 1.34(15.2)	9.1	5.2
CLADOCERA				
Daphnidae	23.64 ±39.90 (63.1)	0.48 ± 1.09(13.00)	45.5	24.3
Chydoridae	4.09 ±11.34 (10.9)	0.07 ± 0.05 (1.8)	36.4	9.8
AMPHIPODA				
Talitridae	0.55 ± 1.51 (1.5)	0.04 ± 0.08 (0.90)	18.2	4.1
OSTRACODA	0.09 ± 0.30 (0.2)	0.02 ± 0.04 (0.5)	9.1	2.0
TERRESTRIALS INSECTA	0.55 ± 1.81 (1.5)	0.02 ± 0.04 (0.5)	9.1	2.2

Table H.55. September feeding habits of 1+ largemouth bass (n=29) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	5.0 ± 6.1 (7.4)	1.3 ± 1.8 (5.9)	65.5	15.1
HYDRACARINA	1.1 ± 4.6 (1.7)	0.04 ± 0.1 (0.2)	20.7	4.3
DIPTERA				
Chironomidae larvae	1.8 ± 2.9 (2.7)	0.1 ± 0.1 (0.4)	55.2	11.1
Chironomidae pupae	0.2 ± 0.5 (0.3)	0.02 ± 0.04 (0.1)	13.8	2.7
Muscidae	0.1 ± 0.7 (0.2)	0.01 ± 0.03 (0.04)	3.4	0.7
COPEPODA				
Cyclopoid	0.3 ± 1.0 (0.5)	0.04 ± 0.1 (0.2)	13.8	2.8
Calanoid	0.03 ± 0.2 (0.1)	0.02 ± 0.1 (0.1)	3.4	0.7
CLADOCERA				
Daphnidae	52.0 ±89.8 (77.8)	0.4 ± 0.9 (1.6)	62.1	27.0
Chydoridae	3.7 ± 7.5 (5.4)	0.1 ± 0.2 (0.5)	37.9	8.4
AMPHIPODA				
Talitridae	1.7 ± 6.6 (2.5)	0.3 ± 0.9 (1.5)	31.0	6.7
OSTRACODA	0.03 ± 0.2 (0.1)	0.01 ± 0.03 (0.04)	3.4	0.7
OSTEICHTHYES	0.3 ± 0.9 (0.5)	19.9 ±50.8 (89.4)	13.8	20.0

Table H.56. September feeding habits of 2+ largemouth bass (n=6) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.2 ± 0.4 (0.8)	0.03 ± 0.1 (1.7)	16.7	2.0
EPHEMEROPTERA				
Baetidae	3.3 ± 5.0 (14.9)	0.4 ± 0.5 (20.7)	66.7	15.7
HYDRACARINA	2.5 ± 5.2 (11.2)	0.1 ± 0.1 (3.4)	50.0	9.9
DIPTERA				
Chironomidae larvae	1.0 ± 1.6 (4.5)	0.1 ± 0.1 (3.4)	50.0	8.9
Chironomidae pupae	1.3 ± 2.8 (6.0)	0.2 ± 0.3 (8.6)	33.3	7.4
COPEPODA				
Cyclopoid	0.7 ± 1.2 (3.0)	0.3 ± 0.4 (15.5)	33.3	8.0
CLADOCERA				
Daphnidae	6.0 ±11.8 (27.9)	0.1 ± 0.1 (3.4)	66.7	15.1
Chydoridae	4.5 ± 8.4 (20.2)	0.4 ± 0.6 (18.9)	33.3	11.1
AMPHIPODA				
Talitridae	0.8 ± 1.7 (3.7)	0.2 ± 0.3 (12.1)	50.0	10.1
OSTRACODA	0.2 ± 0.4 (0.8)	0.03 ± 0.1 (1.7)	16.7	2.9
TERRESTRIALS INSECTA	1 5 ± 3.7 (6.7)	0.2 ± 0.4 (10.3)	33.3	7.7

Table H.57. September feeding habits of 3+ largemouth bass (n=23) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	4.96 ±10.00 (25.5)	2.55 ± 4.87 (3.6)	47.8	18.6
HYDRACARINA	0.04 ± 0.21 (0.2)	0.06 ± 0.20 (0.1)	4.3	1.1
DIPTERA				
Chironomidae larvae	0.61 ± 1.88 (3.1)	0.09 ± 0.14 (0.1)	26.1	7.1
Chironomidae pupae	0.61 ± 1.37 (3.1)	0.05 ± 0.09 (0.1)	21.7	6.0
CLADOCERA				
Daphnidae	7.04 ±33.13 (36.2)	0.63 ± 1.86 (0.9)	13.0	12.1
Chydoridae	2.43 ± 8.61 (12.5)	0.38 ± 0.91 (0.5)	21.7	8.4
AMPHIPODA				
Gammaridae	0.22 ± 0.74 (1.1)	0.02 ± 0.04 (0.02)	8.7	2.4
OSTEICHTHYES	0.78 ± 1.04 (4.02)	64.23 ±131.32(89.3)	47.8	34.2
TERRESTRIALS INSECTA	2.78 ±11.27 (14.3)	3.88 ± 7.90 (5.4)	21.7	10.0

Table H.58. September feeding habits of 4+ largemouth bass (n=4) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD d (%)	%	%
EPHEMEROPTERA				
Baetidae	0.50 ± 0.58 (8.00)	0.18 ± 0.29 (0.1)	50.0	12.2
DIPTERA				
Chironomidae larvae	0.25 ± 0.50 (4.0)	0.03 ± 0.05 (0.02)	25.0	6.1
Chironomidae pupae	0.25 ± 0.50 (4.0)	0.03 ± 0.05 (0.02)	25.0	6.1
OSTEICHTHYES	1.25 ± 0.50 (20.0)	124.85 ±137.78(97.6)	100.0	45.8
TERRESTRIALS INSECTA	3.75 ± 7.50 (60.0)	2.25 ± 4.50 (1.8)	50.0	23.5
Corrixidae	0.25 ± 0.50 (4.00)	0.60 ± 1.20 (0.5)	25.0	6.2

Table H.59. September feeding habits of 5+ largemouth bass (n=3) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
OSTEICHTHYES	1.33 ± 0.58(100.0)	118.24 ±188.24(100)	100.0	100.0

Table H.60. September feeding habits of 7+ largemouth bass (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
HYDRACARINA	18.0 ± 0.00 (4.8)	0.1 ± 0.0 (.5)	100.0	10.5
DIPTERA				
Chironomidae larvae	292 ± 0.00 (77.9)	3.4 ± 0.0 (16.6)	100.0	19.4
Chironomidae pupae	2 ± 0.00 (.5)	0.1 ± 0.0 (.5)	100.0	10.1
Ceratopogonidae	1 ± 0.00 (0.3)	0.1 ± 0.0 (.5)	100.0	10.1
CLADOCERA				
Chydoridae	6 ± 0.0 (1.6)	0.1 ± 0.0 (.5)	100.0	10.2
GASTROPODA				
Planorbidae	46 ± 0.0 (12.3)	14.5 ± 0.0 (70.7)	100.0	18.3
Lymnaeidae	9 ± 0.0 (2.4)	2.1 ± 0.0 (10.2)	100.0	11.2
BIVALVE				
Sphaeridae	1 ± 0.0 (0.3)	0.1 ± 0.0 (0.5)	100.0	10.1

Table H.61. October feeding habits of 0+ largemouth bass (n=6) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	5.0 ± 3.5 (18.4)	2.0 ± 1.6 (88.9)	83.3	47.7
COPEPODA				
Cyclopoid	0.2 ± 0.4 (0.6)	0.1 ± 0.1 (2.2)	0.2	0.7
CLADOCERA				
Daphnidae	15.8 ± 36.9 (58.3)	0.1 ± 0.1 (2.2)	33.0	23.4
Chydoridae	6.0 ± 9.1 (22.1)	0.1 ± 0.0 (4.4)	66.7	23.3
AMPHIPODA				
Talitridae	0.2 ± 0.4 (0.6)	0.1 ± 0.1 (2.2)	16.6	4.9

Table H.62. October feeding habits of 1+ largemouth bass (n=28) in the Pend Oreille River.

	Number			Weight			Occurrence	IRI
	Mean	±SD	(%)	Mean	±SD	(%)	%	%
EPHEMEROPTERA								
Baetidae	5.8	± 6.4	(11.7)	3.6	± 4.0	(50.8)	75.0	34.1
DIPTERA								
Chironomidae larvae	0.2	± 0.4	(0.4)	0.1	± 0.4	(1.9)	17.8	5.0
COPEPODA								
Cyclopoid	0.2	± 0.7	(0.4)	0.02	± 0.1	(0.2)	7.1	1.9
Calanoid	0.1	± 0.3	(0.1)	0.03	± 0.1	(0.4)	7.1	1.9
CLADOCERA								
Daphnidae	40.4	±207.7	(81.8)	0.5	± 1.8	(7.5)	32.1	30.1
Chydoridae	2.5	± 6.7	(5.0)	0.2	± 0.5	(3.2)	35.7	10.9
AMPHIPODA								
Talitridae	0.04	± 0.2	(0.1)	0.1	± 0.4	(1.5)	3.6	1.3
Gammaridae	0.04	± 0.2	(0.1)	0.1	± 0.2	(0.8)	3.6	1.1
OSTRACODA	0.04	± 0.2	(0.1)	0.01	± 0.03	(0.1)	3.6	9
OSTEICHTHYES	0.1	± 0.3	(0.2)	2.3	± 8.1	(32.8)	10.7	10.8
TERRESTRIALS INSECTA	0.1	± 0.3	(0.1)	0.1	± 0.1	(0.8)	7.1	2.0

Table H.63. October feeding habits of 2+ largemouth bass (n=9) in the Pend Oreille River.

	Number			Weight			Occurrence	IRI
	Mean	±SD	(%)	Mean	±SD	(%)	%	%
EPHEMEROPTERA								
Baetidae	1.7	± 3.9	(24.6)	0.7	± 0.9	(17.0)	33.3	25.0
CLADOCERA								
Daphnidae	0.2	± 0.4	(3.3)	0.04	± 0.1	(1.0)	22.2	8.8
Chydoridae	4.3	± 12.6	(63.9)	0.04	± 0.1	(1.0)	22.2	29.1
OSTEICHTHYES	0.1	± 0.3	(1.6)	2.6	± 5.9	(68.0)	11.1	26.9
TERRESTRIALS INSECTA	0.4	± 1.3	(6.6)	0.5	± 1.1	(12.9)	11.1	10.2

Table H.64. October feeding habits of 3+ largemouth bass (n=27) in the Pend Oreille River.

	Number			Weight			Occurrence	IRI
	Mean	±SD	(%)	Mean	±SD	(%)	%	%
EPHEMEROPTERA								
Baetidae	17.3	± 26.0	(83.5)	10.4	± 17.4	(6.2)	70.4	47.6
CLADOCERA								
Daphnidae	0.7	± 3.8	(3.5)	0.1	± 0.3	(0.1)	3.7	2.2
Chydoridae	2.1	± 7.0	(10.1)	0.1	± 0.3	(0.1)	22.2	9.6
OSTEICHTHYES	0.4	± 0.8	(2.0)	164.5	±542	(92.5)	29.6	36.9
TERRESTRIALS INSECTA	0.04	± 0.2	(0.2)	0.3	± 1.0	(0.2)	3.7	1.2
Corixidae	0.1	± 0.4	(0.5)	0.2	± 0.4	(0.1)	7.4	2.4

Table H.65. October feeding habits of 4+ largemouth bass (n=7) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	23.3 ±30.1 (94.5)	16.3 ±16.0 (8.8)	57.1	51.1
DIPTERA				
Chironomidae pupae	0.1 ± 0.4 (0.6)	0.03 ± 0.1 (0.01)	14.3	4.7
CLADOCERA				
Chydoridae	0.9 ± 1.9 (3.5)	0.1 ± 0.1 (0.03)	28.6	10.2
OSTEICHTHYES				
Yellow perch	0.2 ± 0.8 (1.2)	168.7 ±337.4(91.1)	14.3	33.9

Table H.66. October feeding habits of 5+ largemouth bass (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	X (±SD) %	X (±SD) %	%	%
EPHEMEROPTERA				
Baetidae	1.0 ± 1.4 (20.0)	15.2 ±26.8 (0.4)	50.0	17.6
OSTEICHTHYES	1.5 ± 0.7 (60.0)	835.7 ±1447(23.5)	100.0	45.9
Pumpkinseed	0.5 ± 0.7 (20.0)	2709.8 ±2646(76.1)	50.0	36.5

Table H.67. October feeding habits of 6+ largemouth bass (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
OSTEICHTHYES				
Pumpkinseed	1.0 ± 0.0 (100.0)	1005.8 ± 0.0(100.0)	100.0	100.0

MONTHLY FEEDING HABITS OF MOUNTAIN WHITEFISH

Table H.68. April feeding habits of 1+ mountain whitefish (n=6) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	19.3 ± 45.9 (15.8)	3.2 ± 3.9 (17.3)	33.3	9.7
Leptoceridae	0.2 ± 0.4 (0.1)	0.03 ± 0.1 (0.2)	16.7	2.5
Phryganeidae	0.3 ± 0.8 (0.3)	0.2 ± 0.3 (0.9)	16.7	2.6
EPHEMEROPTERA				
Baetidae	1.0 ± 2.0 (0.8)	0.03 ± 0.1 (0.2)	33.3	5.0
ODONATA				
Coenagriidae	0.8 ± 2.0 (0.7)	0.03 ± 0.1 (0.2)	16.7	2.6
HYDRACARINA	0.3 ± 0.5 (0.3)	0.5 ± 0.7 (2.5)	33.3	5.3
DIPTERA				
Chironomidae larvae	81.7 ± 79.2 (66.8)	6.4 ± 5.5 (34.2)	100.0	30.4
Chironomidae pupae	9.1 ± 10.5 (7.4)	1.4 ± 1.2 (7.5)	66.7	12.3
Tipulidae	0.5 ± 0.8 (0.4)	1.5 ± 2.6 (8.0)	33.3	6.1
Simuliidae	6.0 ± 14.2 (4.9)	5.3 ± 9.1 (28.3)	33.3	10.7
CLADOCERA				
Chydoridae	1.0 ± 1.7 (0.8)	0.03 ± 0.1 (0.2)	33.3	5.0
NEMATODA	1.5 ± 0.0 (1.2)	0.03 ± 0.1 (0.2)	33.3	5.0
TERRESTRIAL INSECTA	0.2 ± 0.4 (0.1)	0.03 ± 0.1 (0.2)	16.7	2.5

Table H.69. April feeding habits of 2+ mountain whitefish (n=14) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.9 ± 1.6 (0.3)	0.6 ± 1.6 (1.9)	35.7	6.9
Leptoceridae	0.2 ± 0.8 (0.1)	0.1 ± 0.2 (0.2)	7.1	1.3
Brachycentridae	0.1 ± 0.3 (0.03)	0.1 ± 0.2 (0.2)	7.1	1.3
EPHEMEROPTERA				
Baetidae	3.0 ± 10.7 (1.1)	0.4 ± 0.9 (1.1)	14.3	3.0
COLEOPTERA				
Elmidae	0.1 ± 0.5 (0.1)	0.2 5± 0.4 (0.6)	7.1	1.4
HYDRACARINA	0.3 ± 0.8 (0.1)	0.03 ± 0.1 (0.1)	14.3	2.6
DIPTERA				
Chironomidae larvae	250.1 ± 211.1 (90.6)	28.3 ± 31.9 (85.8)	78.6	46.4
Chironomidae pupae	16.8 ± 21.6 (6.1)	2.4 ± 1.8 (7.2)	78.6	16.7
Tipulidae	0.3 ± 0.7 (0.1)	0.1 ± 0.1 (0.2)	7.1	1.3
Simuliidae	0.2 ± 0.6 (0.1)	0.2 ± 0.5 (0.7)	14.3	2.8
COPEPODA				
Cyclopoid	0.3 ± 0.6 (0.1)	0.2 ± 0.4 (0.6)	21.4	4.0
CLADOCERA				
Chydoridae	1.0 ± 2.1 (0.4)	0.2 ± 0.4 (0.1)	35.7	6.6
OSTRACODA	1.4 ± 5.1 (0.5)	0.1 ± 0.2 (0.3)	7.1	1.4
NEMATODA	0.2 ± 0.6 (0.1)	0.1 ± 0.2 (0.3)	14.3	2.7
TERRESTRIAL INSECTA	0.4 ± 1.3 (0.1)	0.03 ± 0.1 (0.1)	7.1	1.3

Table H.70. April feeding habits of 3+ mountain whitefish (n=35) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	9.2 ±33.2 (4.6)	3.3 ± 6.6 (1.8)	37.1	6.0
Limnephilidae	0.8 ± 3.2 (0.4)	1.3 ± 3.1 (0.7)	2.8	.5
Leptoceridae	1.7 ± 3.5 (0.8)	6.4 ±12.4 (3.4)	31.4	4.9
Phryganeidae	2.2 ± 6.1 (1.1)	21.3 ±58.8 (11.4)	17.1	4.0
Hydropsychidae	0.03 ± 0.2 (0.01)	0.1 ± 0.2 (0.03)	2.8	.4
Brachycentridae	0.5 ± 2.2 (0.2)	0.8 ± 2.2 (0.4)	8.6	1.3
Rhyacophilidae	0.1 ± 0.5 (0.1)	0.3 ± 0.9 (0.2)	8.6	1.2
EPHEMEROPTERA				
Baetidae	0.9 ± 3.9 (0.5)	0.6 ± 1.1 (0.4)	17.1	2.5
Ephemerellidae	0.1 ± 0.4 (0.1)	0.8 ± 2.1 (0.4)	8.6	1.2
Heptageniidae	0.5 ± 2.1 (0.3)	0.2 ± 0.8 (0.1)	5.7	.8
ODONATA				
Coenagriidae	31.1 ±50.4 (15.7)	87.6 ±157.6(46.8)	62.8	17.2
COLEOPTERA	0.1 ± 0.5 (0.04)	0.03 ± 0.1 (0.01)	2.8	.4
HYDRACARINA	1.0 ± 1.7 (0.5)	0.5 ± 3.1 (1.7)	42.8	6.2
LEPIDOPTERA	0.2 ± 0.7 (0.1)	0.4 ± 0.9 (0.2)	8.6	1.2
DIPTERA				
Chironomidae larvae	104.4 ±140.6 (52.7)	41.0 ±58.3 (21.9)	97.1	23.6
Chironomidae pupae	21.0 ±93.0 (10.6)	3.9 ±10.9 (2.1)	57.1	9.6
Tipulidae	4.1 ±12.7 (2.1)	3.3 ± 7.1 (1.8)	17.1	2.9
Empididae	0.1 ± 0.2 (0.03)	0.1 ± 0.2 (0.03)	2.8	.4
Simuliidae	0.1 ± 0.3 (0.03)	0.02 ± 0.04 (0.01)	2.8	.4
Amphizoidae	0.1 ± 0.7 (0.1)	0.5 ± 1.7 (0.26)	2.8	.4
CLADOCERA				
Daphnidae	0.03 ± 0.2 (0.01)	0.1 ± 0.2 (0.03)	2.8	.4
Chydoridae	11.9 ±70.6 (6.0)	1.2 ± 3.9 (0.6)	5.7	1.7
AMPHIPODA				
Gammaridae	2.1 ± 8.0 (1.1)	1.3 ± 3.8 (0.7)	25.7	3.8
OSTRACODA	0.6 ± 1.8 (0.3)	0.03 ± 0.1 (0.01)	17.1	2.4
GASTROPODA				
Planorbidae	0.3 ± 0.6 (0.2)	0.9 ± 1.0 (0.5)	25.7	3.6
Lymnaeidae	0.4 ± 1.8 (0.2)	3.9 ± 9.8 (2.1)	5.7	1.0
Curculionidae	0.7 ± 3.9 (0.3)	3.8 ±13.1 (2.02)	2.8	.7
ANNELIDA	3.7 ±21.8 (1.9)	0.8 ± 2.9 (0.4)	2.8	.7
TERRESTRIAL INSECTA	0.03 ± 0.2 (0.01)	0.1 ± 0.4 (0.1)	2.8	.4

