

SPAWNER SURVEYS 2016

Highlights

- Chum returns increased over the previous two years in the Brothers Creek watershed and in Eagle, Wood and Lawson Creeks. The cyclical return pattern indicates that 2017 may also be a healthy chum spawning year.
- Coho numbers were poor to very poor in all creeks but Hadden.
- Larger than average numbers of chinook were seen in Brothers and Hadden Creeks.
- Hadden Creek had an exceptional spawning year, with the second highest recorded number of chum and coho, and outstanding chinook returns.
- For the first time, chum in Wood Creek swam through the Keith Road culvert and spawned in Parc Verdun in good numbers. A few even ventured further upstream to the Eagle Harbour school yard driveway crossing.

WEST VANCOUVER CREEKS SPAWNER SUMMARY 2016				
CREEK	CHUM	COHO	CHINOOK	CREEK TOTAL
Brothers	876	46	21	943
Hadden	86	49	9	144
Macbeth	8	0	0	8
West Brothers	2	1	0	3
Brothers Watershed	972	96	30	1098
Claymore	0	0	0	0
Cypress	1	0	0	1
Eagle	14	0	0	14
Larson	0	0	0	0
Lawson	5	2	0	7
McDonald	0	3	0	3
Nelson	0	2	0	2
Rodgers	0	0	0	0
Willow	0	0	0	0
Wood	6	0	0	6
TOTAL CREEKS	998	103	30	1131

Chum

- Chum returns were strong in all the creeks in the Brothers watershed, as well as in Eagle, Wood and Lawson Creeks. A single chum was observed in Cypress Creek.
- Hadden Creek had the second highest chum year in the last 11 years, after a peak in 2012.
- Chum in Wood Creek were all observed in Parc Verdun upstream of the Keith Road culvert, with three spotted in the Eagle Harbour school yard.
- A trend of cycles of two low-return years followed by two high-return years, means that higher numbers of chum should also be observed in 2017.

SPAWNING CHUM

CREEK	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Brothers	876	319	331	962	786	368	114	414	173	180	356
Hadden	86	10	56	93	106	1	4	89	12	5	48
Macbeth	8	0	0	6	4	0	0	3			
West Brothers	2	0	0		0	0	0	0	0		7
Burley				0							
Westcot						0	0	0			0
Brothers Watershed	972	329	387	1061	896	369	118	506	185	185	411
Caulfeild				0	0	0	0				
Claymore	0	0	0	0		0					
Cypress	1	0	0	0	0	0	0	0			0
Eagle	14	3	2	26	67	0	0	55	35	2	43
Dogwood			0	0	0	0					
Godman											0
Larson	0	0	0	0	0	0	0				0
Lawson	5	0	2	12	5	2	0	4	18	4	3
McDonald	0	0	0	12	0	1	0	0	2	0	0
Nelson	0	0	0	0	0	0	0	1	0	0	4
Pipe							0	0	0		0
Rodgers	0	0	1	1	0	0	0	0	0		0
Turner/Cave				0	0	0	0	0	0		0
Willow	0	2	0			0		0			0
Wood	6	2	0	0	5	0	0	0	2	0	12
Total	998	336	392	1112	973	372	118	566	242	191	473

Coho

- Coho returns were quite variable in 2016, as always.
- Coho were observed in Hadden Creek in the second highest number of the past eleven years, after a high in 2014. Coho sightings were down in Brothers Creek and stable in West Brothers.
- Coho in Lawson, McDonald and Nelson Creeks were spotted but in low numbers compared with most previous years.
- Coho were not seen in Cypress and Eagle Creeks, where coho have been common in past years.

SPAWNING COHO

CREEK	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Brothers	46	94	71	131	109	128	86	41	12	41	0
Hadden	49	18	69	29	24	7	28	15	13	25	5
Macbeth	0	0	0	0	3	0	7	6			
West Brothers	1	1	0		2	1	0	0	1		0
Burley			0	0							
Westcot						0	0	2			0
Total Brothers Watershed	96	113	140	160	138	136	121	64	26	66	5
Caulfeild				0	0	0	0				
Claymore	0	0	0	0		0					0
Cypress	0	2	0	0	0	0	0	0			0
Eagle	0	0	0	1	2	1	6	5	1	0	2
Dogwood			0	0	0	0					
Godman											0
Larson	0	0	0	0	0	0	0				
Lawson	2	0	13	5	0	13	12	4	1	42	0
McDonald	3	0	12	14	4	7	1	1	0	14	0
Nelson	2	0		0	0	0	2	0	0	0	1
Pipe			0				0	0	0		0
Rodgers	0	0	0	2	0	0	0	0	0		0
Turner/Cave				0	0	0	0	0	0		0
Willow	0	0	0			0		0			0
Wood	0	0	0	1	0	0	0	2	0	0	0
TOTAL	103	115	165	183	144	157	142	76	28	122	8

Chinook

- A handful of chinooks are commonly observed spawning in larger creeks, Brothers and Hadden Creeks, and occasionally in Cypress.
- In 2016 spawning chinook numbers were up significantly in Brothers and Hadden Creeks. The salmon were often found in pairs.
- The anomalous increase in 2014 is thought to be due to unfavourable water conditions in the Capilano River that drove chinook into the Brothers watershed. The cause for the 2016 spawning season increase is unclear.

SPAWNING CHINOOK

CREEK	2016	2015	2014	2013	2012	2011	2010
Brothers	21	2	103	3	3	4	4
Hadden	9	2	102		1		1
Macbeth				1			
West Brothers							
Burley							
Westcot							
Brothers Watershed	30	4	205	4	4	4	5
Caulfeild							
Claymore							
Cypress						1	
Eagle							
Dogwood							
Godman							
Larson							
Lawson							
McDonald							
Nelson							
Pipe							
Rodgers							
Turner/Cave							
Willow							
Wood							

Survey Methodology

- We employ consistent methods of surveying to develop comparable data and highlights trends between years.
- Weekly spawner surveys were conducted on 14 creeks in West Vancouver from mid-October through December.
- More than 20 West Vancouver Streamkeeper volunteers conducted surveys in 2015, with members of the public supplying casual observations.
- Teams of West Vancouver high school students supervised by Streamkeeper members surveyed for seven weeks in the Brothers watershed, as well as Lawson, McDonald, lower Eagle, Wood and Larson creeks.
- Survey figures indicate a total of the number of salmon counted during weekly surveys over the spawning season. All surveys were examined to remove duplications and arrive at one data point per week.
- Zeroes in a table indicate no salmon observed; blanks indicate the creek was not surveyed.
- Coho fry and resident and sea-run cutthroat trout were observed but not counted.
- Other animals noted by surveyors include otters, mink, seals, bald eagles, herons, and dippers