



SPAWNER SURVEYS 2014

Summary

- Hadden Creek was the star performer, with solid coho returns and outstanding chinook numbers. Both species were found higher up in the creek than seen previously.
- Chum returns were down in almost all creeks by a large margin.
- Coho returns were quite variable:
 - numbers were lower in Brothers Creek, about the same in McDonald, and up in Hadden and Lawson.
 - spawners were not seen in several smaller creeks that often have coho
- Pink salmon were spotted in Cypress Creek early in the fall
- Chinook salmon were seen in large numbers in Brothers Creek and its tributary Hadden

CREEK	CHUM	COHO	CHINOOK	PINK	CREEK TOTAL
Brothers	331	71	103	0	505
Hadden	56	69	102	0	227
Macbeth	0	0	0	0	0
West Brothers	0	0	0	0	0
Burley	0	0	0	0	0
Total Brothers	387	140	205	0	732
Claymore	0	0	0	0	0
Cypress	0	0	0	40	40
Dogwood	0	0	0	0	0
Eagle	2	0	0	0	2
Larson	0	0	0	0	0
Lawson	2	13	0	0	15
McDonald	0	12	0	0	12
Nelson	0	0	0	0	0
Rodgers	1	0	0	0	1
Willow	0	0	0	0	0
Wood	0	0	0	0	0
TOTAL CREEKS	392	165	205	40	802

Survey Methodology

- Tables indicate number of salmon counted by Streamkeepers during weekly surveys and do not indicate the total number of spawning salmon

- We employ consistent methods of surveying to develop comparable numbers and highlights trends
- Coho fry and resident and sea-run cutthroat trout were observed but not counted
- Zeroes on the table indicate no salmon observed, and blanks indicate the creek was not surveyed
- Weekly surveys conducted on 15 creeks from mid-October through December
- Surveys conducted by over 20 West Vancouver Streamkeeper volunteers
- Seven weeks of surveying by West Vancouver high school students supervised by Streamkeeper members on Brothers watershed creeks and Lawson, McDonald, Eagle, Wood and Larson creeks.

Trends

SPAWNING CHUM

CREEK	2014	2013	2012	2011	2010	2009	2008	2007	2006
Brothers	331	962	786	368	114	414	173	180	356
Hadden	56	93	106	1	4	89	12	5	48
Macbeth	0	6	4	0	0	3			
West Brothers	0		0	0	0	0	0		7
Burley	0	0							
Westcot				0	0	0			0
Total Brothers	387	1061	896	369	118	506	185	185	411
Caulfeild		0	0	0	0				
Claymore	0	0		0					
Cypress	0	0	0	0	0	0			0
Eagle	2	26	67	0	0	55	35	2	43
Dogwood	0	0	0	0					
Godman									0
Larson	0	0	0	0	0				0
Lawson	2	12	5	2	0	4	18	4	3
McDonald	0	12	0	1	0	0	2	0	0
Nelson	0	0	0	0	0	1	0	0	4
Pipe					0	0	0		0
Rodgers	1	1	0	0	0	0	0		0
Turner/Cave		0	0	0	0	0	0		0
Willow	0			0		0			0
Wood	0	0	5	0	0	0	2	0	12
Total	392	1112	973	372	118	566	242	191	473

- Chum returns were down in almost all creeks by about a third of the previous year and comparable with 2011

SPAWNING COHO

CREEK	2014	2013	2012	2011	2010	2009	2008	2007	2006
Brothers	71	131	109	128	86	41	12	41	0
Hadden	69	29	24	7	28	15	13	25	5
Macbeth	0	0	3	0	7	6			
West Brothers	0		2	1	0	0	1		0
Burley	0	0							
Westcot				0	0	2			0
Total Brothers	140	160	138	136	121	64	26	66	5
Caulfeild		0	0	0	0				
Claymore	0	0		0					0
Cypress	0	0	0	0	0	0			0
Eagle	0	1	2	1	6	5	1	0	2
Dogwood	0	0	0	0					
Godman									0
Larson	0	0	0	0	0				
Lawson	13	5	0	13	12	4	1	42	0
McDonald	12	14	4	7	1	1	0	14	0
Nelson	0	0	0	0	2	0	0	0	1
Pipe					0	0	0		0
Rodgers	0	2	0	0	0	0	0		0
Turner/Cave		0	0	0	0	0	0		0
Willow	0			0		0			0
Wood	0	1	0	0	0	2	0	0	0
TOTAL	165	183	144	157	142	76	28	122	8