Table H.71. April feeding habits of 4+ mountain whitefish (n=36) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	5.6 ±21.9 (2.1)	2.8 ± 5.4 (1.3)	33.3	5.5
Limnephilidae	0.03 ± 0.2 (0.01)	0.1 ± 0.4 (0.1)	2.8	0.4
Leptoceridae	2.6 ±11.8 (1.0)	0.8 ± 2.6 (0.4)	22.2	3.5
Phryganeidae	0.7 ± 1.8 (0.2)	18.2 ±48.8 (8.4)	19.4	4.2
Brachycentridae	1.0 ± 5.8 (0.4)	0.6 ± 2.4 (0.3)	2.8	0.5
EPHEMEROPTERA				
Baetidae	0.03 ± 0.2 (0.01)	0.1 ± 0.5 (0.1)	2.8	0.4
Ephemerellidae	0.4 ± 1.6 (0.2)	2.0 ± 7.6 (0.9)	11.1	1.8
ODONATA				
Coenagriidae	21.9 ±38.2 (8.3)	49.5 ±71.4 (23.0)	47.2	11.7
Libellulidae	0.1 ± 0.3 (0.02)	7.6 ±29.2 (3.5)	2.8	.9
COLEOPTERA				
Elmidae	0.1 ± 0.3 (0.03)	0.2 ± 0.4 (0.1)	8.3	1.2
HYDRACARINA	2.2 ± 6.2 (0.9)	1.2 ± 2.1 (0.5)	50.0	7.6
DIPTERA				
Chironomidae larvae	164.9 ±217.0 (62.2)	88.4 ±138.1(41.1)	88.9	28.6
Chironomidae pupae	43.2 ±150.2 (16.3)	1.2 ± 3.2 (6.3)	58.3	12.0
Tipulidae	0.7 ± 3.4 (0.3)	1.2 ± 3.2 (0.6)	8.3	1.4
Ceratopogonidae	0.1 ± 0.5 (0.03)	0.1 ± 0.2 (0.02)	2.8	0.4
Simuliidae	0.03 ± 0.2 (0.01)	0.03 ± 0.1 (0.02)	2.8	0.4
CLADOCERA				
Chydoridae	0.1 ± 0.5 (0.1)	0.03 ± 0.1 (0.01)	8.3	1.3
AMPHIPODA				
Gammaridae	0.5 ± 1.4 (0.2)	0.2 ± 0.4 (0.1)	19.4	2.9
OSTRACODA	0.4 ± 0.9 (0.1)	0.03 ± 0.1 (0.02)	22.2	3.3
GASTROPODA				
Planorbidae	0.2 ± 0.6 (0.1)	1.5 ± 5.2 (0.7)	11.1	1.8

Table H.72. April feeding habits of 5+ mountain whitefish (n=4) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Limnephilidae	2.0 ± 4.0 (3.2)	2.5 ± 4.3 (1.7)	25.0	4.0
Leptoceridae	0.2 ± 0.5 (0.4)	0.1 ± 0.2 (0.1)	25.0	3.4
Hydropsychidae	0.8 ± 1.5 (1.2)	13.0 ±22.6 (10.2)	25.0	4.9
Brachycentridae	1.0 ± 1.4 (1.6)	7.6 ±13.1 (5.3)	50.0	7.6
EPHEMEROPTERA				
Baetidae	3.0 ± 5.4 (4.8)	0.8 ± 1.4 (0.6)	50.0	7.4
ODONATA				
Coenagriidae	15.0 ±22.7 (24.2)	15.6 ±23.0 (11.9)	50.0	11.5
COLEOPTERA				
Elmidae	0.2 ± 0.5 (0.4)	0.2 ± 0.4 (0.2)	25.0	3.4
DIPTERA				
Chironomidae larvae	34.2 ±55.5 (55.2)	4.0 ± 5.4 (2.8)	75.0	17.7
Chironomidae pupae	0.5 ± 0.1 (0.8)	0.6 ± 1.0 (0.4)	25.0	3.5
Empididae	0.2 ± 0.5 (0.4)	0.2 ± 0.4 (0.1)	25.0	.35
CLADOCERA				
Chydoridae	1.2 ± 2.5 (2.0)	0.03 ± 0.1 (0.02)	25.0	3.6
AMPHIPODA				
Gammaridae	0.2 ± 0.5 (0.4)	0.03 ± 0.1 (0.02)	25.0	3.4
OSTRACODA	0.2 ± 0.5 (0.4)	0.03 ± 0.1 (0.02)	25.0	3.4
GASTROPODA				
Lymnaeidae	1.5 ± 1.9 (2.4)	7.3 ± 8.5 (5.1)	50.0	7.7
OLIGOCHAETA				
Lumbriculidae	1.3 ± 2.5 (2.0)	152.4 ±264.0(61.4)	25.0	11.8
TERRESTRIAL INSECTA	0.2 ± 0.5 (0.4)	0.03 ± 0.1 (0.02)	25.0	3.4

Table H.73. April feeding habits of 6+ mountain whitefish (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
ODONATA				
Coenagriidae	54.0 ± 0.0 (81.8)	48.7 ± 0.0 (96.1)	100.0	55.6
DIPTERA				
Chironomidae larvae	11.0 ± 0.0 (16.7)	1.9 ± 0.0 (3.7)	100.0	24.1
AMPHIPODA				
Gammaridae	1.0 ± 0.0 (1.5)	0.1 ± 0.0 (0.2)	100.0	20.3

Table H.74. June feeding habits of 1+ mountain whitefish (n=7) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.6 ± 1.1 (0.4)	0.2 ± 0.0 (1.1)	28.6	5.9
EPHEMEROPTERA				
Baetidae	3.0 ± 5.1 (2.2)	0.8 ± 0.0 (4.3)	42.8	9.6
ODONATA				
Coenagriidae	0.1 ± 0.4 (0.1)	0.7 ± 0.0 (3.7)	14.3	3.5
HYDRACARINA	1.7 ± 4.1 (1.2)	0.1 ± 0.0 (0.5)	28.6	5.9
DIPTERA				
Chironomidae larvae	131.4 ±142.8 (94.8)	16.3 ± 0.0 (86.7)	100.0	54.9
Chironomidae pupae	0.1 ± 0.4 (0.1)	0.1 ± 0.0 (0.5)	14.2	2.9
Tipulidae	0.1 ± 0.4 (0.1)	0.1 ± 0.0 (0.5)	14.2	2.9
Simuliidae	0.3 ± 0.8 (0.2)	0.1 ± 0.0 (0.5)	14.2	2.9
COPEPODA				
Cyclopoid	0.1 ± 0.4 (0.1)	0.1 ± 0.0 (0.5)	14.2	2.9
CLADOCERA				
Chydoridae	0.1 ± 0.4 (0.1)	0.1 ± 0.0 (0.5)	14.2	2.9
GASTROPODA				
Planorbidae	0.1 ± 0.4 (0.1)	0.1 ± 0.0 (0.5)	14.2	2.9
BIVALVE				
Sphaeriidae	0.3 ± 0.8 (0.2)	0.1 ± 0.0 (0.5)	14.2	2.9

Table H.75. June feeding habits of 2+ mountain whitefish (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Leptoceridae	11.5 ±16.3 (63.9)	17.9 ±25.3 (91.8)	50.0	46.8
EPHEMEROPTERA				
Baetidae	4.0 ± 5.7 (22.2)	0.9 ± 1.3 (4.9)	50.0	17.5
ODONATA				
Coenagriidae	0.5 ± 0.7 (2.8)	0.4 ± 0.6 (2.3)	50.0	12.5
DIPTERA				
Chironomidae larvae	2.0 ± 0.7 (11.1)	0.2 ± 0.1 (1.0)	100.0	23.2

Table H.76. June feeding habits of 3+ mountain whitefish (n=4) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ±SD (%)	%	%
TRICHOPTERA				
Leptoceridae	23.2 ±31.4 (47.9)	19.2 ±25.5 (13.9)	75.0	22.8
Brachycentridae	6.5 ±13.0 (13.4)	0.5 ± 0.9 (0.4)	25.0	6.5
ODONATA				
Coenagriidae	2.0 ± 3.4 (4.1)	4.1 ± 6.9 (3.0)	50.0	9.5
LEPIDOPTERA	0.2 ± 0.5 (0.5)	0.4 ± 0.6 (0.3)	25.0	4.3
DIPTERA				
Chironomidae larvae	1.5 ± 2.4 (3.1)	13.5 ±22.5 (9.8)	50.0	10.5
Chironomidae pupae	12.5 ±25.0 (25.8)	97.4 ±168.0(70.7)	25.0	20.3
Simuliidae	0.5 ± 0.1 (1.0)	0.03 ± 0.1 (0.02)	25.0	4.3
AMPHIPODA				
Gammaridae	0.2 ± 0.5 (0.5)	1.5 ± 2.5 (1.1)	25.0	4.4
GASTROPODA				
Planorbidae	0.2 ± 0.5 (0.5)	0.6 ± 1.0 (0.4)	25.0	4.3
Lymnaeidae	0.2 ± 0.5 (0.5)	0.03 ± 0.1 (0.02)	25.0	4.3
TERRESTRIAL INSECTA	1.0 ± 2.0 (2.1)	0.03 ± 0.1 (0.02)	25.0	4.5
BIVALVE				
Sphaeriidae	0.2 ± 0.5 (0.5)	0.03 ± 0.1 (0.02)	25.0	4.3

Table H.77. June feeding habits of 4+ mountain whitefish (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	21.0 ±29.7 (76.4)	2.6 ± 3.6 (3.1)	50.0	37.0
DIPTERA				
Chironomidae larvae	6.5 ± 6.4 (23.6)	78.6 ±109.3(96.9)	100.0	63.0

Table H.78. June feeding habits of 6+ mountain whitefish (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
HYDRACARINA	18.0 ± 0.0 (54.6)	0.2 ± 0.0 (1.2)	100.0	26.0
DIPTERA				
Chironomidae larvae	1.0 ± 0.0 (3.0)	0.01 ± 0.0 (0.1)	100.0	17.2
GASTROPODA				
Planorbidae	11.0 ± 0.0 (33.3)	16.5 ± 0.0 (97.6)	100.0	38.5
TERRESTRIAL INSECTA	3.0 ± 0.0 (9.1)	0.1 ± 0.0 (0.6)	100.0	18.3

Table H.79. July feeding habits of 0+ mountain whitefish (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae larvae	14.0 ± 0.0 (100.0)	0.1 ± 0.0(100.0)	100.0	100.0

Table H.80. July feeding habits of 1+ mountain whitefish (n=5) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	39.0 ±52.2 (23.3)	1.2 ± 1.9 (13.6)	60.0	19.4
Brachycentridae	0.6 ± 1.3 (0.4)	0.02 ± 0.04 (0.2)	20.0	4.1
ODONATA				
Coenagriidae	0.2 ± 0.4 (0.1)	0.3 ± 0.7 (3.7)	20.0	4.8
COLEOPTERA				
Elmidae	0.2 ± 0.4 (0.1)	0.3 ± 0.6 (3.2)	20.0	4.7
HYDRACARINA	0.2 ± 0.4 (0.1)	0.04 ± 0.1 (0.5)	20.0	4.1
DIPTERA				
Chironomidae larvae	90.0 ±177.5 (53.7)	1.8 ± 3.4 (20.2)	80.0	30.8
Chironomidae pupae	31.8 ±67.3 (18.9)	4.7 ±10.5 (54.2)	40.0	22.6
CLADOCERA				
Chydoridae	0.2 ± 0.4 (0.1)	0.02 ± 0.04 (0.2)	20.0	4.0
AMPHIPODA				
Gammandae	5.2 ±11.6 (3.1)	0.3 ± 0.8 (3.9)	20.0	5.4

Table H.81. July feeding habits of 2+ mountain whitefish (n=3) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	1.7 ± 2.1 (0.6)	1.3 ± 0.0 (3.1)	66.6	11.1
Rhyacophilidae	0.3 ± 0.6 (0.1)	0.1 ± 0.0 (0.2)	33.3	5.3
EPHEMEROPTERA				
Tricorythidae	0.3 ± 0.6 (0.1)	0.1 ± 0.0 (0.2)	33.3	5.3
DIPTERA				
Chironomidae larvae	15.3 ±26.6 (5.3)	0.1 ± 0.0 (0.2)	33.3	6.1
Chironomidae pupae	2.3 ± 1.5 (0.8)	0.1 ± 0.0 (0.2)	100.0	1.6
Ceratopogonidae	0.3 ± 0.6 (0.1)	0.1 ± 0.0 (0.2)	33.3	5.3
Empididae	0.3 ± 0.6 (0.1)	0.1 ± 0.0 (0.2)	33.3	5.3
COPEPODA				
Cyclopoid	0.3 ± 0.6 (0.1)	0.1 ± 0.0 (0.2)	33.3	5.3
TERRESTRIAL INSECTA	0.3 ± 0.6 (0.1)	0.1 ± 0.0 (0.2)	33.3	5.3
FISH EGGS	266 ±460.1 (92.6)	39.6 ± 0.0 (94.7)	33.3	34.8

Table H.82. July feeding habits of 3+ mountain whitefish (n=8) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Limnephilidae	7.4 ±17.5 (8.2)	8.4 ±14.6 (29.7)	25.0	12.9
Leptoceridae	1.6 ± 4.6 (1.8)	14.5 ±22.4 (51.5)	12.5	13.5
Hydropsychidae	1.9 ± 5.3 (2.1)	0.7 ± 1.6 (2.6)	12.5	3.5
EPHEMEROPTERA				
Ephemerellidae	0.1 ± 0.4 (0.1)	0.5 ± 1.0 (1.6)	12.5	2.9
COLEOPTERA				
Elmidae	0.6 ± 1.8 (0.7)	1.5 ± 3.4 (5.5)	12.5	3.8
HYDRACARINA	0.4 ± 0.5 (0.4)	0.5 ± 0.6 (1.7)	37.5	8.1
DIPTERA				
Chironomidae larvae	2.9 ± 4.8 (3.2)	0.3 ± 0.6 (0.9)	62.5	13.6
Chironomidae pupae	1 0 ± 1.4 (1.1)	0.5 ± 1.1 (1.8)	50.0	10.9
COPEPODA				
Cyclopoid	0.1 ± 0.4 (0.1)	0.1 ± 0.0 (0.2)	12.5	2.6
CLADOCERA				
Chydoridae	73.1 ±206.8 (81.6)	0.8 ± 1.8 (2.9)	12.5	19.9
AMPHIPODA				
Gammandae	0.1 ± 0.4(0.1)	0.2 ± 0.5 (0.8)	12..5	2.7
TERRESTRIAL INSECTA	0.2 ± 0.5 (03)	0.2 ± 0.5 (0.8)	25.0	5.4

Table H.83. July feeding habits of 4+ mountain whitefish (n=4) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Ephemerellidae	0.2 ± 0.4 (0.3)	0.4 ± 0.4 (9.6)	25.0	8.2
DIPTERA				
Chironomidae larvae	16.6 ±27.2 (22.8)	2.0 ± 2.6 (44.6)	100.0	39.4
Chironomidae pupae	9.2 ±18.9 (11.7)	0.8 ± 0.0 (19.3)	75.0	24.9
CLADOCERA				
Daphnidae	46.6 ±104.2 (65.6)	1.1 ± 1.56(26.5)	25.0	27.5

Table H.84. July feeding habits of 5+ mountain whitefish (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae pupae	1.0 ± 0.0 (100.0)	0.1 ± 0.0(100.0)	100.0	100.0

Table H.85. September feeding habits of 1+ mountain whitefish (n=10) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
HYDRACARINA	0.10 ± 0.32 (0.29)	0.05 ± 0.07 (0.04)	10.0	2 2
DIPTERA				
Chironomidae larvae	4.20 ± 7.38 (12.17)	0.10 ± 0.00 (0.09)	70.0	17.9
Chironomidae pupae	10.10 ± 16.82 (29.28)	5.30 ± 6.65 (4.59)	60.0	20.4
CLADOCERA				
Chydoridae	1 3 ± 4.11 (3.77)	0.05 ± 0.07 (0.04)	10.0	3.0
GASTROPODA				
Planorbidae	0.20 ± 0.63 (0.58)	2.0 ± 2.83 (1.73)	10.0	2.7
Lymnaeidae	1.4 ± 2.8 (4.06)	9.5 ± 13.44 (8.23)	30.0	9.2
TERRESTRIAL INSECTA	17.10 ± 16.64 (49.57)	98.0 ± 138.59(84.85)	70.0	44.5

Table H.86. September feeding habits of 2+ mountain whitefish (n=9) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.22 ± 0.67 (0.04)	350 ± 4.95 (4.43)	11.1	3.2
HYDRACARINA	0.33 ± 0.71 (0.06)	1.00 ± 1.41 (1.27)	22.2	4.8
LEPIDOPTERA	1.78 ± 5.33 (0.31)	1.75 ± 2 47 (2.21)	11.1	2.8
DIPTERA				
Chironomidae larvae	8.67 ± 11.58 (1.49)	8.55 ± 11.95(10.82)	66.7	16.2
Chironomidae pupae	0.22 ± 0.67 (0.04)	0.05 ± 0.07 (0.06)	11.1	2.3
COPEPODA				
Cyclopoid	0.22 ± 0.44 (0.04)	0.10 ± 0.14 (0.13)	22.2	4 6
CLADOCERA				
Daphnidae	565.56 ± 919.74(97.29)	31.60 ± 44.69(39.97)	33.3	34.9
AMPHIPODA				
Talitridae	0.11 ± 0.33 (0.02)	0.05 ± 0.07 (0.06)	11.1	2.3
Gammaridae	0.11 ± 0.33 (0.02)	0.05 ± 0.07 (0.06)	11.1	2.3
GASTROPODA				
Planorbidae	1.44 ± 2.30 (0.25)	31.65 ± 38.68(40.04)	44.4	17.3
Lymnaeidae	2.56 ± 4.28 (0.44)	0.65 ± 0.92 (0.82)	33.3	7.1
TERRESTRIAL INSECTA	0.11 ± 0.33 (0.02)	0.05 ± 0.07 (0.06)	11.1	2.3

