

2011 OUT-MIGRATION REPORT

Fauntleroy Creek

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SUMMARY

We documented 147 live coho smolts in a new, upstream trap at Fenton Glen, as they left Fauntleroy Park. During the same period, we documented only 36 that survived to reach the downstream trap at the fish ladder. We found a few live fry in each trap, no dead smolts, and no other aquatic species. We did not spot any fry from 2010 spawning in the lower reach prior to out-migration season.

Year	Monitoring Period	Live Smolts Upper	Live Smolts Lower	Smolt Size Range	Dead Smolts Upper	Dead Smolts Lower	Live Fry Lower	Dead Fry Lower	Released Fry
2011	3/25 - 5/30	147	36	not measured	0	0	few	0	2,027
2010	4/1 - 5/22		24	110 mm - 140 mm		0	81	2	2,298
2009	4/1 - 5/31		18	97 mm - 110 mm		1	1	0	1,936
2008	4/2 - 5/31		17	100 mm - 135 mm		0	85	0	1,790
2007	4/7 - 5/19		24	115 mm - 128 mm		0	20	0	2,276
2006	4/9 - 5/18		22	105 mm - 155 mm		1	121	0	2,033
2005	3/16 - 5/27		10	100 mm - 135 mm		0	34	3	1,138
2004	3/3 - 6/10		11	97 mm - 123 mm		0	569	3	1,534
2003	4/2 - 6/16		37	(used different method)		0	637	84	1,254

METHODOLOGY

The two traps are similar: a wooden box fitted with netting and anchored below a weir such that all water flows through, softly trapping everything headed downstream. Design of the new, upstream trap rectified an overflow problem with the lower trap, plus was easier to clean and check for fish. (We will replace the latter next year with the new design.) We installed the upper trap on 3/23 and the lower trap on 3/25; we found smolts in both on the days immediately following. We checked the traps almost daily during the monitoring period and released all live fish to continue their journey. To simplify the volunteer task of checking two traps and reduce the chance of trauma to smolts, we elected not to measure total body length this year.

OBSERVATIONS AND COMMENTS

Considerably more smolts were removed from the upper trap than the lower (by several times). Ideally the numbers should be roughly equal; smolts caught and released from the upper trap should proceed downstream and be picked up, again, in the lower trap.

Although we can't explain the discrepancy with any certainty, it may be because of predation, trap malfunction and resulting smolt escapement, or physical impediments to out-migration between the upper and lower traps. One suggestion is that the culvert through which the creek flows under 45th Ave. SW, with its built-in drop, may be an impediment. On occasion, the lower trap filled with debris during high flow and overflowed, but those days were few. Also, a small hole developed in the netting of the lower trap, which might have compromised its function for an unknown period of time.

The addition of the second trap has given us a better picture of population size and out-migration of smolts in Fauntleroy Creek. It has also raised questions. The large number of smolts found in the upper trap was surprising and puzzling but also hopeful. We are happy to know that the creek is able to produce that many - and to convey this good news to the youngsters releasing fry. The early sightings indicate that we are not putting the traps in early enough.

RELEASES

A record number of youngsters released coho fry this year. The number of fry was nearly 300 fewer than in 2010 and was at the upper limit of our estimate of what habitat in the park will bear. As shown below, all releases occurred in May. Jack Lawless again raised "volunteer" fry for groups that did not bring their own.

DATE	SCHOOL / GROUP	# KIDS	# FRY
5/2	Pathfinder	50	100
5/3	Cove School	10	30
5/4	Cove School	13	100
5/4	KapKa Cooperative K-2	38	190
5/9	Denise Louis*	17	50
5/11	Alki	70	70
5/11	Westside School	44	143
5/12	Little Pilgrim*	33	75
5/13	Gatewood	60	178
5/16	Sanislo	58	177

DATE	SCHOOL / GROUP	# KIDS	# FRY
5/16	West Seattle MOMS*	20	50
5/18	Fauntleroy Children's Center	13	176
5/20	West Seattle	48	193
5/23	Alki Cooperative Preschool*	15	25
5/24	Arbor Heights	54	80
5/25	White Center Heights*	22	50
5/26	Roxhill	45	100
5/27	Schmitz Park	31	150
Rest of volunteer-reared fry			90
TOTALS		641	2,027

* Volunteer fry

The following graph documents smolt count by day and location.

2011 Fauntleroy Creek Smolt Count

	UPPER CREEK																	LOWER CREEK							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	1	2	3	4				
31-Mar	■																	■							
1-Apr							■	■										■	■						
2-Apr	■																	■							
3-Apr																		■							
4-Apr	■	■																							
5-Apr		■	■															■	■	■					
6-Apr																		■							
7-Apr																									
8-Apr	■	■	■	■														■							
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22-Apr	■	■																							
23-Apr	■	■	■	■	■	■												■							
24-Apr	■	■																■	■						
25-Apr	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
26-Apr	■	■																							
27-Apr	■	■																■	■						
28-Apr	■	■	■	■	■	■	■											■							
29-Apr	■	■	■	■	■																				
30-Apr	■	■																■							
1-May	■	■	■	■	■													■							
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