

NPAFC

Doc. 1269

Rev. _____

Rev.Date: _____

**Biostatistical Information on Salmon Catches, Escapement
and Enhancement Production in Russia in 2009**

Pacific Research Fisheries Centre (TINRO-centre)

4, Shevchenko Alley, Vladivostok, 690600, RUSSIA

Submitted to the

NORTH PACIFIC ANADROMOUS FISH COMMISSION

by

RUSSIA

October 2010

THIS PAPER MAY BE CITED IN THE FOLLOWING MANNER:

Biostatistical Information on Salmon Catches, and Enhancement Production in Russia in 2009. NPAFC Doc. 1269. 5 pp. Pacific Research Fisheries Centre (TINRO-centre), 4, Shevchenko Alley, Vladivostok, 690600, RUSSIA. (Available at www.npafc.org).

Table 1

Commercial salmon catch in Russia (Far East) by species, in tonnes (round weight), 2009.

Region, subregion	Pink	Chum	Sockey	Coho	Chinook	Masou	Total
Western Bering Sea	214.11	755.82	232.63				1202.56
Eastern Kamchatka	139063.51	11611.09	10690.83	1748.42	614.60		163728.46
Kuriles	25666.40	13445.90	232.10	194.13			39538.53
The Sea of Okhotsk							
Western Kamchatka	7325.91	7346.38	17106.80	1215.47	80.54		33075.08
Continental coast	18983.38	16033.64	133.22	470.83			35621.07
Sakhalin coast	229252.60	25510.50		64.20		4.36	254831.66
Amur Basin	3624.73	13142.65					16767.38
The Sea of Japan							
Primor'e	120.63	241.33				5.87	367.83
Southwestern Sakhalin	1204.10	4931.00				9.00	6144.10
Total	425455.37	93018.31	28395.57	3693.05	695.14	19.23	551276.66

Table 2

Commercial salmon catch in Russia (Far East) by species, in thousands of fish, 2009.

Region, subregion	Pink	Chum	Sockey	Coho	Chinook	Masou	Total
Western Bering Sea	173.09	231.98	73.70				478.77
Eastern Kamchatka	119138.89	3865.41	4244.51	544.57	101.40		127894.77
Kuriles	15746.25	3897.36	110.52	64.71			19818.85
The Sea of Okhotsk							0.00
Western Kamchatka	4284.45	2143.50	6366.71	377.74	11.33		13183.73
Continental coast	13670.58	4954.18	49.35	137.79			18811.89
Sakhalin coast	159012.10	8622.90		21.40		4.48	167660.88
Amur Basin	2827.40	5366.54					8193.94
The Sea of Japan							0.00
Primor'e	84.31	64.15				2.14	150.60
Southwestern Sakhalin	873.83	1507.29				3.29	2384.41
Total	315810.89	30653.31	10844.78	1146.21	112.73	9.90	358577.82

Table 3

Average weights (kg) of salmon in commercial catch in Russia (Far East) by species, 2009.

Region, subregion	Pink	Chum	Sockey	Coho	Chinook	Masou
Western Bering Sea	1.237	3.258	3.156			
Eastern Kamchatka	1.167	3.004	2.519	3.211	6.061	
Kuriles	1.610	3.460	2.120	3.000		
The Sea of Okhotsk						
Western Kamchatka	1.710	3.427	2.687	3.218	7.109	
Continental coast	1.389	3.236	2.700	3.417		
Sakhalin coast	1.440	2.960				0.970
Amur Basin	1.282	2.449				
The Sea of Japan						
Primor'e	1.431	3.762				2.743
Southwestern Sakhalin	1.380	3.270				2.740

Table 4

Subsistence catch of salmon in Russia (Far East) by species, in numbers of fish, 2009.

Region, subregion	Pink	Chum	Sockey	Coho	Chinook	Masou	Total
Western Bering Sea	15683.00	18503.00	5386.00				39 572
Eastern Kamchatka	1401109.70	158740.00	45248.90	5196.00	1369.90		1 611 665
Kuriles							-
The Sea of Okhotsk							-
Western Kamchatka	173726.90	106434.50	33246.00	30976.70	1502.70		345 887
Continental Coast	257581.00	101676.00		3123.00			362 380
Sakhalin Coast		78700.00					78 700
Amur River Basin	69735.00	526276.00					596 011
The Sea of Japan							-
Primor'e	3013.00	577987.00				196.00	581 196
Southwestern Sakhalin							-
Total	1 920 849	1 568 317	83880.9	39 296	2 873	196.00	3 615 410

Table 5

Sport catch of salmon in Russia (Far East) by species, in numbers of fish, 2009.