- Coho returns were variable
- Coho numbers were lower in Brothers Creek, about the same in McDonald and up in Hadden and Lawson.
- Coho were not seen in a number of the small creek that have a small coho return, such as Eagle, Rodgers, Wood, Macbeth and West Brothers
- Coho were found higher up in Hadden Creek than ever before, to the downstream side of Hadden Drive

SPAWNING PINKS

CREEK	2014	2013	2012	2011	2010	2009
Brothers		thousands*		88		3
Hadden		many*		1		0
Macbeth		12				
West Brothers		2				
Burley		0				
Westcot						
Total Brothers		313		89		3
Caulfeild						
Claymore						
Cypress	40	37		1	12	28
Eagle						
Dogwood						
Godman						
Larson						
Lawson		3				
McDonald						
Nelson						
Pipe						
Rodgers						
Turner/Cave						
Willow						
Wood		1				
TOTAL	40	354		90	12	31

* 232 pinks in Brothers and 55 pinks in Hadden in the survey period, which occurred after the pink spawning peak

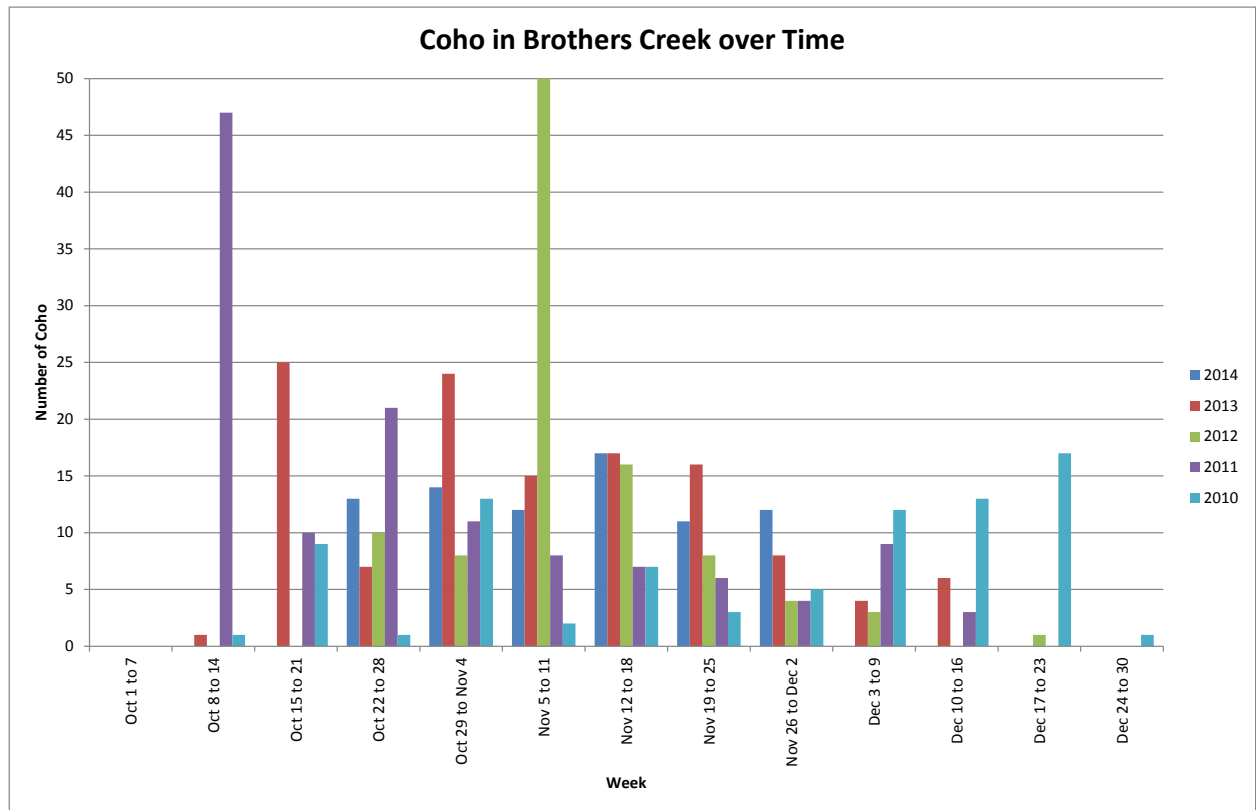
- Cypress was the only creek where pink salmon were spotted in 2014
- Pink salmon usually spawn in West Vancouver creeks on odd numbered years
- Pink salmon are not uncommon in Cypress Creek on even years