Table H.87. September feeding habits of 3+ mountain whitefish (n=17) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	4.82 ± 12.81 (2.4)	3.4 ± 3.7 (4.5)	23.5	6.9
HYDRACARINA	0.53 ± 1.18 (0.3)	0.5 ± 0.8 (0.7)	23.5	5.6
DIPTERA				
Chironomidae larvae	36.59 ± 89.46 (18.6)	13.1 ± 13.5 (17.3)	52.9	20.1
Chironomidae pupae	2.53 ± 6.43 (1.3)	0.1 ± 0.2 (0.2)	29.4	7.0
Tipulidae	0.06 ± 0.24 (0.03)	0.03 ± 0.1 (0.04)	5.9	1.4
COPEPODA				
Cyclopoid	0.18 ± 0.73 (0.1)	0.03 ± 0.1 (0.04)	5.9	1.4
CLADOCERA				
Daphnidae	143.41 ± 373.16 (72.9)	5.1 ± 8.8 (6.7)	35.3	26.0
AMPHIPODA				
Talitridae	0.18 ± 0.73 (0.1)	0.03 ± 0.1 (0.04)	5.9	1.4
Gammandae	0.12 ± 0.49 (0.1)	0.03 ± 0.1 (0.04)	5.9	1.4
GASTROPODA				
Planorbidae	21.2 ± 0.33 (0.1)	1.7 ± 2.9 (2.2)	11.8	3.2
TERRESTRIAL INSECTA	8.24 ± 16.32 (4.2)	51.6 ± 82.7 (68.2)	41.2	25.7

Table H.88. September feeding habits of 4+ mountain whitefish (n=10) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.70 ± 1.64 (0.29)	0.10 ± 0.10 (0.2)	20.0	3.5
HYDRACARINA	0.90 ± 1.37 (0.37)	0.1 ± 0.2 (0.2)	40.0	7.0
DIPTERA				
Chironomidae larvae	29.40 ± 65.41 (11.99)	21.9 ± 33.9 (35.4)	70.0	20.2
Chironomidae pupae	4.5 ± 4.62 (1.84)	0.7 ± 1.1 (1.2)	60.0	10.9
Ceratopogonidae	0.20 ± 0.63 (0.08)	0.03 ± 0.1 (0.1)	10.0	1.8
COPEPODA				
Cyclopoid	0.10 ± 0.32 (0.04)	0.03 ± 0.2 (0.1)	10.0	1.7
CLADOCERA				
Daphnidae	2.20 ± 4.39 (0.90)	0.07 ± 0.06 (0.1)	30.0	5.3
Chydoridae	198.20 ± 466.07 (80.83)	11.47 ± 18.41 (18.5)	70.0	29.2
AMPHIPODA				
Talitridae	0.20 ± 0.42 (0.08)	0.03 ± 0.06 (0.1)	20.0	3.5
OSTRACODA				
GASTROPODA				
Planorbidae	5.50 ± 16.7 (2.24)	15.0 ± 25.55 (24.2)	20.0	8.0
Lymnaeidae	3.10 ± 8.49 (1.26)	12.23 ± 12.78 (19.8)	20.0	7.1
TERRESTRIAL INSECTA	0.10 ± 0.32 (0.04)	0.10 ± 0.17 (0.2)	10.0	1.8

Table H.89. September feeding habits of 5+ mountain whitefish (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	1 ± 0.0 (1.08)	0.1 ± 0.0 (0.44)	100.0	14.5
HYDRACARINA	1.0 ± 0.0 (1.08)	18.7 ± 0.0 (82.74)	100.0	26.3
DIPTERA				
Chironomidae larvae	5 ± 0.0 (5.38)	0.1 ± 0.0 (0.44)	100.0	15.1
Chironomidae pupae	11 ± 0.0 (11.83)	1.6 ± 0.0 (7.08)	100.0	17.0
CLADOCERA				
Chydoridae	75.0 ± 0.0 (80.65)	2.1 ± 0.0 (9.29)	100.0	27.1

Table H.90. September feeding habits of 7+ mountain whitefish (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae larvae	2.0 ± 0.0 (50.0)	0.1 ± 0.0 (50.0)	100.0	50.0
Chironomidae pupae	2.0 ± 0.0 (50.0)	0.1 ± 0.0 (50.0)	100.0	50.0

Table H.91. October feeding habits of 1+ mountain whitefish (n=4) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae larvae	7.0 ± 4.8 (44.4)	1.1 ± 1.3 (27.6)	100.0	43.0
Chironomidae pupae	3.5 ± 5.7 (22.2)	1.2 ± 0.4 (32.9)	50.0	26.3
TERRESTRIAL INSECTA	5.2 ± 8.9 (33.3)	1.5 ± 0.8 (39.5)	50.0	30.1

Table H.92. October feeding habits of 2+ mountain whitefish (n=6) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
HYDRACARINA	0.3 ± 0.5 (0.1)	0.1 ± 0.1 (1.0)	33.3	7.6
DIPTERA				
Chironomidae larvae	43.0 ±54.4 (17.8)	7.5 ± 6.2 (71.9)	83.3	38.4
Chironomidae pupae	3.8 ± 6.3 (1.6)	0.3 ± 0.5 (2.6)	33.3	8.3
CLADOCERA				
Daphnidae	191.8 ±469.4 (79.5)	2.3 ± 3.8 (21.7)	50.0	33.6
GASTROPODA				
Planorbidae	0.7 ± 1.6 (0.3)	0.03 ± 0.1 (0.3)	16.7	3.8
TERRESTRIAL INSECTA	1.5 ± 2.4 (0.6)	0.3 ± 0.5 (2.6)	33.3	8.1

Table H.93. October feeding habits of 3+ mountain whitefish (n=17) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	11.2 ±45.8 (7.6)	5.9 ±16.9 (13.2)	11.8	7.0
Leptoceridae	4.4 ±18.0 (3.0)	6.5 ±19.6 (14.5)	5.9	5.0
Brachycentridae	0.6 ± 4.3 (0.4)	0.01 ± 0.03 (0.02)	5.9	1.4
EPHEMEROPTERA				
Baetidae	0.3 ± 1.2 (0.2)	0.1 ± 0.4 (0.3)	5.9	1.4
HYDRACARINA	0.3 ± 0.7 (0.2)	0.03 ± 0.1 (0.1)	17.6	3.8
DIPTERA				
Chironomidae larvae	85.6 ±137.5 (58.4)	25.1 ±33.2 (55.8)	88.2	43.5
Chironomidae pupae	2.2 ± 8.0 (1.5)	0.4 ± 0.8 (0.8)	11.8	3.0
Tipulidae	0.1 ± 0.2 (0.04)	0.01 ± 0.03 (0.02)	5.9	1.3
Ceratopogonidae	0.2 ± 0.4 (0.1)	0.1 ± 0.3 (0.3)	17.6	3.9
CLADOCERA				
Daphnidae	35.4 ±145.5 (24.1)	0.6 ± 1.8 (1.4)	11.8	8.0
Chydoridae	0.1 ± 0.2 (0.04)	0.02 ± 0.04 (0.1)	5.9	1.3
AMPHIPODA				
Talitridae	0.5 ± 1.2 (0.3)	0.02 ± 0.04 (0.1)	17.6	3.9
Gammaridae	0.1 ± 0.2 (0.04)	0.01 ± 0.03 (0.02)	5.9	1.3
OSTRACODA	0.1 ± 0.5 (0.1)	0.1 ± 0.3 (0.3)	5.9	1.4
GASTROPODA				
Planorbidae	0.1 ± 0.2 (0.04)	0.1 ± 0.2 (0.1)	5.9	1.3
Lymnaeidae	2.4 ± 9.7 (1.6)	2.8 ± 8.4 (6.2)	5.9	2.9
TERRESTRIAL INSECTA	3.1 ±10.8 (2.1)	2.3 ± 6.6 (5.1)	23.9	6.7
BIVALVE				
Sphaeriidae	0.1 ± 0.3 (0.1)	0.8 ± 2.4 (1.8)	11.8	2.9

Table H.94. October feeding habits of 4+ mountain whitefish (n=7) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	36.9 ±63.4 (17.5)	18.8 ±42.0 (25.1)	71.4	19.5
Limnephilidae	0.1 ± 0.4 (0.1)	0.02 ± 0.04 (0.03)	14.3	2.5
Leptoceridae	1.4 ± 3.8 (0.7)	0.5 ± 1.2 (0.7)	28.6	5.1
ODONATA				
Coenagriidae	0.1 ± 0.4 (0.1)	0.02 ± 0.04 (0.03)	14.3	2.5
COLEOPTERA				
Elmidae	0.1 ± 0.4 (0.1)	0.12 ± 0.3 (0.2)	14.3	2.5
HYDRACARINA	0.4 ± 0.8 (0.2)	0.1 ± 0.1 (0.1)	28.6	4.9
DIPTERA				
Chironomidae larvae	167.4 ±183.2 (79.6)	51.0 ±40.6 (67.9)	100.0	42.4
COPEPODA				
Cyclopoid	0.1 ± 0.4 (0.1)	0.02 ± 0.04 (0.03)	14.3	2.5
CLADOCERA				
Daphnidae	0.4 ± 1.1 (0.2)	0.02 ± 0.04 (0.03)	14.3	2.5
Chydoridae	0.3 ± 0.5 (0.1)	0.02 ± 0.04 (0.03)	28.6	4.9
AMPHIPODA				
Talitridae	0.3 ± 0.8 (0.1)	0.02 ± 0.04 (0.03)	14.3	2.5
Gammaridae	0.1 ± 0.4 (0.1)	0.02 ± 0.04 (0.03)	14.3	2.5
GASTROPODA				
Lymnaeidae	2.1 ± 4.8 (1.0)	3.5 ± 7.5 (4.6)	14.3	3.4
TERRESTRIAL INSECTA	0.3 ± 0.8 (0.1)	0.9 ± 2.0 (1.2)	14.3	2.7

MONTHLY FEEDING HABITS OF BLACK CRAPPIE

Table H.95. April feeding habits of 3+ black crappie (n=9) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Leptoceridae	0.1 ± 0.3 (0.1)	0.02 ± 0.04 (0.1)	11.1	1.8
EPHEMEROPTERA				
Baetidae	7.6 ± 17.9 (1.4)	1.4 ± 1.1 (6.4)	55.6	10.0
DIPTERA				
Chironomidae larvae	12.7 ± 15.3 (2.3)	4.3 ± 4.5 (19.8)	77.8	15.8
Chironomidae pupae	10.4 ± 11.2 (2.0)	1.5 ± 1.4 (6.8)	88.9	15.4
COPEPODA				
Cyclopoid	483.5 ± 905.4 (88.6)	11.4 ± 11.7 (53.2)	66.7	32.9
CLADOCERA				
Chydoridae	24.2 ± 48.7 (4.4)	1.2 ± 1.4 (5.6)	77.8	13.9
AMPHIPODA				
Talitridae	2.0 ± 4.1 (0.4)	1.2 ± 1.2 (5.8)	22.2	4.5
OSTRACODA	2.2 ± 5.2 (0.4)	0.4 ± 0.4 (1.9)	33.3	5.6

Table H.96. April feeding habits of 4+ black crappie (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ±SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae pupae	1.0 ± 0.0 (50.0)	0.1 ± 0.0 (50.0)	100.0	50.0
CLADOCERA				
Chydoridae	1 ± 0.0 (50.0)	0.1 ± (50.0)	100.0	50.0

Table H.97. April feeding habits of 5+ black crappie (n=8) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	19.0 ± 13.6 (3.9)	5.8 ± 2.9 (14.5)	88.9	13.4
ODONATA				
Coenagriidae	0.25 ± 0.7 (0.1)	5.1 ± 5.5 (12.8)	12.5	3.2
HYDRACARINA	3.0 ± 7.0 (0.6)	0.4 ± 0.5 (1.0)	25.0	3.3
DIPTERA				
Chironomidae larvae	105.1 ±110.4 (21.6)	8.6 ±11.9 (21.5)	87.5	16.3
Chironomidae pupae	12.6 ±15.0 (2.6)	2.8 ± 2.3 (7.1)	75.0	10.6
Culicidae	5.8 ±12.4 (1.2)	0.9 ± 1.3 (2.3)	25.0	3.6
COPEPODA				
Cyclopoid	25.6 ±68.5 (5.2)	1.1 ± 1.1 (2.8)	75.0	10.4
CLADOCERA				
Chydoridae	275.8 ±688.7 (56.7)	10.6 ± 9.7 (26.5)	87.5	21.3
AMPHIPODA				
Gammaridae	5.1 ±13.3 (1.1)	2.5 ± 2.3 (6.3)	50.0	7.2
OSTRACODA	2.4 ± 3.7 (0.5)	0.2 ± 0.2 (0.4)	50.0	6.4
OSTEICHTHYES	31.0 ±79.5 (6.4)	1.9 ± 4.3 (4.8)	25.0	4 5

Table H.98. April feeding habits of 6+ black crappie (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	76.0 ± 0.0 (21.5)	0.9 ± 1.6 (8.5)	100.0	14.5
ODONATA				
Coenagriidae	32.0 ± 0.0 (9.1)	6.7 ±11.6 (61.3)	100.0	18.9
DIPTERA				
Chironomidae larvae	70.0 ± 0.0 (19.8)	1.6 ± 2.7 (14.6)	100.0	14.9
Chironomidae pupae	5.0 ± 0.0 (1.4)	0 1 ± 0.1 (0.9)	100.0	11.4
CLADOCERA				
Daphnidae	147.0 ± 0.0 (41.6)	0.5 ± 0.9 (4.9)	100.0	16.3
AMPHIPODA				
Gammandae	22.0 ± 0.0 (6.2)	2.5 ± 0.8 (7.6)	100.0	12.7
OSTRACODA	1.0 ± 0.0 (0.3)	0.2 ± 0.3 (1.8)	100.0	11.4

Table H.99. April feeding habits of 7+ black crappie (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Phryganeidae	0.5 ± 0.7 (0.4)	0.5 ± 0.7 (7.6)	50.0	12.9
EPHEMEROPTERA				
Tricorythidae	78.0 ±110.3 (70.3)	3.5 ± 5.0 (53.0)	50.0	38.5
ODONATA				
Coenagriidae	2.5 ± 3.5 (2.2)	2.0 ± 2.8 (30.3)	50.0	18.3
COPEPODA				
Cyclopoid	2.5 ± 3.5 (2.2)	0.1 ± 0.1 (0.8)	50.0	11.8
CLADOCERA				
Daphnidae	27.5 ±38.9 (24.8)	0.6 ± 0.8 (8.3)	50.0	18.5

Table H.100. June feeding habits of 3+ black crappie (n=14) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	9.4 ±21.8 (0.3)	0.1 ± 0.1 (0.3)	42.9	6.0
EPHEMEROPTERA				
Tricorythidae	3.9 ±14.4 (0.14)	2.7 ± 4.7 (7.3)	7.1	2.0
ODONATA				
Coenagriidae	0.4 ± 1.2 (0.02)	0.1 ± 0.2 (0.3)	14.3	2.0
HYDRACARINA	0.9 ± 2.4 (0.03)	0.2 ± 0.4 (0.5)	14.3	2.0
DIPTERA				
Chironomidae larvae	15.7 ±17.3 (0.6)	7.4 ±10.2 (19.9)	92.8	15.7
Chironomidae pupae	9.3 ±15.2 (0.2)	2.5 ± 4.2 (6.7)	57.1	8.9
COPEPODA				
Cyclopoid	71.1 ±228.7 (2.5)	1.7 ± 3.3 (4.6)	57.1	8.9
CLADOCERA				
Daphnidae	0.3 ± 0.8 (0.01)	0.03 ± 0.06 (0.1)	14.3	2.0
Chydoridae	2683 ±3587 (95.8)	21.5 ±21.7 (58.0)	100.0	35.2
Sididae	0.9 ±2.7 (0.03)	0.2 ± 0.4 (0.6)	14.3	2.1
AMPHIPODA				
Gammandae	1.7 ± 3.8 (0.1)	0.1 ± 0.03 (0.1)	35.7	5.0
OSTRACODA	5.2 ±10.6 (0.2)	0.1 ± 0.1 (0.2)	64.3	9.0
OSTEICHTHYES	3.4 ±12.6 (0.1)	0.5 ± 0.9 (1.4)	7.1	1.2

Table H.101. June feeding habits of 4+ black crappie (n=6) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.5 ± 1.2 (0.05)	0.1 ± 0.1 (0.5)	33.3	4.7
ODONATA				
Coenagriidae	0.2 ± 0.4 (0.02)	2.1 ± 2.9 (9.6)	16.7	3.7
HYDRACARINA	1.2 ± 2.4 (0.1)	0.05 ± 0.1 (0.2)	16.7	2.4
DIPTERA				
Chironomidae larvae	29.5 ±23.8 (3.0)	6.1 ± 8.5 (27.9)	100.0	18.3
Chironomidae pupae	8.5 ±15.4 (0.9)	2.3 ± 3.2 (10.6)	66.7	10.9
COPEPODA				
Cyclopoid	12.2 ±13.2 (1.2)	0.05 ± 0.1 (0.2)	66.7	9.5
Calanoid	7.7 ±18.8 (0.8)	0.05 ± 0.1 (0.2)	16.7	2.5
CLADOCERA				
Chydoridae	912 ±1007 (91.9)	10.1 ±13.7(46.3)	83.3	30.9
Leptadoridae	16.8 ±34.0 (1.7)	0.8 ± 1.2 (3.9)	33.3	5.4
OSTRACODA	3.3 ± 4.9 (0.3)	0.05 ± 0.1 (0.2)	66.7	9.4
TERRESTRIAL INSECTA	0.8 ± 2.0 (0.1)	0.05 ± 0.1 (0.2)	16.7	2.4

Table H.102. June feeding habits of 5+ black crappie (n=9) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	2.6 ± 7.7 (0.3)	0.03 ± 0.05 (0.1)	22.2	3.3
EPHEMEROPTERA				
Baetidae	6.8 ±19.9 (0.7)	0.03 ± 0.05 (0.1)	22.2	3.4
Ephemerellidae	3.6 ± 8.4 (0.4)	0.03 ± 0.05 (0.1)	22.2	3.4
ODONATA				
Coenagriidae	1.5 ± 3.2 (0.2)	1.8 ± 3.6 (5.4)	33.3	5.7
DIPTERA				
Chironomidae larvae	81.9 ±150.2 (8.8)	2.6 ± 3.1 (7.8)	88.9	15.6
Chironomidae pupae	33.3 ±90.9 (3.8)	0.5 ± 0.9 (1.6)	55.6	9.0
Muscidae	0.1 ± 0.3 (0.01)	0.03 ± 0.1 (0.1)	11.1	1.7
COPEPODA				
Cyclopoid	35.2 ±57.7 (3.8)	0.5 ± 0.7 (1.5)	66.7	10.6
CLADOCERA				
Chydoridae	714 ±1732 (78.0)	3.4 ± 6.6 (10.3)	66.7	22.9
OSTRACODA	1.2 ± 2.5 (0.1)	0.05 ± 0.06 (0.2)	22.2	3.3
OSTEICHTHYES	28.6 ±85.7 (3.1)	24.3 ±48.6 (72.4)	11.1	12.8
TERRESTRIAL INSECTA	1.7 ± 2.3 (0.2)	0.2 ± 0.4 (0.6)	55.6	8.3

Table H.103. July feeding habits of 1+ black crappie (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae larvae	13.0 ± 0.0 (5.4)	0.1 ± 0.7 (14.3)	100.0	13.3
COPEPODA				
Cyclopoid	167 ± 0.0 (68.7)	0.1 ± 0.7 (14.3)	100.0	20.3
Calanoid	4.0 ± 0.0 (1.6)	0.1 ± 0.7 (14.3)	100.0	12.9
CLADOCERA				
Daphnidae	1.0 ± 0.0 (0.4)	0.1 ± 0.7 (14.3)	100.0	12.7
Chydoridae	18.0 ± 0.0 (7.4)	0.1 ± 0.7 (14.3)	100.0	13.5
AMPHIPODA				
Gammaridae	1.0 ± 0.0 (0.4)	0.1 ± 0.7 (14.3)	100.0	12.7
OSTRACODA	39.0 ± 0.0 (16.1)	0.1 ± 0.7 (14.3)	100.0	14.5

Table H.104. July feeding habits of 3+ black crappie (n=11) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Ephemerellidae	0.4 ± 1.2 (0.1)	0.7 ± 1.6 (5.6)	9.1	2.6
Tricorythidae	0.1 ± 0.3 (0.02)	0.2 ± 0.04 (0.1)	9.1	1.6
HYDRACARINA	0.1 ± 0.3 (0.02)	0.02 ± 0.04 (0.1)	9.1	1.6
DIPTERA				
Chironomidae larvae	2.8 ± 3.7 (0.7)	0.2 ± 1.2 (1.2)	42.8	7.8
Chironomidae pupae	2.4 ±3.9 (0.6)	0.6 ± 1.1 (4.6)	54.5	10.5
Ceratopogonidae	0.9 ± 2.4 (0.2)	0.3 ± 0.5 (2.6)	18.2	3.7
COPEPODA				
Cyclopoid	62.0 ±149.4 (15.4)	1.7 ± 3.6 (13.5)	81.8	19.4
CLADOCERA				
Daphnidae	119.6 ±209.8 (29.7)	0.7 ± 1.7 (5.8)	63.6	17.4
Chydoridae	191.4 ±498 (47.6)	3.3 ± 6.4 (27.1)	36.4	19.5
OSTRACODA	0.2 ± 0.4 (0.1)	0.02 ± 0.04 (0.1)	18.2	3.2
OSTEICHTHYES	22.4 ±52.4 (5.6)	4.8 ± 7.5 (39.1)	27.3	12.6

Table H.105. July feeding habits of 4+ black crappie (n=10) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Leptoceridae	0.2 ± 0.6 (0.02)	0.4 ± 0.9 (1.3)	10.0	2.1
EPHEMEROPTERA				
Ephemerellidae	0.8 ± 2.5 (0.1)	0.03 ± 0.05 (0.1)	10.0	1.9
ODONATA				
Coenagriidae	0.1 ± 0.3 (0.01)	0.3 ± 0.6 (0.9)	10.0	2.0
DIPTERA				
Chironomidae larvae	2.9 ± 4.5 (0.3)	0.2 ± 0.2 (0.6)	60.0	11.3
Chironomidae pupae	1.3 ± 2.0 (0.1)	0.1 ± 0.1 (0.2)	50.0	9.3
Ceratopogonidae	0.4 ± 1.3 (0.03)	0.03 ± 0.1 (0.1)	10.0	1.9
COPEPODA				
Cyclopoid	389.9 ±1175.3(33.7)	18.6 ±37.0 (53.5)	70.0	29.1
CLADOCERA				
Daphnidae	671.4 ±878.2 (58.1)	13.8 ±16.2 (39.8)	70.0	31.1
Chydoridae	86.7 ±273.8 (7.5)	1.1 ± 2.0 (3.0)	20.0	5.6
AMPHIPODA				
Gammaridae	1.5 ± 4.7 (0.1)	0.03 ± 0.05 (0.1)	10.0	1.9
OSTRACODA	0.2 ± 0.6 (0.02)	0.03 ± 0.05 (0.1)	10.0	1.9
TERRESTRIAL INSECTA	0.1 ± 0.3 (0.01)	0.1 ± 0.2 (0.4)	10.0	1.9

Table H.106. July feeding habits of 5+ black crappie (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
ODONATA				
Coenagriidae	2.0 ± 2.8 (10.3)	3.9 ± 0.0 (54.2)	50.0	25.4
DIPTERA				
Chironomidae larvae	4.0 ± 1.4 (20.5)	1.7 ± 0.0 (23.6)	100.0	32.0
Chironomidae pupae	13.5 ±13.4 (69.2)	1.6 ± 0.0 (22.2)	100.0	42.5

Table H.107. September feeding habits of 0+ black crappie (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
CLADOCERA				
Daphnidae	106 ± 0.0 (100.0)	4.0 ± 0.0(100.0)	100.0	100.0

Table H.108. September feeding habits of 3+ black crappie (n=7) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	4.1 ± 10.9 (0.1)	0.2 ± 0.3 (1.6)	14.3	3.0
EPHEMEROPTERA				
Baetidae	2.1 ± 3.4 (0.1)	0.02 ± 0.04 (0.2)	42.9	8.2
HYDRACARINA	0.9 ± 1.9 (0.02)	0.02 ± 0.04 (0.2)	28.6	5.4
DIPTERA				
Chironomidae larvae	3.0 ± 4.8 (0.1)	0.04 ± 0.1 (0.4)	42.8	8.2
Chironomidae pupae	6.3 ± 16.6 (0.2)	0.2 ± 0.5 (2.5)	14.3	3.2
COPEPODA				
Calanoid	4.4 ± 11.7 (0.1)	0.1 ± 0.3 (1.2)	14.3	3.0
CLADOCERA				
Daphnidae	3694 ±3498 (98.6)	4.5 ± 6.1 (46.0)	71.4	40.9
Chydoridae	3.7 ± 6.1 (0.1)	0.1 ± 0.1 (0.6)	57.1	11.0
Sididae	13.9 ±36.7 (0.4)	2.7 ± 6.0 (27.6)	14.3	8.0
AMPHIPODA				
Gammaridae	1.0 ± 2.6 (0.03)	0.6 ± 0.8 (6.0)	14.3	3.8
OSTEICHTHYES	.08 ± 1.6 (.0001)	1.3 ± 2.8 (13.0)	14.3	5.2

Table H.109. September feeding habits of 4+ black crappie (n=6) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae larvae	0.2 ± 0.8 (0.1)	1.0 ± 2.2 (0.8)	33.0	8.9
COPEPODA				
Calanoid	2.3 ± 3.6 (0.6)	0.02 ±0.04 (0.02)	33.0	8.8
CLADOCERA				
Daphnidae	359 ±853 (96.7)	0.7 ± 1.3 (0.5)	50.0	38.5
OSTEICHTHYES	0.8 ± 1.6 (0.2)	99.3 ±217 (74.6)	33.0	28.2
TERRESTRIAL INSECTA	8.7 ±20.3 (2.3)	32 ±71.6 (24.1)	33.0	15.6

Table H.110. September feeding habits of 5+ black crappie (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	5.0 ± 0.0 (4.4)	0.1 ± 0.0 (0.3)	100.0	14.9
DIPTERA				
Chironomidae pupae	1.0 ± 0.0 (0.9)	0.1 ± 0.0 (0.3)	100.0	14.4
COPEPODA				
Cyclopoid	4.0 ± 0.0 (3.5)	0.1 ± 0.0 (0.3)	100.0	14.8
CLADOCERA				
Daphnidae	93 ± 0.0 (81.6)	24 ± 0.0 (72.1)	100.0	36.2
TERRESTRIAL INSECTA	11.0 ±0.0 (9.6)	9.0 ± 0.0 (27.0)	100.0	19.5

Table H.111. October feeding habits of 1+ black crappie (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
COPEPODA				
Calanoid	24.0 ± 0.0 (40.0)	1.4 ± 0.0 (63.6)	100.0	50.9
CLADOCERA				
Daphnidae	36.0 ± 0.0 (60.0)	0.8 ± 0.0 (36.4)	100.0	49.1

Table H.112. October feeding habits of 3+ black crappie (n=6) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	0.8 ± 1.2 (0.2)	0.1 ± 0.0 (0.3)	50.0	7.0
DIPTERA				
Chironomidae larvae	0.2 ± 0.4 (0.04)	0.2 ± 0.3 (0.5)	16.7	2.4
COPEPODA				
Cyclopoid	69.2 ±102.7 (17.8)	5.5 ± 7.8 (15.0)	83.3	16.2
CLADOCERA				
Daphnidae	294.3 ±289.4 (75.6)	24.9 ±35.3 (67.8)	83.3	31.6
Chydoridae	1.7 ± 1.5 (0.4)	0.1 ± 0.1 (0.1)	83.3	11.7
AMPHIPODA				
Talitridae	21.8 ±16.2 (5.6)	5.2 ± 7.3 (14.3)	100.0	16.7
OSTRACODA	1.2 ± 0.8 (0.3)	0.2 ± 0.3 (0.5)	83.3	11.7
TERRESTRIAL INSECTA	0.2 ± 0.4 (0.04)	0.6 ± 0.8 (1.5)	16.7	2.5

Table H.113. October feeding habits of 4+ black crappie (n=3) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.3 ± 0.6 (0.2)	0.03 ± 0.1 (0.4)	0.3	0.2
EPHEMEROPTERA				
Baetidae	47 0 ±77.1 (28.4)	2.9 ± 4.8 (31.8)	66.7	22.4
DIPTERA				
Chironomidae larvae	1 0 ± 1.0 (0.6)	0.1 ± 0.1 (0.7)	66.7	12.0
COPEPODA				
Cyclopoid	63.7 ±110.3 (38.5)	1.0 ± 1.7 (10.9)	33.3	14.6
Calanoid	6.7 ±11.6 (4.0)	0.1 ± 0.1 (0.7)	33.3	6.7
CLADOCERA				
Daphnidae	24.3 ±31.6 (14.7)	2.5 ± 3.0 (27.0)	66.7	19.1
Chydoridae	19.7 ±34.1 (11.9)	1.2 ± 1.2 (13.1)	33.3	10.3
AMPHIPODA				
Talitridae	0.7 ± 1.2 (0.4)	0.2 ± 0.3 (1.8)	33.3	6.3
Gammandae	2.0 ± 3.5 (1.2)	1.2 ± 2.1 (13.5)	33.3	8.5

Table H.114. October feeding habits of 5+ black crappie (n=4) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	62.5 ±124.3 (88.3)	26.5 ±37.5 (98.3)	50.0	86.0
AMPHIPODA				
Talitridae	8.2 ±16.5 (11.7)	0.4 ± 0.6 (1.7)	25.0	14.0

MONTHLY FEEDING HABITS OF BROWN TROUT

Table H.115. April feeding habits of 1+ brown trout (n=4) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.8 ± 1.5 (4.2)	0.1 ± 0.2 (0.5)	25.0	7.0
ODONATA				
Coenagriidae	11.2 ± 14.8 (62.5)	10.9 ± 14.4 (51.0)	100.0	50.2
Libellulidae	0.3 ± 0.5 (1.4)	10.0 ± 19.9 (46.2)	25.0	17.1
COLEOPTERA				
Elmidae	0.3 ± 0.5 (1.4)	0.03 ± 0.05 (0.1)	25.0	6.2
DIPTERA				
Chironomidae larvae	1.0 ± 1.7 (4.2)	0.1 ± 0.1 (0.5)	25.0	7.0
Chironomidae pupae	6.3 ± 11 (26.4)	0.5 ± 0.1 (2.2)	25.0	12.6

Table H.116. April feeding habits of 2+ brown trout (n=4) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
ODONATA				
Coenagriidae	22 ± 0.0 (91.7)	17.7 ± 0.0 (98.9)	100.0	72.6
DIPTERA				
Chironomidae larvae	2 ± 0.0 (8.3)	0.2 ± 0.0 (1.1)	100.0	27.4

Table H.117. June feeding habits of 2+ brown trout (n=3) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.3 ± 0.6 (1.8)	0.03 ± 0.1 (0.6)	33.3	8.9
ODONATA				
Coenagriidae	1.3 ± 2.3 (7.0)	4.2 ± 7.2 (77.2)	33.3	29.4
COLEOPTERA				
Elmidae	0.3 ± 0.6 (1.8)	0.8 ± 1.4 (15.4)	33.3	12.6
DIPTERA				
Chironomidae larvae	13.7 ± 23.7 (71.9)	0.03 ± 0.1 (0.6)	33.3	26.5
TERRESTRIAL INSECTA	3.3 ± 3.1 (17.5)	0.3 ± 0.5 (6.2)	66.6	22.6

Table H.118. June feeding habits of 3+ brown trout (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Leptoceridae	2.0 ± 0.0 (22.2)	0.5 ± 0.0 (6.3)	100.0	21.4
EPHEMEROPTERA				
Baetidae	2.0 ± 0.0 (22.2)	0.3 ± 0.0 (3.8)	100.0	21.0
GASTROPODA				
Planorbidae	1.0 ± 0.0 (11.1)	2.0 ± 0.0 (25.3)	100.0	22.7
TERRESTRIAL INSECTA	4.0 ± 0.0 (44.4)	5.1 ± 0.0 (64.6)	100.0	34.8

Table H.119. September feeding habits of 0+ brown trout (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	0.5 ± 0.7 (33.3)	0.1 ± 0.1 (50.0)	50.0	44.4
COLEOPTERA				
Elmidae	1.0 ± 1.4 (66.7)	0.1 ± 0.1 (50.0)	50.0	55.6

Table H.120. September feeding habits of 1+ brown trout (n=4) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	0.2 ± 0.5 (14.3)	0.1 ± 0.1 (0.1)	25.0	12.1
DIPTERA				
Chironomidae larvae	0.5 ± 0.6 (28.6)	0.1 ± 0.1 (0.1)	50.0	24.3
GASTROPODA				
Planorbidae	0.2 ± 0.5 (14.3)	0.1 ± 0.1 (0.1)	25.0	12.1
TERRESTRIAL INSECTA	0.8 ± 1.5 (42.9)	55.5 ±78.5 (99.2)	25.0	51.5

Table H.121. September feeding habits of 2+ brown trout (n=3) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	0.3 ± 0.6 (50.0)	0.5 ± 0.0 (0.4)	33.3	31.4
OSTEICHTHYES	0.3 ± 0.6 (50.0)	127 ± 0.0 (99.6)	33.3	68.6

Table H.122. September feeding habits of 3+ brown trout (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae larvae	1.0 ± 1.4 (0.8)	0.03 ± 0.1 (0.04)	100.0	13.4
Chironomidae pupae	9.5 ±13.4 (7.7)	0.8 ± 1.3 (1.1)	100.0	14.5
CLADOCERA				
Chydoridae	15.0 ±21.2 (12.2)	0.03 ± 0.1 (0.04)	50.0	8.3
TERRESTRIAL INSECTA	1.6 ± 2.2 (1.3)	22.8 ±37.9 (35.0)	50.0	11.5
Orussidae	16.5 ±23.3 (13.4)	9.6 ±16.6 (13.2)	50.0	10.2
Cicadellidae	1.5 ± 2.1 (1.2)	0.1 ± 0.2 (0.1)	50.0	6.8
Formicidae	77.0 ±108.9 (62.6)	34.9 ±60.4 (45.9)	50.0	21.1
Pentatomidae	0.5 ± 0.7 (0.4)	4.2 ± 7.2 (4.9)	50.0	7.4
Lygaeidae	0.5 ± 0.7 (0.4)	0.03 ± 0.1 (0.05)	50.0	6.7

Table H.123. September feeding habits of 4+ brown trout (n=3) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
COLEOPTERA				
Elmidae	0.7 ± 0.6 (18.2)	42 ± 0.0 (94.6)	100.0	39.9
DIPTERA				
Chironomidae larvae	0.3 ± 0.6 (9.1)	0.1 ± 0.0 (0.2)	100.0	20.5
Chironomidae pupae	0.7 ± 0.6 (18.2)	0.1 ± 0.0 (0.2)	100.0	22.2
TERRESTRIAL INSECTA	2.0 ± 0.0 (54.6)	2.1 ± 0.0 (4.7)	33.3	17.4

Table H.124. September feeding habits of 5+ brown trout (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae larvae	3.0 ± 0.0 (37.5)	0.1 ± 0.0 (25.0)	100.0	27.1
Chironomidae pupae	2.0 ± 0.0 (25.0)	0.1 ± 0.0 (25.0)	100.0	25.0
COPEPODA				
Cyclopoid	1.0 ± 0.0 (12.5)	0.1 ± 0.0 (25.0)	100.0	22.9
CLADOCERA				
Chydoridae	2 ± 0.0 (25.0)	0.1 ± 0.0 (25.0)	100.0	25.0

Table H.125. October feeding habits of 3+ brown trout (n=3) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae pupae	1.3 ± 2.3 (2.0)	0.1 ± 0.0 (0.2)	33.3	5.1
TERRESTRIAL INSECTA				
Orussidae	18.3 ± 18.8 (27.5)	20.5 ± 0.0 (32.8)	100.0	22.9
Cicadellidae	7.0 ± 6.1 (10.5)	17.4 ± 0.0 (27.8)	66.7	15.0
Formicidae	10.7 ± 12.4 (16.0)	10.6 ± 0.0 (16.9)	100.0	19.0
Lygaeidae	16.3 ± 25.7 (24.5)	12.3 ± 0.0 (19.7)	66.7	15.8
Aphidae	11.7 ± 17.7 (17.5)	1.4 ± 0.0 (2.2)	66.7	12.4
Chir. Terr.	0.7 ± 1.2 (1.0)	0.1 ± 0.0 (1.0)	33.3	4.9
Cerambycidae	0.3 ± 0.6 (0.5)	0.1 ± 0.0 (0.2)	33.3	4.9

Table H.126. October feeding habits of 6+ brown trout (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	X (±SD) %	X (±SD) %	%	%
EPHEMEROPTERA				
Baetidae	1.0 ± 0.0 (50.0)	0.1 ± 0.0 (97.2)	100.0	61.8
TERRESTRIAL INSECTA				
Corixidae	1.0 ± 0.0 (50.0)	3.5 ± 0.0 (2.8)	100.0	38.2

MONTHLY FEEDING HABITS OF CUTTHROAT TROUT

Table H.127. April feeding habits of 2+ cutthroat trout (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	15.0 ± 0.0 (21.7)	132.1 ± 0.0 (16.0)	100.0	12.5
Rhyacophilidae	4.0 ± 0.0 (5.8)	30.7 ± 0.0 (3.7)	100.0	10.0
EPHEMEROPTERA				
Ephemerellidae	15.0 ± 0.0 (21.7)	62.1 ± 0.0 (7.5)	100.0	11.7
HYDRACARINA	2.0 ± 0.0 (2.9)	3.3 ± 0.0 (0.4)	100.0	9.4
DIPTERA				
Tipulidae	4.0 ± 0.0 (5.8)	32.7 ± 0.0 (3.9)	100.0	10.0
GASTROPODA				
Planorbidae	7.0 ± 0.0 (10.1)	66.2 ± 0.0 (8.0)	100.0	10.7
OSTEICHTHYES				
Cottidae	1.0 ± 0.0 (1.4)	94.5 ± 0.0 (11.4)	100.0	10.2
OLIGOCHAETA				
Lumbriculidae	19.0 ± 0.0 (27.5)	403.5 ± 0.0 (48.9)	100.0	16.0
Naididae	2.0 ± 0.0 (2.9)	0.7 ± 0.0 (0.1)	100.0	9.4

Table H.128. July feeding habits of 2+ cutthroat trout (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae pupae	1.0 ± 0.0 (33.3)	2.8 ± 0.0 (96.5)	100.0	57.5
NEMATODA	2.0 ± 1.4 (66.7)	0.1 ± 0.0 (3.4)	100.0	42.5