SPAWNING CHINOOK

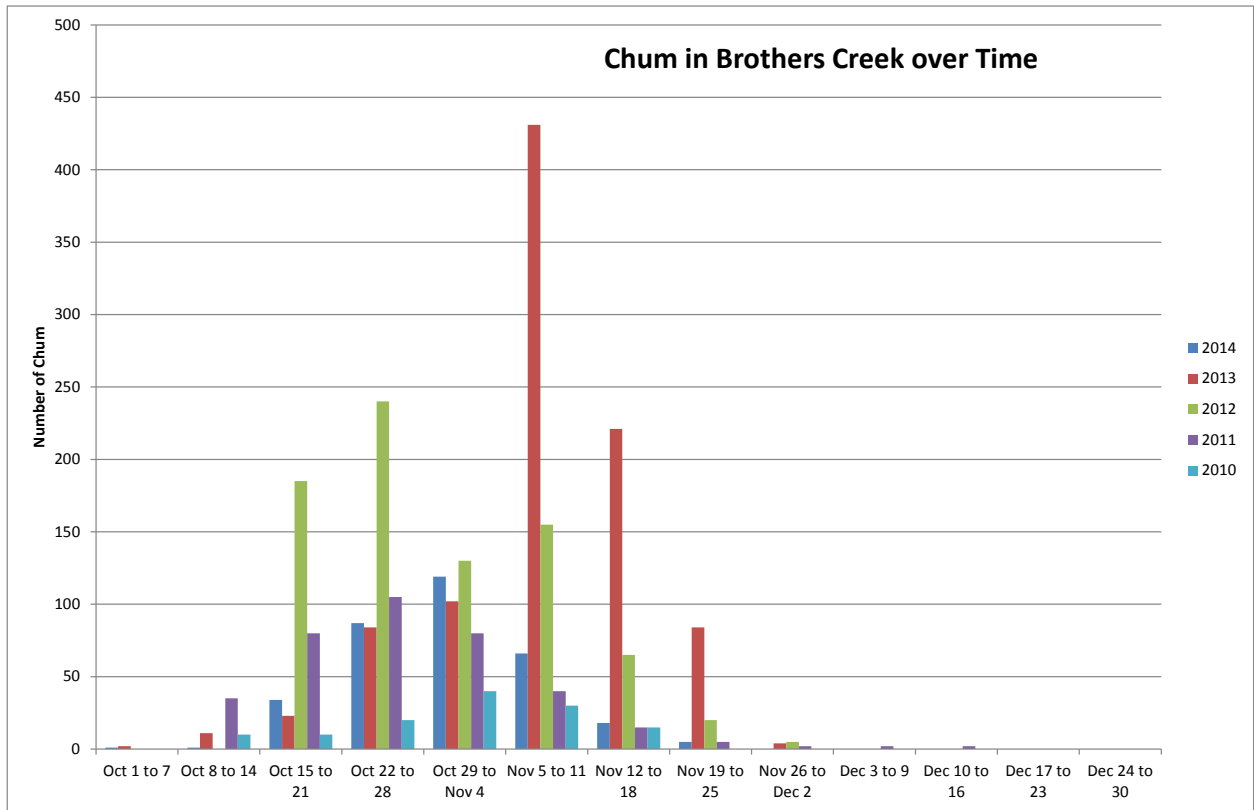
CREEK	2014	2013	2012	2011	2010
Brothers	103	3	3	4	4
Hadden	102		1		1
Macbeth	0	1			
West Brothers	0				
Burley	0				
Westcot					
Total Brothers	205	4	4	4	5
Caulfeild					
Claymore					
Cypress				1	
Eagle					
Dogwood					
Godman					
Larson					
Lawson					
McDonald					
Nelson					
Pipe					
Rodgers					
Turner/Cave					
Willow					
Wood					

- A very strong return of chinook to West Vancouver’s largest creek, Brothers, and its tributary Hadden
- The abundance of chinook in the Brothers watershed may have been due to the high amount of silt in the Capilano River. The river sediment was caused by several landslides in the upper watershed.

Timing

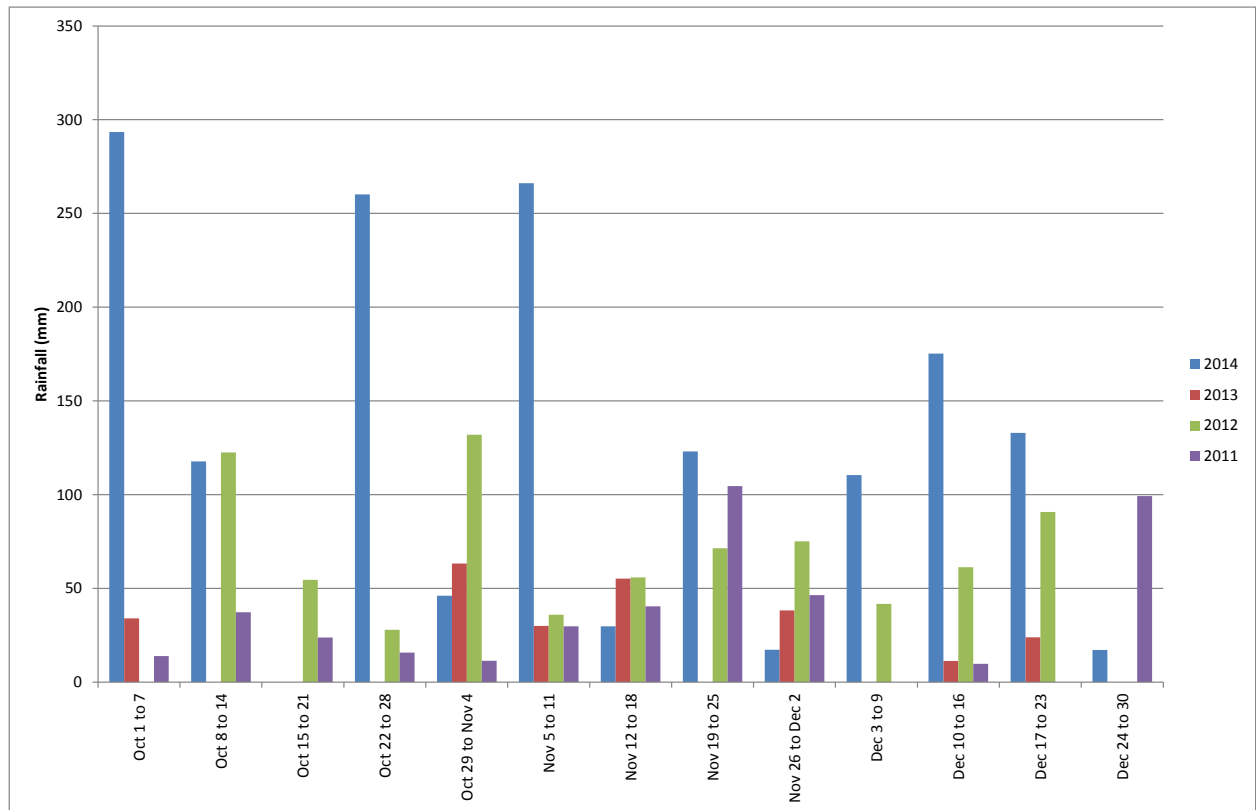


- Coho arrive in Brothers Creek over long time period, from October or earlier and may be found in late December or early January
- In 2014 there was an abrupt end to coho returns in late November/early December



- Chum return are over a shorter time period than coho, with sharper and more abrupt peaks

Precipitation in West Vancouver by week



- The amount of precipitation was added over seven day periods and compared over four years through the period of October 1 to December 31
- The fall of 2014 was very stormy, with the four highest peaks of precipitation over the four year period studied
- These weeks of high precipitation were sometimes the result of several days of rain and sometimes one big storm
- The fall of 2013 was a dry fall, with periods of several weeks with no precipitation