Table H.129. September feeding habits of 2+ cutthroat trout (n=3) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae pupae	29.0 ±29.0 (10.0)	13.6 ±18.4 (3.4)	66.7	6.9
NEMATODA	0.3 ± 0.6 (0.1)	36.1 ±50.9 (9.1)	33.3	3.6
TERRESTRIAL INSECTA				
Acrididae	0.3 ± 0.6 (0.1)	19.4 ±27.4 (4.9)	33.3	3.3
Cicadellidae	5.0 ± 3.5 (1.7)	2.9 ± 2.2 (0.7)	100.0	8.8
Formicidae	237 ±131.7 (81.7)	183.2 ±146.4(47.2)	100.0	19.6
Aphidae	0.3 ± 0.6 (0.1)	6.4 ± 8.8 (1.6)	33.3	3.0
Corixidae	6.3 ± 9.3 (2.2)	15.2 ±21.4 (3.8)	66.7	6.2
Simulidae Terr.	4.3 ± 5.1 (1.5)	0.1 ± 0.1 (0.01)	66.7	5.8
Muscidae Terr.	0.3 ± 0.6 (0.1)	3.0 ± 4.2 (0.7)	33.3	2.9
Orussidae	0.7 ± 1.2 (0.2)	7.0 ± 9.9 (1.8)	33.3	3.0
Lygaeidae	0.3 ± 0.6 (0.1)	0.1 ± 0.1 (0.02)	33.3	2.9
Psocidae	0.7 ± 1.2 (0.2)	96.7 ±136.8(25.4)	33.3	5.1
Phoridae	0.3 ± 0.6 (0.1)	0.6 ± 0.6 (0.01)	33.3	2.9
Sierolorphidae	0.3 ± 0.6 (0.1)	0.6 ± 0.6 (0.01)	33.3	2.9
Apidae	0.7 ± 0.6 (0.2)	0.2 ± 0.3 (0.01)	66.7	5.7
Culorophidae	0.3 ± 0.6 (0.1)	0.8 ± 1.1 (0.2)	33.3	2.9
Curculionidae	1.0 ± 1.0 (0.3)	1.4 ± 1.1 (0.3)	66.7	5.8
Staphylinidae	0.3 ± 0.6 (0.1)	1.1 ± 1.6 (0.3)	33.3	2.9
Cleridae	0.3 ± 0.6 (0.1)	0.1 ± 0.1 (0.01)	33.3	2.9
Coniopterygidae	0.3 ± 0.6 (0.1)	0.1 ± 0.1 (0.01)	33.3	2.9

Table H.130. October feeding habits of 3+ cutthroat trout (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
DIPTERA				
Chironomidae pupae	21.5 ±30.4 (15.6)	1.4 ± 0.0 (2.3)	50.0	8.5
Muscidae	0.5 ± 0.7 (0.4)	0.1 ± 0.0 (0.2)	50.0	6.3
TERRESTRIAL INSECTA				
Cicadellidae	23.0 ± 2.8 (16.4)	22.4 ± 0.0 (36.2)	100.0	19.1
Orussidae	20.0 ±28.3 (14.3)	18.2 ± 0.0 (29.4)	50.0	11.7
Formicidae	9.0 ± 8.5 (6.4)	6.6 ± 0.0 (10.7)	100.0	14.6
Aphidae	38.5 ±24.8 (27.5)	4.3 ± 0.0 (6.9)	100.0	16.8
Lygaeidae	26.5 ± 3.5 (18.9)	8.8 ± 0.0 (14.2)	100.0	16.6
Simulidae Terr.	1.0 ± 1.4 (0.7)	0.1 ± 0.0 (0.2)	50.0	6.4

MONTHLY FEEDING HABITS OF PUMPKINSEED

Table H.131. April feeding habits of 3+ pumpkinseed (n=5) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	1.2 ± 2.2 (4.9)	0.2 ± 0.4 (4.5)	60.0	13.6
ODONATA				
Coenagriidae	0.4 ± 0.6 (1.6)	0.8 ± 1.1 (14.8)	40.0	11.1
COLEOPTERA				
Elmidae	2.0 ± 4.5 (8.1)	0.1 ± 0.2 (2.2)	20.0	5.9
DIPTERA				
Chironomidae larvae	15.6 ±30.6 (63.4)	2.4 ± 4.6 (42.6)	60.0	32.6
Chironomidae pupae	0.6 ± 1.3 (2.4)	0.1 ± 0.2 (1.8)	20.0	4.8
CLADOCERA				
Chydoridae	0.2 ± 0.4 (0.8)	0.3 ± 0.6 (4.9)	20.0	5.0
GASTROPODA				
Planorbidae	4.2 ± 0.0 (17.1)	1.3 ± 1.6 (22.9)	50.0	17.7
Lymnaeidae	0.2 ± 0.4 (0.8)	0.03 ± 0.1 (0.4)	20.0	4.2
OLIGOCHAETA	0.2 ± 0.4 (0.8)	0.3 ± 0.6 (5.4)	20.0	5.1

Table H.132. April feeding habits of 4+ pumpkinseed (n=4) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Leptoceridae	0.2 ± 0.5 (5.6)	0.1 ± 0.1 (0.2)	25.0	6.5
ODONATA				
Coenagriidae	0.2 ± 0.5 (5.6)	0.8 ± 1.1 (4.4)	25.0	7.4
DIPTERA				
Chironomidae larvae	1.2 ± 1.9 (27.8)	7.7 ±15.4 (24.0)	50.0	21.4
Chironomidae pupae	0.5 ± 0.1 (11.1)	0.2 ± 0.4 (0.5)	25.0	7.7
Tipulidae	0.5 ± 0.1 (11.1)	0.4 ± 0.8 (0.5)	25.0	7.9
Muscidae	0.2 ± 0.5 (5.6)	2.1 ± 4.2 (6.4)	25.0	7 8
AMPHIPODA				
Gammandae	1.0 ± 1.4 (22.2)	0.2 ± 0.3 (0.6)	50.0	15.3
GASTROPODA				
Planorbidae	0.2 ± 0.5 (5.6)	1.3 ± 2.6 (4.0)	25.0	7.3
OLIGOCHAETA				
Lumbriculidae	0.2 ± 0.5 (5.6)	18.8 ±37.6 (58.6)	25.0	18.8

Table H.133. April feeding habits of 5+ pumpkinseed (n=9) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	2.3 ± 3.7 (6.0)	0.1 ± 0.1 (0.1)	77.8	14.0
Psychomyiidae	0.1 ± 0.3 (0.3)	0.1 ± 0.2 (0.2)	11.1	1.9
ODONATA				
Coenagriidae	0.1 ± 0.3 (0.3)	0.03 ± 0.1 (0.1)	1.1	1.9
HYDRACARINA	0.3 ± 0.7 (0.9)	0.1 ± 0.2 (0.2)	22.2	3.9
DIPTERA				
Chironomidae larvae	28.0 ± 32.4 (72.0)	11.6 ± 20.0 (21.0)	77.8	28.5
Chironomidae pupae	1.7 ± 1.7 (4.3)	0.03 ± 0.1 (0.1)	66.7	11.9
Tipulidae	0.2 ± 0.4 (0.6)	0.03 ± 0.1 (0.1)	22.2	3.8
CLADOCERA				
Chydoridae	0.4 ± 0.9 (1.1)	0.03 ± 0.1 (0.1)	22.2	3.9
OSTRACODA	0.3 ± 0.7 (0.9)	0.03 ± 0.1 (0.1)	22.2	3.9
GASTROPODA				
Planorbidae	3.2 ± 6.1 (8.3)	2.7 ± 4.7 (4.9)	55.6	11.5
OLIGOCHAETA	1.9 ± 5.7 (4.9)	40.3 ± 35.2 (73.2)	11.1	14.9

Table H.134. June feeding habits of 2+ pumpkinseed (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
ODONATA				
Libellulidae	0.5 ± 0.7 (5.6)	0.6 ± 1.5 (0.7)	50.0	11.4
COLEOPTERA				
Elmidae	4.0 ± 5.7 (44.4)	0.5 ± 0.9 (24.8)	50.0	21.7
DIPTERA				
Chironomidae larvae	3.5 ± 2.1 (38.9)	0.1 ± 0.0 (5.2)	100.0	26.2
AMPHIPODA				
Gammaridae	0.5 ± 0.7 (5.6)	0.2 ± 0.4 (11.1)	50.0	12.1
OLIGOCHAETA				
Lumbriculidae	0.4 ± 0.5 (3.8)	1.0 ± 1.8 (50.4)	50.0	18.9
NEMATODA	0.03 ± 0.1 (1.7)	0.03 ± 0.1 (1.7)	50.0	9.7

Table H.135. June feeding habits of 3+ pumpkinseed (n=6) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Lepidostomatidae	0.2 ± 0.4 (1.5)	0.01 ± 0.04 (0.2)	16.7	2.6
Leptoceridae	0.2 ± 0.4 (1.5)	0.8 ± 1.8 (10.4)	16.7	4.1
EPHEMEROPTERA				
Tricorythidae	0.2 ± 0.4 (1.5)	0.01 ± 0.04 (0.2)	16.7	2.6
ODONATA				
Libellulidae	0.2 ± 0.4 (1.5)	0.6 ± 1.5 (7.5)	16.7	3.7
COLEOPTERA				
Elmidae	1.8 ± 2.2 (15.4)	0.5 ± 1.1 (7.2)	66.7	12.8
HYDRACARINA	1.2 ± 2.9 (10.2)	0.01 ± 0.04 (0.2)	16.7	3.9
DIPTERA				
Chironomidae larvae	2.5 ± 4.3 (21.4)	0.1 ± 0.1 (0.7)	50.0	10.4
Ceratopogonidae	0.2 ± 0.4 (1.5)	0.01 ± 0.04 (0.2)	16.7	2.6
COPEPODA				
Cyclopoid	0.2 ± 0.4 (1.5)	0.01 ± 0.04 (0.2)	16.7	2.6
AMPHIPODA				
Gammaridae	0.3 ± 0.5 (3.0)	0.1 ± 0.04 (0.2)	33.3	5.2
GASTROPODA				
Planorbidae	0.3 ± 0.8 (3.0)	0.03 ± 0.1 (0.4)	16.7	2.9
Lymnaeidae	0.5 ± 0.8 (5.0)	0.4 ± 1.1 (5.7)	33.3	6.3
OLIGOCHAETA				
Lumbriculidae	1.3 ± 1.0 (11.0)	5.0 ± 7.3 (64.5)	83.3	22.8
NEMATODA	0.2 ± 0.4 (1.5)	0.01 ± 0.04 (0.2)	16.7	2.6
TERRESTRIAL INSECTA	1.2 ± 1.5 (11.0)	0.04 ± 0.1 (0.6)	50.0	8.9
BIVALVE				
Sphaeriidae	0.5 ± 0.8 (5.0)	0.1 ± 0.3 (1.5)	33.3	5.7

Table H.136. June feeding habits of 4+ pumpkinseed (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
ODONATA				
Coenagriidae	0.5 ± 0.7 (4.6)	0.02 ± 0.04 (1.4)	50.0	12.4
COLEOPTERA				
Elmidae	3.5 ± 4.9 (31.8)	0.2 ± 0.5 (17.6)	50.0	22.1
DIPTERA				
Chironomidae larvae	5.[illegible] ± 6.4 (50.0)	0.2 ± 0.4 (20.3)	100.0	37.8
GASTROPODA				
Lymnaeidae	1.5 ± 2.1 (13.6)	0.7 ± 1.8 (60.8)	50.0	27.6

Table H.137. July feeding habits of 2+ pumpkinseed (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	0.5 ± 0.7 (2.2)	0.1 ± 0.1 (2.3)	50.0	6.8
EPHEMEROPTERA				
Baetidae	0.5 ± 0.7 (2.2)	0.1 ± 0.1 (2.3)	50.0	6.8
ODONATA				
Coenagriidae	0.5 ± 0.7 (2.2)	0.1 ± 0.1 (2.3)	50.0	6.8
COLEOPTERA				
Elmidae	1.0 ± 1.4 (4.4)	0.1 ± 0.1 (2.3)	50.0	7.1
DIPTERA				
Chironomidae larvae	16.0 ± 8.5 (71.1)	0.1 ± 0.0 (4.6)	100.0	22.0
Chironomidae pupae	0.5 ± 0.7 (2.2)	0.1 ± 0.1 (2.3)	50.0	6.8
CLADOCERA				
Daphnidae	0.5 ± 0.7 (2.2)	0.1 ± 0.1 (2.3)	50.0	6.8
AMPHIPODA				
Gammaridae	2.0 ± 1.4 (8.9)	0.1 ± 0.0 (4.6)	100.0	14.2
TERRESTRIAL INSECTA	0.5 ± 0.7 (2.2)	1.6 ± 2.3 (75.0)	50.0	15.9
BIVALVE				
Sphaeriidae	0.5 ± 0.7 (2.2)	0.1 ± 0.1 (2.3)	50.0	6.8

Table H.138. July feeding habits of 3+ pumpkinseed (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	1.5 ± 0.7 (8.6)	6.1 ±12.0 (88.4)	100.0	43.8
DIPTERA				
Chironomidae larvae	15.0 ± 1.4 (85.7)	0.8 ± 0.5 (11.3)	100.0	43.8
CLADOCERA				
Daphnidae	1.0 ± 1.4 (5.7)	0.03 ± 0.1 (0.4)	50.0	12.5

Table H.139. July feeding habits of 4+ pumpkinseed (n=3) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	7.7 ± 13.3 (17.0)	0.2 ± 0.5 (6.0)	33.3	7.4
COLEOPTERA				
Elmidae	10.3 ± 17.9 (22.9)	0.6 ± 1.7 (18.0)	33.3	9.7
HYDRACARINA	5.0 ± 7.8 (11.1)	0.03 ± 0.1 (0.7)	66.7	10.3
DIPTERA				
Chironomidae larvae	10.3 ± 8.3 (23.0)	0.4 ± 0.4 (11.3)	100.0	17.6
Chironomidae pupae	0.7 ± 1.2 (1.5)	0.04 ± 0.1 (1.1)	33.3	4.7
Ceratopogonidae	1.7 ± 2.9 (3.7)	0.04 ± 0.1 (1.1)	33.3	5.0
COPEPODA				
Cyclopoid	0.3 ± 0.4 (0.7)	0.03 ± 0.1 (0.7)	33.3	4.5
CLADOCERA				
Daphnidae	1.3 ± 2.3 (3.0)	0.03 ± 0.1 (0.7)	33.3	4.8
GASTROPODA				
Planorbidae	4.7 ± 8.1 (10.4)	1.8 ± 2.2 (49.8)	33.3	12.2
NEMATODA	0.3 ± 0.6 (0.7)	0.01 ± 0.04 (0.4)	33.3	4.5
TERRESTRIAL INSECTA	2.0 ± 2.6 (4.4)	0.3 ± 0.9 (8.2)	66.7	10.4
CESTODA	0.3 ± 0.6 (0.7)	0.01 ± 0.04 (0.4)	33.3	4.5
BIVALVE				
Sphaeriidae	0.3 ± 0.6 (0.7)	0.03 ± 0.1 (0.6)	33.3	4.5

Table H.140. July feeding habits of 5+ pumpkinseed (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	1.0 ± 0.0 (1.4)	0.1 ± 0.1 (0.5)	100.0	10.7
Glossosmadidae	1.0 ±1.4 (1.4)	0.1 ± 0.1 (0.5)	50.0	5.5
EPHEMEROPTERA				
Leptophlebiidae	1.0 ± 1.4 (1.4)	1.1 ± 1.5 (10.2)	50.0	6.5
COLEOPTERA				
Elmidae	32.5 ± 26.2 (46.4)	7.8 ± 11.1 (76.2)	100.0	23.4
HYDRACARINA	3.5 ± 5.0 (5.0)	0.1 ± 0.1 (0.5)	50.0	5.8
DIPTERA				
Chironomidae larvae	25.5 ± 36.4 (36.4)	0.1 ± 0.0 (1.0)	100.0	14.5
AMPHIPODA				
Gammaridae	0.5 ± 0.7 (0.7)	0.1 ± 0.0 (1.0)	100.0	10.7
OSTRACODA	0.5 ± 0.7 (0.7)	0.9 ± 1.3 (9.2)	50.0	6.3
GASTROPODA				
Planorbidae	4.0 ± 4.2 (5.7)	0.1 ± 0.1 (0.5)	100.0	11.2
Lymnaeidae	0.5 ± 0.7 (0.7)	0.1 ± 0.1 (0.5)	50.0	5.4

Table H.141. July feeding habits of 6+ pumpkinseed (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
CLADOCERA				
Chydoridae	2.0 + 0.0 (100.0)	0.1 + 0.0(100.0)	100.0	100.0

Table H.142. September feeding habits of 2+ pumpkinseed (n=2) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	2.0 ± 2.8 (2.4)	0.03 ± 0.1 (3.7)	50.0	8.0
COLEOPTERA				
Chrysomelidae				
HYDRACARINA	1.0 ± 1.4 (1.2)	0.03 ± 0.1 (3.7)	50.0	7.8
DIPTERA				
Chironomidae larvae	50.0 ± 70.0 (61.6)	0.6 ± 0.9 (7.4)	100.0	33.1
COPEPODA				
Cyclopoid	1.5 ± 2.1 (1.8)	0.03 ± 0.1 (3.7)	50.0	7.9
CLADOCERA				
Daphnidae	18.0 ± 25.5 (21.7)	0.03 ± 0.1 (3.7)	50.0	10.7
Chydoridae	4.5 ± 6.4 (5.4)	0.03 ± 0.1 (3.7)	50.0	8.4
AMPHIPODA				
Talitridae	0.5 ± 0.7 (0.6)	0.1 ± 0.1 (3.7)	50.0	7.7
OSTRACODA	4.5 ± 6.4 (5.4)	0.1 ± 0.1 (3.7)	50.0	8.4
GASTROPODA				
Planorbidae	1.5 ± 2.1 (1.8)	0.1 ± 0.1 (3.7)	50.0	7.9

Table H.143. September feeding habits of 3+ pumpkinseed (n=5) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	0.2 ± 0.4 (0.4)	0.03 ± 0.1 (0.01)	20.0	3.3
HYDRACARINA	0.6 ± 0.9 (1.2)	0.1 ± 0.1 (0.02)	40.0	6.6
DIPTERA				
Chironomidae larvae	34.6 ±69.1 (70.1)	3.2 ± 5.4 (1.2)	80.0	24.4
Chironomidae pupae	0.6 ± 0.9 (1.2)	0.4 ± 0.6 (0.1)	40.0	6.6
COPEPODA				
Cyclopoid	0.4 ± 0.9 (0.8)	0.03 ± 0.1 (0.01)	20.0	3.3
CLADOCERA				
Daphnidae	0.8 ± 1.8 (1.6)	0.1 ± 0.1 (0.02)	20.0	3.5
Chydoridae	3.6 ± 5.1 (7.2)	0.1 ± 0.1 (0.02)	40.0	7.6
AMPHIPODA				
Talitridae	0.2 ± 0.4 (0.4)	0.1 ± 0.1 (0.01)	20.0	3.3
Gammaridae	0.8 ± 1.8 (1.6)	0.03 ± 0.1 (0.01)	20.0	3.5
GASTROPODA				
Planorbidae	6.4 ± 8.2 (13.5)	8.5 ±14.8 (2.8)	80.0	15.5
OLIGOCHAETA				
Lumbriculidae	0.6 ± 1.3 (1.2)	246.3 ±426.7(94.9)	20.0	18.7
BIVALVE				
Sphaeriidae	0.2 ± 0.4 (0.4)	0.7 ± 1.2 (2.5)	20.0	3.7

Table H.144. September feeding habits of 4+ pumpkinseed (n=3) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Baetidae	0.3 ± 0.6 (2.4)	0.03 ± 0.1 (2.0)	33.3	7.5
DIPTERA				
Chironomidae larvae	8.7 ±11.0 (63.0)	0.8 ± 0.7 (49.0)	66.7	35.8
Chironomidae pupae	0.3 ± 0.6 (2.4)	0.2 ± 0.3 (10.2)	33.3	9.2
COPEPODA				
Cyclopoid	0.3 ± 0.6 (2.4)	0.01 ± 0.1 (0.1)	33.3	7.2
CLADOCERA				
Chydoridae	0.7 ± 1.2 (4.9)	0.03 ± 0.1 (2.0)	33.3	8.0
GASTROPODA				
Planorbidae	3.3 ± 2.5 (24.4)	0.6 ± 0.6 (36.7)	100.0	32.2

Table H.145. September feeding habits of 5+ pumpkinseed (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
HYDRACARINA	3.0 ± 0.0 (3.4)	0.1 ± 0.0 (0.2)	100.0	20.7
DIPTERA				
Chironomidae larvae	79.0 ± 0.0 (90.8)	42.0 ± 0.0 (99.5)	100.0	58.1
Chironomidae pupae	5.0 ± 0.0 (5.8)	0.1 ± 0.0 (0.2)	100.0	21.2

Table H.146. September feeding habits of 6+ pumpkinseed (n=1) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
TRICHOPTERA				
Hydroptilidae	7.0 ± 0.0 (50.0)	0.6 ± 0.0 (46.2)	100.0	39.2
DIPTERA				
Chironomidae larvae	5.0 ± 0.0 (35.7)	0.6 ± 0.0 (46.2)	100.0	36.4
Chironomidae pupae	2.0 ± 0.0 (14.3)	0.1 ± 0.0 (7.7)	100.0	24.4

Table H.147. October feeding habits of 0+ pumpkinseed (n=3) in the Pend Oreille River.

	Number	Weight	Occurrence	IRI
	Mean ± SD (%)	Mean ± SD (%)	%	%
EPHEMEROPTERA				
Tricorythidae	1.0 ± 1.0 (3.3)	0.01 ± 0.0 (20.0)	66.7	16.9
DIPTERA				
Chironomidae larvae	9.7 ± 8.1 (32.2)	0.1 ± 0.0 (20.0)	100.0	28.5
CLADOCERA				
Daphnidae	1.7 ± 1.5 (5.6)	0.1 ± 0.0 (20.0)	66.7	17.3
OSTRACODA	14.7 ± 13.5 (48.9)	0.1 ± 0.0 (20.0)	66.7	25.4
GASTROPODA				
Planorbidae	3.0 ± 5.2 (10.0)	0.1 ± 0.0 (20.0)	33.3	11.9

MONTHLY FEEDING HABITS OF NON-TARGET SPECIES

Table H.148. Mean annual percent by number of prey items consumed by non- target fish species for 1988, Pend Oreille River, WA.

Prey Organisms	Tench	Redside shiner	Brown Bullhead	Longnose sucker	Largescale sucker	Peamouth	Northern squawfish
	N=7	N=1	N=10	N=3	N=3	N=2	N=12
TRICHOPTERA							
Hydroptilidae	0.9						
Leptoceridae			<0.1				
Brachycentridae							3.6
EPHEMEROPTERA							
Baetidae	11.8		<0.1				
ODONATA							
Coenagriidae					0.2		
HYDRACARINA	7.3		0.6	0.5			
DIPTERA							
Chironomidae larvae	21.8		91.6	9.6	4.9		52.9
Chironomidae pupae		6.3	0.4	0.3	0.6		
Tipulidae				0.5	0.2		
Ceratopogonidae	5.5		0.3	1.9	3.9		
Empididae			<0.1		0.2		
Simuliidae		6.3					
Muscidae					33 3		
COPEPODA							
Cyclopoid	6.4		0.4	0.3			
CLADOCERA							
Daphnidae			2.8		80.6		
Chydoridae	10.0		0.5	18.5			
Bosminidae			0.1				
AMPHIPODA							
Talitridae			0.3		1.2		
Gammaridae			0.1		0.2		

Table H.148. (cont.)

Prey Organism	Tench	Redside shiner	Brown Bullhead	Longnose sucker	Largescale sucker	Peamouth	Northern squawfish
	N=7	N=1	N=10	N=3	N=3	N=2	N=12
OSTRACODA	34.6		0.8	64.7	2.4		
GASTROPODA							
Planorbidae		1.6	3.5			75.4	1.2
Lymnaeidae			0.1			18.3	
OLIGOCHAETA							
Naididae					0.4		
Lumbriculidae					0.4		1.2
NEMATODA				<0.1	0.2	5.6	30.6
TERRESTRIAL INSECTA		87.5					
BIVALVE							
Sphaeriidae	0.9		0.2		4.2	0.8	1.2
CESTODA					0.2		
HIRUDINEA							2.4

Table H.149. Mean annual percent by weight of prey items consumed by non-target fish species for 1988, Pend Oreille River, WA.

Prey Organisms	Tench	Redside shiner	Brown Bullhead	Longnose sucker	Largescale sucker	Peamouth	Northern squawfish
	N=7	N=1	N=10	N=3	N=3	N=2	N=12
TRICHOPTERA							
Hydroptilidae	1.8						
Leptoceridae			1.1				
Brachycentridae							<0.1
Psychomyiidae				2.7			
EPHEMEROPTERA							
Baetidae	7.0		1.1				
ODONATA							
Coenagriidae					3.1		
HYDRACARINA	1.8		0.7	0.6			
DIPTERA							
Chironomidae larvae	7.0		66.3	4.4	6.8		<0.1
Chironomidae pupae		5.0	2.3	0.6	1.3		
Tipulidae				1.3	0.4		
Ceratopogonidae	17.5		2.3	1.7	0.2		
Empididae			0.1				
Simuliidae		5.0					
Muscidae					0.3		
COPEPODA							
Cyclopoid	1.8		1.6	0.2			
CLADOCERA							
Daphnidae			3.6		8.0		
Chydoridae	52.6		2.2	14.1			
Bosminidae			0.2				
AMPHIPODA							
Talitridae			2.1		2.4		
Gammaridae			2.7		0.1		

Table H.149. (cont.)

Prey Organisms	Tench	Redside shiner	Brown Bullhead	Longnose sucker	Largescale sucker	Peamouth	Northern squawfish
	N=7	N=1	N=10	N=3	N=3	N=2	N=12
OSTRACODA	8.8		2.3	20.1	0.2		
GASTROPODA							
Planorbidae		90.0	10.6	54.0		22.7	<0.1
Lymnaeidae			0.6			47.6	
OSTEICHTHYES							40.3
Yellow perch							9.9
Tench							49.8
OLIGOCHAETA							
Naididae					14.1		
Lumbriculidae					4.8		<0.1
NEMATODA			0.1		4.3	<0.1	<0.1
TERRESTRIAL INSECTA							
BIVALVE							
Sphaeriidae	1.8		0.2		52.6	29.8	<0.1
CESTODA				0.2			
TRICLADIDA							
Planariidae				1.3			
HIRUDINEA							<0.1

Table H.150. Mean annual occurrence frequencies of prey items consumed by non-target species for 1988, Pend Oreille River, WA.

Prey Organisms	Tench	Redside shiner	Brown Bullhead	Longnose sucker	Largescale sucker	Peamouth	Northern squawfish
	N=7	N=1	N=10	N=3	N=3	N=2	N=12
TRICHOPTERA							
Hydroptilidae	14.3						
Leptoceridae			10.0				
Brachycentridae							8.3
Psychomyiidae				33.3			
EPHEMEROPTERA							
Baetidae	14.3		10.0				
ODONATA							
Coenagriidae						33.3	
HYDRACARINA	14.3		20.0	100.0			
DIPTERA							
Chironomidae larvae	28.6		90.0	100.0	100.0		16.3
Chironomidae pupae		100.0	30.0	33.3	33.3		
Tipulidae				66.7	33.3		
Ceratopogonidae	14.3		50.0	66.7	33.3		
Empididae				10.0			
Simuliidae		100.0					
Muscidae					33.3		
COPEPODA							
Cyclopoid	14.3		30.0	33.3			
CLADOCERA							
Daphnidae			30.0		33.3		
Chydoridae	28.6		10.0	33.3			
Bosminidae			20.0				
AMPHIPODA							
Talitridae			20.0		33.3		
Gammaridae			10.0		33.3		

Table H.150. (cont.)

Prey Organisms	Tench	Redside shiner	Brown Bullhead	Longnose sucker	Largescale sucker	Peamouth	Northern squawfish
	N=7	N=1	N=10	N=3	N=3	N=2	N=12
OSTRACODA	42.8		30.0	33.3	67.7		
GASTROPODA							
Planorbidae		60.0	33.3			50.0	8.3
Lymnaeidae			20.0			50.0	
OSTEICHTHYES							8.3
Yellow perch							16.7
Tench							8.3
OLIGOCHAETA							
Naididae					33.3		
Lumbriculidae					33.3		8.3
NEMATODA			10.0		33.3	50.0	25.0
TERRESTRIAL INSECTA		100.0					
BIVALVE							
Sphaeriidae	14.3		10.0		66.7	50.0	8.3
CESTODA				33.3			
TRICLADIDA							
Planariidae				33.3			
HIRUDINEA							16.7

Table H.151. Mean annual index of relative importance (IRI) of prey items consumed by non-target fish species for 1988, Pend Orielle River, WA.

Prey Organisms	Tench	Redside shiner	Brown Bullhead	Longnose sucker	Largescale sucker	Peamouth	Northern squawfish
	N=7	N=1	N=10	N=3	N=3	N=2	N=12
TRICHOPTERA							
Hydroptilidae	4.4						
Leptoceridae			1.7				
Brachycentridae							3.7
Psychomyiidae				4.7			
EPHEMEROPTERA							
Baetidae	8.6		1.7				
ODONATA							
Coenagriidae					4.4		
HYDRACARINA	6.1		3.2	13.2			
DIPTERA							
Chironomidae larvae	14.9		37.0	14.9	13.4		21.4
Chironomidae pupae		22.3	4.9	4.5	4.2		
Tipulidae				8.9	4.1		
Ceratopogonidae		9.7	7.8	9.2	4.5		
Empididae			1.5				
Simuliidae		22.3					
Muscidae					4.1		
COPEPODA							
Cyclopoid	5.8		4.8	4.4			
CLADOCERA							
Daphnidae			5.4		14.6		
Chydoridae	23.7		2.0	8.6			
Bosminidae			3.0				
AMPHIPODA							
Talitridae			3.3		4.4		
Gammaridae			1.9		4.0		

Table H.151. (cont.)

Prey Organisms	Tench	Redside shiner	Brown Bullhead	Longnose sucker	Largescale sucker	Peamouth	Northern squawfish
	N=7	N=1	N=10	N=3	N=3	N=2	N=12
OSTRACODA	22.4		4.9	15.4	8.3		
GASTROPODA							
Planorbidae			10.8	11.9		37.0	2.9
Lymnaeidae			3.1			29.0	
OSTEICHTHYES							15.4
Yellow perch							16.7
Tench							8.3
OLIGOCHAETA							
Naididae					5.7		
Lumbriculidae					4.6		2.9
NEMATODA			1.5		4.5	13.9	17.2
TERRESTRIAL INSECTA		55.6					
BIVALVE							
Sphaeriidae	14.3		1.6		14.8	50.0	2.9
CESTODA				4.4			
TRICLADIDA							
Planariidae				4.2			
HIRUDINEA							5.9

APPENDIX I

FISH MIGRATION INFORMATION

Table I.1. Tagging and recapture dates and locations for Brown trout in the Pend Oreille River.

Location Tagged	Month Tagged	Age	Month Recaptured	Recapture Location
3A	JUL-88	5+	AUG-88	3A
3A	JUL-88	5+	AUG-88	3A
3A	JUL-88	5+	AUG-88	3A
3A	JUL-88	5+	AUG-88	3A
3A	JUL-88	5+	AUG-88	3A
3A	JUL-88	6+	AUG-88	3A
3A	JUL-88	6+	AUG-88	3A
3A	JUL-88	6+	AUG-88	3A
3A	JUL-88	6+	AUG-88	3A
3A	JUL-88	7+	AUG-88	3A
3A	JUL-88	7+	AUG-88	3A
3A	AUG-88	4+	SEP-88	3A
3A	AUG-88	4+	SEP-88	3A
3A	AUG-88	4+	SEP-88	3A
3A	AUG-88	4+	SEP-88	3A
3A	AUG-88	5+	SEP-88	3A
3A	AUG-88	5+	SEP-88	3A
3A	JUL-88	6+	SEP-88	3A
3A	JUL-88	6+	SEP-88	3A
3A	AUG-88	6+	SEP-88	3A
3A	AUG-88	6+	SEP-88	3A
3A	APR-88	7+	SEP-88	3A
3A	JUL-88	7+	SEP-88	3A
3A	JUL-88	7+	SEP-88	3A
3A	AUG-88	7+	SEP-88	3A
3A	AUG-88	7+	SEP-88	3A
3A	AUG-88	7+	SEP-88	3A
3A	AUG-88	7+	SEP-88	3A
3A	AUG-88	7+	SEP-88	3A
3A	SEP-88	7+	SEP-88	3A
3A	AUG-88	5+	OCT-88	3A
3A	AUG-88	5+	OCT-88	3A
3A	SEP-88	5+	OCT-88	3A
3A	JUL-88	6+	OCT-88	3A
3A	AUG-88	6+	OCT-88	3A
3A	JUL-88	7+	OCT-88	3A
3A	JUL-88	7+	OCT-88	3A
3A	JUL-88	7+	OCT-88	3A
3A	JUL-88	7+	OCT-88	3A
2	AUG-88	7+	OCT-88	2
2	SEP-88	7+	OCT-88	2
3A	JUL-88	6+	OCT-88	8A
8	JUL-88	7+	AUG-88	8A
8A	AUG-88	7+	OCT-88	8A
8A	AUG-88	7+	SEP-88	8A
8	OCT-87	7+	OCT-88	8A
8A	AUG-88	7+	OCT-88	8A

Table I.2. Tagging and recapture dates and locations for mountain whitefish in the Pend Oreille River.

Location Tagged	Month Tagged	Age	Month Recaptured	Recapture Location
1	MAR-88	2+	APR-88	1
7	MAR-88	3+	APR-88	7
2	MAR-88	3+	APR-88	2
11	MAR-88	3+	MAY-88	11
2	MAR-88	3+	JUL-88	2
3	MAR-88	3+	AUG-88	3A
3	MAR-88	3+	AUG-88	3A
3A	JUL-88	4+	AUG-88	3A
3A	MAR-88	4+	AUG-88	3A
3A	JUL-88	7+	AUG-88	3A
2	APR-88	3+	SEP-88	2
2	MAR-88	3+	SEP-88	2
3A	AUG-88	4+	SEP-88	3A
3A	AUG-88	5+	SEP-88	3A
3A	AUG-88	3+	SEP-88	3A
3	MAR-88	3+	SEP-88	3A
3A	AUG-88	1+	SEP-88	3A
3A	AUG-88	7+	SEP-88	3A
8A	MAR-88	3+	SEP-88	8A
8	MAY-88	3+	SEP-88	8A
8A	AUG-88	3+	APR-88	8A
3A	MAR-88	4+	SEP-88	3A
3A	AUG-88	4+	SEP-88	3A
2	APR-88	3+	OCT-88	2
2	APR-88	3+	OCT-88	2
2	SEP-88	3+	OCT-88	2
2	SEP-88	3+	OCT-88	2
3A	MAR-88	3+	OCT-88	3A
3A	SEP-88	4+	OCT-88	3A
3A	SEP-88	4+	OCT-88	3A
3A	MAR-88	4+	OCT-88	3A
8A	SEP-88	3+	OCT-88	8A
8A	SEP-88	3+	OCT-88	8A
8A	SEP-88	3+	OCT-88	8A
8A	MAR-88	4+	OCT-88	8A
8A	SEP-88	4+	OCT-88	8A
8A	*	4+	AUG-88	8A
8A	*	4+	SEP-88	8A
8A	*	4+	OCT-88	8A

* Denotes that fish were tagged with a non-numbered Floy FD-67F anchor tag therefore tagging date was unknown.

Table I.3. Tagging and recapture dates and locations for largemouth bass in the Pend Oreille River.

Location Tagged	Month Tagged	Age	Month Recaptured	Recapture Location
5A	MAY-85	11+	APR-88	4B
5A	MAY-85	11+	MAY-88	5
5A	MAR-88	11+	APR-88	5A
1B	MAR-88	5+	MAY-88	1B
5A	MAR-88	5+	MAY-88	4A
5A	APR-88	7+	MAY-88	5A
1B	MAY-88	6+	JUN-88	1B
1B	MAY-88	7+	JUN-88	1B
1B	MAY-88	7+	JUN-88	1B
1B	MAY-88	11+	JUN-88	1B
5	MAY-88	11+	JUN-88	5A
1B	MAY-88	14+	JUN-88	1B
3	APR-88	6+	JUL-88	2
3C	MAY-88	6+	AUG-88	9A
4A	MAY-88	6+	AUG-88	3A
4A	APR-88	11+	AUG-88	4A
2	AUG-88	7+	SEP-88	2
5B	MAR-88	9+	SEP-88	8C
1	JUL-88	5+	OCT-88	1
4A	APR-88	11+	OCT-88	5
4A	*	3+	MAY-88	4A
5B	*	2+	AUG-88	5B
8	*	3+	SEP-88	8
7	*	3+	SEP-88	7
5B	*	3+	SEP-88	5B
4A	*	3+	OCT-88	7
4A	*	3+	OCT-88	4A
2	*	3+	OCT-88	2
2	*	3+	OCT-88	2
5A	*	3+	OCT-88	5A

* Denotes that fish were tagged with a non-numbered Floy FD-67F anchor tag therefore tagging date was unknown.

Table I.4. **Tagging and recapture dates and locations for yellow perch, black crappie and pumpkinseed in the Pend Oreille River.**

Location Tagged	Month Tagged	Species	Age	Month Recaptured	Recapture Location
3A	*	Yellow perch	4 +	JUL-88	3A
6	*	Yellow perch	3 +	AUG-88	6
4	*	Yellow perch	4 +	AUG-88	4
2	*	Yellow perch	5 +	AUG-88	2
10	*	Yellow perch	5 +	AUG-88	10
2	*	Yellow perch	5 +	AUG-88	2
7	*	Yellow perch	3 +	SEP-88	7
7	*	Yellow perch	4 +	SEP-88	7
1	*	Yellow perch	6 +	SEP-88	1
4A	*	Yellow perch	5 +	OCT-88	4A
4A	*	Yellow perch	5 +	OCT-88	4A
8	*	Yellow perch	5 +	OCT-88	8
3A	MAY-88	Black crappie	5 +	JUN-88	3A
5A	*	Pumpkinseed	3 +	JUN-88	5A
3	*	Pumpkinseed	4 +	JUN-88	4
3A	*	Pumpkinseed	4 +	JUN-88	3A
3	*	Pumpkinseed	3 +	JUL-88	3
4	*	Pumpkinseed	4 +	JUL-88	4A
4	*	Pumpkinseed	5 +	OCT-88	7

* Denotes that fish were tagged with a non-numbered Floy FD-67F anchor tag therefore tagging date was unknown.

Table I.5. Tagging and recapture dates and locations for non-target species in the Pend Oreille River.

Location Tagged	Month Tagged	Species	Age	Month Recaptured	Recapture Location
3	*	Longnose sucker	4 +	APR-88	4A
3A	*	Longnose sucker	5 +	JUL-88	3A
3A	*	Longnose sucker	3 +	SEP-88	3A
3A	*	Longnose sucker	5 +	OCT-88	3A
3A	*	Longnose sucker	5 +	OCT-88	3A
3A	*	Longnose sucker	5 +	OCT-88	3A
9	SEP-87	Largescale sucker	8 +	MAY-88	3A
5	FEB-88	Largescale sucker	9 +	JUN-88	5
1	*	Largescale sucker	6 +	SEP-88	1
1	*	Largescale sucker	6 +	OCT-88	1
2	*	Largescale sucker	7 +	OCT-88	2
8	*	Largescale sucker	7 +	OCT-88	8
3A	*	Largescale sucker	7 +	OCT-88	3A
4	*	Largescale sucker	8 +	OCT-88	3A
5A	*	Largescale sucker	8 +	OCT-88	5A
3A	*	Largescale sucker	9 +	OCT-88	3A
8	*	Largescale sucker	9 +	OCT-88	8
6A	*	Northern squawfish	3 +	JUN-88	6A
3A	*	Northern squawfish	7 +	JUN-88	3A
1	*	Northern squawfish	2 +	JUL-88	1
2	*	Northern squawfish	2 +	AUG-88	2
1	*	Northern squawfish	4 +	AUG-88	1
3A	*	Northern squawfish	4 +	AUG-88	3A
2	*	Northern squawfish	2 +	SEP-88	2
2	*	Northern squawfish	3 +	SEP-88	2
2	*	Northern squawfish	4 +	SEP-88	2
2	*	Northern squawfish	2 +	OCT-88	2
2	*	Northern squawfish	2 +	OCT-88	2
2	*	Northern squawfish	3 +	OCT-88	2
3	*	Northern squawfish	4 +	OCT-88	9
1	*	Northern squawfish	4 +	OCT-88	2
2	*	Northern squawfish	4 +	OCT-88	2
1	*	Northern squawfish	4 +	OCT-88	2
5	SEP-87	Tench	5 +	SEP-88	5
3	OCT-87	Tench	6 +	MAY-88	3A
4A	OCT-87	Tench	7 +	MAY-88	3A
5	SEP-87	Tench	7 +	MAY-88	5B
3A	*	Tench	7 +	OCT-88	3A
3A	*	Tench	1 +	JUL-88	3A
4A	*	Tench	7 +	APR-88	4A
4	*	Tench	7 +	JUN-88	4
5	*	Tench	6 +	APR-88	4A
8C	*	Tench	8 +	JUL-88	8C
5	*	Tench	6 +	OCT-88	5

* Denotes that fish were tagged with a non-numbered Floy FD-67F anchor tag therefore tagging date was unknown.

APPENDIX J

HABITAT UTILIZATION INFORMATION

Table J.1. Habitat Utilization Information collected for various species caught electrofishing in the Pend Oreille River.

SPECIES	DATE	LOCATION	LN	DEPTH	VEL	SUBSTR	COVER	MACROPHYTES	TEMP
BC	7/20/88	8	137	5.40	0.15	2.00	5	38.41	22.00
BC	7/20/88	7	137	8.00	0.15	1.00	5	29.14	22.50
BRBH	6/23/88	4	262	4.70	0.39	1.00	5	19.21	
BRBH	7/21/88	3	240	6.00	0.13	1.00	5	35.43	23.00
BRNT	7/21/88	3	202	6.40	0.06	1.00	5	33.43	23.50
BRNT	7/21/88	3	392	6.40	0.06	1.00	5	33.43	23.50
BRNT	7/21/88	3	392	6.40	0.06	1.00	5	33.43	23.50
BRNT	7/21/88	3	404	6.40	0.06	1.00	5	33.43	23.50
BRNT	7/21/88	3	416	6.40	0.06	1.00	5	33.43	23.50
BRNT	7/21/88	3	460	6.00	0.13	1.00	5	35.43	23.00
BRNT	7/21/88	3	463	6.40	0.06	1.00	5	33.43	23.50
BRNT	7/21/88	3	470	6.00	0.13	1.00	5	35.43	23.00
BRNT	7/21/88	3	499	6.00	0.13	1.00	5	35.43	23.00
BRNT	7/21/88	3	508	6.40	0.06	1.00	5	33.43	23.50
BRNT	7/21/88	3	535	6.40	0.06	1.00	5	33.43	23.50
BRNT	7/21/88	3	544	6.00	0.13	1.00	5	35.43	23.00
BRNT	7/21/88	3	544	6.40	0.06	1.00	5	33.43	23.50
BRNT	7/21/88	3	545	6.40	0.06	1.00	5	33.43	23.50
BRNT	7/21/88	3	555	6.00	0.13	1.00	5	35.43	23.00
BRNT	7/21/88	3	555	6.40	0.06	1.00	5	33.43	23.50
BRNT	7/21/88	3	563	6.00	0.13	1.00	5	35.43	23.00
BRNT	7/21/88	3	592	6.40	0.06	1.00	5	33.43	23.50
BRNT	7/21/88	3	616	6.40	0.06	1.00	5	33.43	23.50
LMB	6/23/88	4	135	2.80	0.29	1.50	5	11.20	
LMB	6/23/88	3	315	5.60	0.33	1.00	5	12.43	
LMB	7/20/88	8	90	2.90	0.18	2.00	5	23.42	22.00
LMB	7/20/88	9	99	5.00	0.09	1.00	5	39.24	21.00
LMB	7/20/88	7	103	4.20	0.16	1.50	5	39.21	22.00
LMB	7/20/88	9	108	6.80	0.10	1.00	5	38.24	21.00
LMB	7/20/88	7	108	4.20	0.16	1.50	5	39.21	22.00
LMB	7/20/88	9	113	5.00	0.09	1.00	5	39.24	21.00
LMB	7/20/88	8	119	2.90	0.18	2.00	5	23.42	22.00
LMB	7/20/88	7	128	4.70	0.06	2.00	5	39.24	22.00
LMB	7/20/88	9	130	5.00	0.09	1.00	5	39.24	21.00
LMB	7/20/88	9	130	4.00	0.14	1.00	5	39.24	21.00
LMB	7/20/88	8	132	2.90	0.18	2.00	5	23.42	22.00
LMB	7/20/88	9	135	4.00	0.14	1.00	5	39.24	21.00
LMB	7/20/88	7	219	4.70	0.06	2.00	5	39.24	22.00
LNS	6/22/88	5	304	8.30	0.34	1.00	5	25.12	
LNS	6/23/88	3	339	4.70	0.15	1.00	5	12.43	
LNS	6/23/88	4	370	2.80	0.29	1.50	5	11.20	
LNS	6/23/88	4	371	4 70	0.39	1.00	5	19.21	
LNS	6/23/88	3	402	4.70	0.15	1.00	5	12.43	
LNS	6/23/88	4	404	2.90	0.23	1.00	5	12.23	
LNS	6/23/88	4	406	2.80	0.29	1.50	5	11.20	
LNS	6/23/88	4	426	6.70	0.39	1.00	5	29.10	
LNS	7/20/88	9	346	8.60	0.20	2.00	5	38.42	21 50
LSS	6/22/88	5	421	7.00	0.43	1.00	5	19.21	

Table J.1. (cont.)

SPECIES	DATE	LOCATION	LN	DEPTH	VEL	SUBSTR	COVER	MACROPHYTES	TEMP
LSS	6/22/88	5	470	8.30	0.34	1.00	5	25.12	
LSS	6/22/88	5	474	8.10	0.56	1.00	5	13.21	
LSS	6/22/88	5	476	3.10	0.56	2.00	0	0.00	
LSS	6/22/88	5	481	6.00	0.42	1.00	5	25.12	
LSS	6/22/88	5	505	6.00	0.42	1.00	5	25.12	
LSS	6/22/88	5	509	6.00	0.42	1.00	5	25.12	
LSS	6/22/88	5	515	6.00	0.42	1.00	5	25.12	
LSS	6/23/88	4	465	2.90	0.23	1.00	5	12.23	
LSS	6/23/88	3	495	3.40	0.28	1.00	5	11.21	
LSS	7/20/88	8	398	7.00	0.15	2.00	5	39.42	23.00
LSS	7/20/88	9	442	8.60	0.20	2.00	5	38.42	21.50
MWF	6/23/88	3	315	6.80	0.00	1.00	5	39.40	
MWF	7/21/88	3	217	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	268	6.40	0.06	1.00	5	33.43	23.50
MWF	7/21/88	3	284	6.40	0.06	1.00	5	33.43	23.50
MWF	7/21/88	3	302	6.40	0.06	1.00	5	33.43	23.50
MWF	7/21/88	3	330	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	395	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	405	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	410	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	426	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	428	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	429	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	429	6.40	0.06	1.00	5	33.43	23.50
MWF	7/21/88	3	432	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	434	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	436	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	442	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	446	6.40	0.06	1.00	5	33.43	23.50
MWF	7/21/88	3	452	6.40	0.06	1.00	5	33.43	23.50
MWF	7/21/88	3	456	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	456	6.00	0.13	1.00	5	35.43	23.00
MWF	7/21/88	3	461	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	212	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	223	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	240	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	271	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	271	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	274	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	274	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	276	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	281	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	282	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	289	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	290	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	291	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	292	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	296	6.40	0.06	1.00	5	33.43	23.50
PM	7/21/88	3	299	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	300	6.00	0.13	1.00	5	35.43	23.00

Table J.1. (cont.)

SPECIES	DATE	LOCATION	LN	DEPTH	VEL	SUBSTR	COVER	MACROPHYTES	TEMP
PM	7/21/88	3	301	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	304	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	304	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	305	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	305	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	309	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	310	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	310	6.40	0.06	1.00	5	33.43	23.50
PM	7/21/88	3	310	6.40	0.06	1.00	5	33.43	23.50
PM	7/21/88	3	310	6.40	0.06	1.00	5	33.43	23.50
PM	7/21/88	3	315	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	315	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	316	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	319	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	321	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	322	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	327	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	331	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	334	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	335	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	335	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	337	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	338	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	339	6.00	0.13	1.00	5	35.43	23.00
PM	7/21/88	3	353	6.00	0.13	1.00	5	35.43	23.00
PS	6/22/88	5	96	3.50	0.13	1.00	5	11.40	
PS	6/22/88	5	100	3.50	0.13	1.00	5	11.40	
PS	6/22/88	5	102	3.50	0.13	1.00	5	11.40	
PS	6/22/88	5	104	3.50	0.13	1.00	5	11.40	
PS	6/22/88	5	105	2.50	0.29	1.00	5	13.12	
PS	6/22/88	5	105	3.10	0.56	2.00	0	0.00	
PS	6/22/88	5	107	3.50	0.13	1.00	5	11.40	
PS	6/22/88	5	109	3.10	0.56	2.00	0	0.00	
PS	6/22/88	5	111	3.90	0.29	1.00	5	13.12	
PS	6/22/88	5	111	3.90	0.29	1.00	5	13.12	
PS	6/22/88	5	111	3.50	0.13	1.00	5	11.40	
PS	6/22/88	5	115	6.00	0.42	1.00	5	25.12	
PS	6/22/88	5	117	3.90	0.29	1.00	5	13.12	
PS	6/22/88	5	118	2.50	0.29	1.00	5	13.12	
PS	6/22/88	5	120	2.50	0.29	1.00	5	13.12	
PS	6/22/88	5	121	3.90	0.29	1.00	5	13.12	
PS	6/22/88	5	122	3.50	0.13	1.00	5	11.40	
PS	6/22/88	5	124	3.10	0.56	2.00	0	0.00	
PS	6/22/88	5	125	3.10	0.56	2.00	0	0.00	
PS	6/22/88	5	125	3.10	0.56	2.00	0	0.00	
PS	6/22/88	5	125	3.10	0.56	2.00	0	0.00	
PS	6/23/88	4	97	2.80	0.29	1.50	5	11.20	
PS	6/23/88	4	99	2.80	0.29	1.50	5	11.20	
PS	6/23/88	4	102	2.80	0.29	1.50	5	11.20	
PS	6/23/88	4	102	2.50	0.12	1.00	5	12.10	

Table J.1. (cont.)

SPECIES	DATE	LOCATION	LN	DEPTH	VEL	SUBSTR	COVER	MACROPHYTES	TEMP
PS	6/23/88	4	106	2.90	0.23	1.00	5	12.23	
PS	6/23/88	4	109	2.90	0.23	1.00	5	12.23	
PS	6/23/88	4	109	2.50	0.12	1.00	5	12.10	
PS	6/23/88	4	115	2.80	0.29	1.50	5	11.20	
PS	6/23/88	4	116	3.30	0.25	1.00	5	18.40	
PS	6/23/88	4	118	2.80	0.29	1.50	5	11.20	
PS	6/23/88	4	119	2.50	0.12	1.00	5	12.10	
PS	6/23/88	3	120	3.40	0.28	1.00	5	11.21	
PS	6/23/88	4	120	2.80	0.29	1.50	5	11.20	
PS	6/23/88	4	120	2.80	0.29	1.50	5	11.20	
PS	6/23/88	4	120	2.50	0.12	1.00	5	12.10	
PS	6/23/88	4	120	2.50	0.12	1.00	5	12.10	
PS	6/23/88	4	122	2.80	0.29	1.50	5	11.20	
PS	6/23/88	4	123	2.50	0.12	1.00	5	12.10	
PS	6/23/88	4	124	2.90	0.23	1.00	5	12.23	
PS	6/23/88	4	125	2.50	0.12	1.00	5	12.10	
PS	6/23/88	4	126	2.80	0.29	1.50	5	11.20	
PS	6/23/88	4	127	3.30	0.25	1.00	5	18.40	
PS	6/23/88	4	137	2.50	0.12	1.00	5	12.10	
PS	6/23/88	4	137	2.50	0.12	1.00	5	12.10	
PS	7/20/88	9	68	4.00	0.14	1.00	5	39.24	21.00
PS	7/20/88	8	79	2.90	0.18	2.00	5	23.42	22.00
PS	7/20/88	7	81	4.20	0.16	1.50	5	39.21	22.00
PS	7/20/88	8	82	2.90	0.18	2.00	5	23.42	22.00
PS	7/20/88	9	84	3.60	0.19	2.00	5	39.42	23.00
PS	7/20/88	7	84	4.20	0.16	1.50	5	39.21	22.00
PS	7/20/88	9	89	3.60	0.19	2.00	5	39.42	23.00
PS	7/20/88	7	92	4.70	0.06	2.00	5	39.24	22.00
PS	7/20/88	7	92	4.70	0.06	2.00	5	39.24	22.00
PS	7/20/88	8	95	4.50	0.06	1.00	5	39.24	23.00
PS	7/20/88	7	96	4.20	0.16	1.50	5	39.21	22.00
PS	7/20/88	8	98	5.40	0.15	2.00	5	38.41	22.00
PS	7/20/88	7	98	4.20	0.16	1.50	5	39.21	22.00
PS	7/20/88	7	98	4.20	0.16	1.50	5	39.21	22.00
PS	7/20/88	8	101	4.50	0.06	1.00	5	39.24	23.00
PS	7/20/88	7	101	4.20	0.16	1.50	5	39.21	22.00
PS	7/20/88	7	102	3.20	0.27	1.00	5	39.12	22.00
PS	7/20/88	7	104	4.70	0.06	2.00	5	39.24	22.00
PS	7/20/88	9	105	4.00	0.14	1.00	5	39.24	21.00
PS	7/20/88	8	107	7.00	0.15	2.00	5	39.42	23.00
PS	7/20/88	9	108	5.00	0.09	1.00	5	39.24	21.00
PS	7/20/88	9	109	3.60	0.19	2.00	5	39.42	23.00
PS	7/20/88	7	109	4.20	0.16	1.50	5	39.21	22.00
PS	7/20/88	8	113	4.50	0.06	1.00	5	39.24	23.00
PS	7/20/88	7	115	4.20	0.16	1.50	5	39.21	22.00
PS	7/20/88	9	116	3.60	0.19	2.00	5	39.42	23.00
PS	7/20/88	8	116	2.90	0.18	2.00	5	23.42	22.00
PS	7/20/88	9	123	3.60	0.19	2.00	5	39.42	23.00
PS	7/20/88	9	123	3.60	0.19	2.00	5	39.42	23.00
PS	7/20/88	8	124	4.50	0.06	1.00	5	39.24	23.00

Table J.1. (cont.)

SPECIES	DATE	LOCATION	LN	DEPTH	VEL	SUBSTR	COVER	MACROPHYTES	TEMP
PS	7/20/88	7	124	4.70	0.06	2.00	5	39.24	22.00
PS	7/20/88	7	124	4.20	0.16	1.50	5	39.21	22.00
PS	7/20/88	7	125	4.20	0.16	1.50	5	39.21	22.00
PS	7/20/88	9	128	4.00	0.14	1.00	5	39.24	21.00
PS	7/20/88	8	129	7.00	0.15	2.00	5	39.42	23.00
PS	7/20/88	9	1411	6.80	0.10	1.00	5	38.24	21.00
SQF	6/23/88	4	181	3.30	0.25	1.00	5	18.40	
SQF	6/23/88	4	185	3.30	0.25	1.00	5	18.40	
SQF	6/23/88	4	227	4.70	0.39	1.00	5	19.21	
SQF	7/21/88	3	295	6.00	0.13	1.00	5	35.43	23.00
TEN	6/22/88	5	360	3.50	0.13	1.00	5	11.40	
TEN	6/22/88	5	382	3.50	0.13	1.00	5	11.40	
TEN	6/23/88	4	299	2.80	0.29	1.50	5	11.20	
TEN	6/23/88	3	360	4.70	0.15	1.00	5	12.43	
TEN	6/23/88	4	400	2.80	0.29	1.50	5	11.20	
TEN	7/20/88	8	142	4.50	0.06	1.00	5	39.24	23.00
TEN	7/20/88	8	194	4.50	0.06	1.00	5	39.24	23.00
TEN	7/20/88	8	247	2.90	0.18	2.00	5	23.42	22.00
TEN	7/20/88	8	258	7.00	0.15	2.00	5	39.42	23.00
TEN	7/20/88	7	258	4.70	0.06	2.00	5	39.24	22.00
TEN	7/20/88	9	261	4.00	0.14	1.00	5	39.24	21.00
TEN	7/20/88	9	298	4.00	0.14	1.00	5	39.24	21.00
TEN	7/20/88	9	302	6.80	0.10	1.00	5	38.24	21.00
TEN	7/20/88	9	313	4.00	0.14	1.00	5	39.24	21.00
TEN	7/20/88	7	322	3.20	0.27	1.00	5	39.12	22.00
TEN	7/20/88	8	325	4.50	0.06	1.00	5	39.24	23.00
TEN	7/20/88	8	330	5.40	0.15	2.00	5	38.41	22.00
TEN	7/20/88	8	341	7.00	0.15	2.00	5	39.42	23.00
TEN	7/20/88	9	343	5.00	0.09	1.00	5	39.24	21.00
TEN	7/20/88	7	348	3.20	0.27	1.00	5	39.12	22.00
TEN	7/20/88	9	350	3.60	0.19	2.00	5	39.42	23.00
TEN	7/20/88	9	412	4.00	0.14	1.00	5	39.24	21.00
YP	6/22/88	5	120	7.20	0.31	1.00	5	25.12	
YP	6/22/88	5	130	7.20	0.31	1.00	5	25.12	
YP	6/22/88	5	137	8.10	0.56	1.00	5	13.21	
YP	6/22/88	5	140	3.10	0.56	2.00	0	0.00	
YP	6/22/88	5	145	3.10	0.56	2.00	0	0.00	
YP	6/22/88	5	145	6.00	0.42	1.00	5	25.12	
YP	6/22/88	5	146	6.00	0.42	1.00	5	25.12	
YP	6/22/88	5	150	7.00	0.43	1.00	5	19.21	
YP	6/22/88	5	150	3.10	0.56	2.00	0	0.00	
YP	6/22/88	5	150	3.50	0.13	1.00	5	11.40	
YP	6/22/88	5	152	3.10	0.56	2.00	0	0.00	
YP	6/22/88	5	155	3.10	0.56	2.00	0	0.00	
YP	6/22/88	5	155	7.80	0.40	1.00	5	15.14	
YP	6/22/88	5	155	7.80	0.40	1.00	5	15.14	
YP	6/22/88	5	156	7.20	0.31	1.00	5	25.12	
YP	6/22/88	5	159	3.90	0.29	1.00	5	13.12	
YP	6/22/88	5	160	2.50	0.29	1.00	5	13.12	
YP	6/22/88	5	160	7.20	0.31	1.00	5	25.12	

Table J.1. (cont.)

SPECIES	DATE	LOCATION	LN	DEPTH	VEL	SUBSTR	COVER	MACROPHYTES	TEMP
YP	6/22/88	5	162	7.80	0.40	1.00	5	15.14	
YP	6/22/88	5	163	6.00	0.42	1.00	5	25.12	
YP	6/22/88	5	165	6.00	0.42	1.00	5	25.12	
YP	6/22/88	5	166	6.00	0.42	1.00	5	25.12	
YP	6/22/88	5	168	6.00	0.42	1.00	5	25.12	
YP	6/22/88	5	169	6.00	0.42	1.00	5	25.12	
YP	6/22/88	5	172	7.80	0.40	1.00	5	15.14	
YP	6/22/88	5	174	6.00	0.42	1.00	5	25.12	
YP	6/22/88	5	175	6.00	0.42	1.00	5	25.12	
YP	6/22/88	5	180	3.10	0.56	2.00	0	0.00	
YP	6/22/88	5	207	7.20	0.31	1.00	5	25.12	
YP	6/23/88	4	105	2.80	0.29	1.50	5	11.20	
YP	6/23/88	4	108	2.90	0.23	1.00	5	12.23	
YP	6/23/88	4	109	2.90	0.23	1.00	5	12.23	
YP	6/23/88	4	110	2.90	0.23	1.00	5	12.23	
YP	6/23/88	4	110	2.80	0.29	1.50	5	11.20	
YP	6/23/88	4	112	2.50	0.12	1.00	5	12.10	
YP	6/23/88	3	115	3.40	0.28	1.00	5	11.21	
YP	6/23/88	3	115	3.40	0.28	1.00	5	11.21	
YP	6/23/88	4	115	2.80	0.29	1.50	5	11.20	
YP	6/23/88	4	118	2.50	0.12	1.00	5	12.10	
YP	6/23/88	3	119	3.40	0.28	1.00	5	11.21	
YP	6/23/88	4	120	2.80	0.29	1.50	5	11.20	
YP	6/23/88	4	123	2.50	0.12	1.00	5	12.10	
YP	6/23/88	3	125	3.40	0.28	1.00	5	11.21	
YP	6/23/88	3	125	6.80	0.00	1.00	5	39.40	
YP	6/23/88	4	125	2.90	0.23	1.00	5	12.23	
YP	6/23/88	3	127	6.80	0.00	1.00	5	39.40	
YP	6/23/88	3	128	4.70	0.15	1.00	5	12.43	
YP	6/23/88	4	128	2.80	0.29	1.50	5	11.20	
YP	6/23/88	4	130	2.90	0.23	1.00	5	12.23	
YP	6/23/88	3	133	6.80	0.00	1.00	5	39.40	
YP	6/23/88	4	133	2.50	0.12	1.00	5	12.10	
YP	6/23/88	3	136	6.80	0.00	1.00	5	39.40	
YP	6/23/88	4	140	3.30	0.25	1.00	5	18.40	
YP	6/23/88	3	141	6.80	0.00	1.00	5	39.40	
YP	6/23/88	4	142	3.30	0.25	1.00	5	18.40	
YP	6/23/88	3	143	6.80	0.00	1.00	5	39.40	
YP	6/23/88	3	143	6.80	0.00	1.00	5	39.40	
YP	6/23/88	4	148	6.70	0.39	1.00	5	29.10	
YP	6/23/88	4	148	2.50	0.12	1.00	5	12.10	
YP	6/23/88	4	150	3.30	0.25	1.00	5	18.40	
YP	6/23/88	4	150	2.50	0.12	1.00	5	12.10	
YP	6/23/88	3	151	3.40	0.28	1.00	5	11.21	
YP	6/23/88	4	152	3.30	0.25	1.00	5	18.40	
YP	6/23/88	3	153	6.80	0.00	1.00	5	39.40	
YP	6/23/88	3	153	6.80	0.00	1.00	5	39.40	
YP	6/23/88	4	154	2.90	0.23	1.00	5	12.23	
YP	6/23/88	4	155	2.90	0.23	1.00	5	12.23	
YP	6/23/88	4	155	2.80	0.29	1.50	5	11.20	

Table J.1. (cont.)

SPECIES	DATE	LOCATION	LN	DEPTH	VEL	SUBSTR	COVER	MACROPHYTES	TEMP
YP	6/23/88	4	156	6.70	0.39	1.00	5	29.10	
YP	6/23/88	3	159	6.80	0.00	1.00	5	39.40	
YP	6/23/88	4	160	2.80	0.29	1.50	5	11.20	
YP	6/23/88	3	163	3.40	0.28	1.00	5	11.21	
YP	6/23/88	3	163	6.80	0.00	1.00	5	39.40	
YP	6/23/88	4	163	2.90	0.23	1.00	5	12.23	
YP	6/23/88	3	164	3.40	0.28	1.00	5	11.21	
YP	6/23/88	3	167	5.60	0.33	1.00	5	12.43	
YP	6/23/88	4	172	3.30	0.25	1.00	5	18.40	
YP	6/23/88	4	173	2.90	0.23	1.00	5	12.23	
YP	6/23/88	4	175	2.90	0.23	1.00	5	12.23	
YP	6/23/88	4	182	2.90	0.23	1.00	5	12.23	
YP	7/20/88	8	86	2.90	0.18	2.00	5	23.42	22.00
YP	7/20/88	8	100	7.00	0.15	2.00	5	39.42	23.00
YP	7/20/88	7	100	4.20	0.16	1.50	5	39.21	22.00
YP	7/20/88	8	105	2.90	0.18	2.00	5	23.42	22.00
YP	7/20/88	8	106	5.40	0.15	2.00	5	38.41	22.00
YP	7/20/88	8	107	8.80	0.19	1.00	5	38.21	22.00
YP	7/20/88	7	112	4.20	0.16	1.50	5	39.21	22.00
YP	7/20/88	7	113	4.70	0.06	2.00	5	39.24	22.00
YP	7/20/88	9	114	5.00	0.09	1.00	5	39.24	21.00
YP	7/20/88	7	115	4.20	0.16	1.50	5	39.21	22.00
YP	7/20/88	8	116	5.40	0.15	2.00	5	38.41	22.00
YP	7/20/88	8	116	2.90	0.18	2.00	5	23.42	22.00
YP	7/20/88	8	116	7.00	0.15	2.00	5	39.42	23.00
YP	7/20/88	7	118	3.20	0.27	1.00	5	39.12	22.00
YP	7/20/88	7	120	7.00	0.06	2.00	5	39.24	23.00
YP	7/20/88	7	120	4.70	0.06	2.00	5	39.24	22.00
YP	7/20/88	7	120	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	9	121	6.80	0.10	1.00	5	38.24	21.00
YP	7/20/88	9	121	3.60	0.19	2.00	5	39.42	23.00
YP	7/20/88	9	121	3.60	0.19	2.00	5	39.42	23.00
YP	7/20/88	8	121	8.80	0.19	1.00	5	38.21	22.00
YP	7/20/88	8	121	4.50	0.06	1.00	5	39.24	23.00
YP	7/20/88	8	121	4.50	0.06	1.00	5	39.24	23.00
YP	7/20/88	9	122	4.00	0.14	1.00	5	39.24	21.00
YP	7/20/88	9	122	4.00	0.14	1.00	5	39.24	21.00
YP	7/20/88	9	122	3.60	0.19	2.00	5	39.42	23.00
YP	7/20/88	8	122	4.50	0.06	1.00	5	39.24	23.00
YP	7/20/88	7	122	4.20	0.16	1.50	5	39.21	22.00
YP	7/20/88	7	122	3.20	0.27	1.00	5	39.12	22.00
YP	7/20/88	9	123	8.60	0.18	2.50	5	39.41	21.00
YP	7/20/88	8	123	7.00	0.15	2.00	5	39.42	23.00
YP	7/20/88	8	123	4.50	0.06	1.00	5	39.24	23.00
YP	7/20/88	7	123	4.70	0.06	2.00	5	39.24	22.00
YP	7/20/88	9	124	8.60	0.20	2.00	5	38.42	21.50
YP	7/20/88	9	124	8.60	0.20	2.00	5	38.42	21.50
YP	7/20/88	9	124	8.60	0.20	2.00	5	38.42	21.50
YP	7/20/88	8	124	5.40	0.15	2.00	5	38.41	22.00
YP	7/20/88	8	124	2.90	0.18	2.00	5	23.42	22.00

Table J.1. (cont.)

SPECIES	DATE	LOCATION	LN	DEPTH	VEL	SUBSTR	COVER	MACROPHYTES	TEMP
YP	7/20/88	8	124	4.50	0.06	1.00	5	39.24	23.00
YP	7/20/88	9	125	4.00	0.14	1.00	5	39.24	21.00
YP	7/20/88	7	125	4.70	0.06	2.00	5	39.24	22.00
YP	7/20/88	9	126	8.60	0.20	2.00	5	38.42	21.50
YP	7/20/88	9	126	3.60	0.19	2.00	5	39.42	23.00
YP	7/20/88	8	126	8.80	0.19	1.00	5	38.21	22.00
YP	7/20/88	9	127	3.60	0.19	2.00	5	39.42	23.00
YP	7/20/88	8	127	8.80	0.19	1.00	5	38.21	22.00
YP	7/20/88	7	127	4.70	0.06	2.00	5	39.24	22.00
YP	7/20/88	8	128	2.90	0.18	2.00	5	23.42	22.00
YP	7/20/88	9	129	8.60	0.18	2.50	5	39.41	21.00
YP	7/20/88	8	129	5.40	0.15	2.00	5	38.41	22.00
YP	7/20/88	8	129	4.50	0.06	1.00	5	39.24	23.00
YP	7/20/88	7	129	4.70	0.06	2.00	5	39.24	22.00
YP	7/20/88	9	130	5.00	0.09	1.00	5	39.24	21.00
YP	7/20/88	7	130	4.70	0.06	2.00	5	39.24	22.00
YP	7/20/88	7	130	4.20	0.16	1.50	5	39.21	22.00
YP	7/20/88	8	131	7.00	0.15	2.00	5	39.42	23.00
YP	7/20/88	8	131	4.50	0.06	1 00	5	39.24	23.00
YP	7/20/88	8	131	4.50	0.06	1.00	5	39.24	23.00
YP	7/20/88	8	131	4.50	0.06	1.00	5	39.24	23.00
YP	7/20/88	7	132	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	7	132	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	9	133	5.00	0.09	1.00	5	39.24	21.00
YP	7/20/88	7	133	4.20	0.16	1.50	5	39.21	22.00
YP	7/20/88	7	135	4.70	0.06	2.00	5	39.24	22.00
YP	7/20/88	9	136	8.60	0.18	2.50	5	39.41	21.00
YP	7/20/88	8	136	5.40	0.15	2.00	5	38.41	22.00
YP	7/20/88	8	136	8.80	0.19	1.00	5	38.21	22.00
YP	7/20/88	7	136	4.70	0.06	2.00	5	39.24	22.00
YP	7/20/88	8	138	5.40	0.15	2.00	5	38.41	22.00
YP	7/20/88	8	138	8.80	0.19	1.00	5	38.21	22.00
YP	7/20/88	8	139	5.40	0.15	2.00	5	38.41	22.00
YP	7/20/88	8	140	7.00	0.15	2.00	5	39.42	23.00
YP	7/20/88	7	140	7.00	0.06	2.00	5	39.24	23.00
YP	7/20/88	8	141	4.50	0.06	1.00	5	39.24	23.00
YP	7/20/88	9	143	8.60	0.18	2.50	5	39.41	21.00
YP	7/20/88	7	143	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	7	143	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	8	146	8.80	0.19	1.00	5	38.21	22.00
YP	7/20/88	8	147	7.00	0.15	2.00	5	39.42	23.00
YP	7/20/88	7	147	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	9	149	6.80	0.10	1.00	5	38.24	21.00
YP	7/20/88	8	149	8.80	0.19	1.00	5	38.21	22.00
YP	7/20/88	8	149	4.50	0.06	1.00	5	39.24	23.00
YP	7/20/88	7	150	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	9	151	8.60	0.18	2.50	5	39.41	21.00
YP	7/20/88	7	151	3.20	0.27	1.00	5	39.12	22.00
YP	7/20/88	8	152	8.80	0.19	1.00	5	38.21	22.00
YP	7/20/88	9	153	5.00	0.09	1.00	5	39.24	21.00

Table J.1. (cont.)

SPECIES	DATE	LOCATION	LN	DEPTH	VEL	SUBSTR	COVER	MACROPHYTES	TEMP
YP	7/20/88	8	153	2.90	0.18	2.00	5	23.42	22.00
YP	7/20/88	9	154	8.60	0.18	2.50	5	39.41	21.00
YP	7/20/88	9	154	8.60	0.20	2.00	5	38.42	21.50
YP	7/20/88	7	154	7.00	0.06	2.00	5	39.24	23.00
YP	7/20/88	9	156	8.60	0.18	2.50	5	39.41	21.00
YP	7/20/88	9	156	8.60	0.20	2.00	5	38.42	21.50
YP	7/20/88	8	156	7.00	0.15	2.00	5	39.42	23.00
YP	7/20/88	8	156	4.50	0.06	1.00	5	39.24	23.00
YP	7/20/88	9	157	8.60	0.20	2.00	5	38.42	21.50
YP	7/20/88	7	157	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	9	159	8.60	0.18	2.50	5	39.41	21.00
YP	7/20/88	7	159	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	7	160	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	7	161	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	9	162	8.60	0.18	2.50	5	39.41	21.00
YP	7/20/88	7	162	4.70	0.06	2.00	5	39.24	22.00
YP	7/20/88	7	162	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	7	163	4.70	0.06	2.00	5	39.24	22.00
YP	7/20/88	7	163	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	8	165	4.50	0.06	1.00	5	39.24	23.00
YP	7/20/88	7	166	3.20	0.27	1.00	5	39.12	22.00
YP	7/20/88	7	168	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	8	169	2.90	0.18	2.00	5	23.42	22.00
YP	7/20/88	7	171	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	7	172	4.70	0.06	2.00	5	39.24	22.00
YP	7/20/88	7	172	8.00	0.15	1.00	5	29.14	22.50
YP	7/20/88	9	179	8.60	0.20	2.00	5	38.42	21.50
YP	7/20/88	7	180	8.00	0.15	1.00	5	29.14	22.50
YP	7/21/88	3	135	6.40	0.06	1.00	5	33.43	23.50

APPENDIX K

MONTHLY ANGLER PRESSURE ESTIMATES AND ANGLER USE PATERNS OF THE PEND OREILLE RIVER

Table K.1. Pressure estimates ± 95 confidence intervals for shore and boat anglers for each strata on Pend Oreille River, WA (March-December, 1988)

	March[1,2]	April[2]	May[2]	June[2]	July	August	September	October	November	December	TOTAL
Section 1											
Weekday (shore)	34±4	272±70	73±5	88±6	223±11	14±2	21±2	26±4	0	0	750±104
Weekend (shore)	12±3	172±36	0	58±8	0	0	0	28±5	0	1±1	271±53
Weekday (boat)	20±4	0	75±6	36±4	356±21	25±3	25±4	0	7±3	0	544±45
Weekend (boat)	0	61±3	71±6	38±5	21±4	137±16	0	11±3	0	0	338±37
Section 2											
Weekday (shore)		114±27	61±6	25±2	63±4	51±5	12±2	0	0	0	326±46
Weekend (shore)		36±4	97±12	42±9	10±2	53±6	0	0	0	0	238±46
Weekday (boat)		54±9	22±4	0	82±8	45±5	49±3	0	0	0	252±25
Weekend (boat)		17±3	148±13	128±8	0	58±7	0	0	0	0	351±31
Section 3											
Weekday (shore)					0	71±7	0	0	0	0	71±7
Weekend (shore)					94±4	68±7	26±6	5±1	0	0	193±18
Weekday (boat)					0	233±18	24±2	13±2	0	0	270±22
Weekend (boat)					228±10	163±15	140±18	4±1	0	0	535±44
TOTAL PRESSURE (angler hours)	66±11	726±151	547±52	415±42	1076±63	918±90	296±38	87±16	7±3	1±1	4139±466

1 During March, surveys were only conducted at the end of the month (3/24-3/31).

2 From April to June the river was divided into two sections for creel surveys after June a modification was made and three sections were used.

Table K.2. Angler preference for different localities on the Pend Oreille River, based on pressure counts, March-December, 1988.

LOCATION	March	April	May	June	July	August	September	October	November	December
SHORE ANGLERS[1]	N=4	N=100	N=39	N=36	N=38	N=43	N=12	N=10	None	N=1
1A Albeni Falls Dam		20.0	15.4	8.3	5.3	2.3	25.0	20.0		
1B Pioneer Park		3.0		5.6	7.9					
1C Indian Island	50.0	1.0	5.1	22.2	5.3			30.0		
1D Davis Estates		35.0	2.6	25.0	15.7			30.0		
2A Usk		12.0				4.6				100.0
2B Cusick		3.0			2.6	2.3				
2C Cee Cee Ah		5.0	2.6			4.6	25.0			
2D Riverbend Park		4.0	12.8	2.8	2.6	27.9	16.7			
3A Panhandler Park		7.0	2.6	5.6	10.5	27.9	16.7			
3B Le Clerc Creek	25.0	9.0	20.5	2.8	23.7	30.2	16.7			
3D Tiger	25.0	1.0	10.2	25.0	5.3					
3D Ione			12.8	2.8	21.1					
3E Box Canyon Dam			15.4					20.0		
BOAT ANGLERS[1]	N=1	N=15	N=30	N=12	N=35	N=63	N=32	N=4	N=2	None
1A Albeni Falls Dam		6.6	6.7	16.7	11.4		6.2	25.0		
1B Pioneer Park			20.0	16.7	5.7	6 3			50.0	
1C Indian Island		6.6		8.3	8.6	6.3			50.0	
1D Davis Estates	100.0	26.7	10.0		5.7	11.1				
2A Usk		13.3				3.2	3.1			
2B Cusick						3.2				
2C Cee Cee Ah		40.0	6.7	16.7		7.9	3.1			
2D Riverbend Park		6.6	10.0	25.0		3.2	15.6			
3A Panhandler Park			10.0	8.3	14.3	31.7	25.0	75.0		
3B Le Clerc Creek			10.0		11.4	19.0	40.6			
3D Tiger			6.7		17.1	4.8	6.2			
3D Ione			13.3	8.3	20.0					
3E Box Canyon Dam			6.7		5.7	3.2				

[1]Number of anglers counted.