Region, subregion	Pink	Chum	Sockey	Coho	Chinook	Masou	Total
Western Bering Sea	13096.000	33566.000	2852.000				2 852
Eastern Kamchatka	48868.00	26079.60	5532.00	16684.20	2396.80		24 613
Kuriles	1800.000						-
The Sea of Okhotsk							
Western Kamchatka	22433.90	33021.00	14320.40	29825.40	6401.90		50 548
Continental Coast	465891.00	59383.00	1401.00	16150.00			17 551
Sakhalin Coast	142900.000	24000.000					-
Amur River Basin	39002.000	170437.000					-
The Sea of Japan							
Primor'e	16550.500	9876.800				1018.200	1 018
Southwestern Sakhalin	2600.000	2600.000					-
Total	753 141	358 963	24 105	62 660	8 799	1 018.20	96 582

Table 6

Hatchery releases of Russian salmon fry and smolts (Far East) by species, in thousands of fish, 2009.

Region, subregion	Pink	Chum	Sockeye	Coho	Chinook	Masou	Total
Eastern Kamchatka		14674.00		1280.00			1 280.0
Kuriles	124346.00	72606.00					-
The Sea of Okhotsk							
Western Kamchatka		1594.00	14693.00		784.00		15 477.0
Continental Coast	4822.90	12943.80	23.80	1188.60			1 212.4
Sakhalin Coast	202880.00	227974.00					-
Amur River Basin		77500.00					-
The Sea of Japan							
Primor'e		34682.00				1362.60	1 362.6
Southwestern Sakhalin	19377.00	81292.00					-
Total	351 425.9	523 265.8	14 716.8	2 468.6	784.0	1 362.6	19 332.0

Table 7

Total pink salmon catch in Russia (Far East) by regions, subregions and month in number of fish, 2009

Region,subregion	June	July	August	September	October	November	Total
Western Bering Sea	1213.0	163549.0	8326.0				173088.0
Eastern Kamchatka	1577845.0	101027594.0	15242552.0	1290894.0			119138885.0
Kuriles		892300.0	11603700.0	3113700.0			15609700.0
The Sea of Okhotsk							
Western Kamchatka	1725.0	1361465.0	2104296.0	816961.0			4284447.0
Continental coast	606840.0	8805619.0	3788708.0	469408.0			13670575.0
Sakhalin coast		29201001	112891007	16920122			159012130.0
Amur Basin		1081076.0	1670562.0	75764.0			2827402.0
The Sea of Japan							
Primor'e	171.0	34834.0	18483.0	30821.0			84309.0
Southwestern Sakhalin	8810.0	182850.0	682170.0				873830.0
Total	2196604.0	142750288.0	148009804.0	22717670.0	0.0		315674366.0

Table 8

Total chum salmon catch in Russia (Far East) by regions, subregions and month in number of fish, 2009

Region,subregion	June	July	August	September	October	November	Total
Western Bering Sea		98158.0	127962.0	5862.0			231982.0
Eastern Kamchatka	79569.0	1929570.0	1133997.0	722278.0			3865414.0
Kuriles		11600.0	457100.0	3225300.0	15100.0		3709100.0
The Sea of Okhotsk							
Western Kamchatka	111062.0	489507.0	1181302.0	361630.0			2143501.0
Continental coast	2323.0	726215.0	3557946.0	667694.0			4954178.0
Sakhalin coast		614900.0	1885600.0	5931800.0	190600.0		8622900.0
Amur Basin	979457.0	2390024.0	1224880.0	642891.0	129285.0		5366537.0
The Sea of Japan							
Primor'e		4862.0	27415.0	17212.0	14658.0		64147.0
Southwestern Sakhalin			63570.0	1336340.0	107380.0		1507290.0
Total	1172411.0	6264836.0	9659772.0	12911007.0	457023.0	0.0	30465049.0

Table 9

Total sockeye salmon catch in Russia (Far East) by regions, subregions and month in number of fish, 2009

Region,subregion	June	July	August	September	October	November	Total
Western Bering Sea	5215.0	64302.0	4183.0				73700.0
Eastern Kamchatka	2223198.0	1562181.0	360240.0	98887.0			4244506.0
Kuriles		2977.0					2977.0
The Sea of Okhotsk							
Western Kamchatka	3451.0	2535329.0	3539020.0	288907.0			6366707.0
Continental coast	0.134	23049.000	26162.000				49211.134
Sakhalin coast							
Amur Basin							
The Sea of Japan							
Primor'e							
Southwestern Sakhalin							
Total	2231864.1	4187838.0	3929605.0	387794.0			10737101.1

Table 10

Total coho salmon catch in Russia (Far East) by regions, subregions and month in number of fish, 2009

Region,subregion	June	July	August	September	October	November	Total
Western Bering Sea							
Eastern Kamchatka		1198.0	401095.0	142274.0			544567.0
Kuriles							
The Sea of Okhotsk							
Western Kamchatka		500.0	143231.0	234010.0			377741.0
Continental coast		55548.0	45035.0	37211.0			137794.0
Sakhalin coast							
Amur Basin							
The Sea of Japan							
Primor'e							
Southwestern Sakhalin							
Total		57246.0	589361.0	413495.0			1060102.0

Table 11

Total chinook salmon catch in Russia (Far East) by regions, subregions and month in number of fish, 2009

Region,subregion	June	July	August	September	October	November	Total
Western Bering Sea							
Eastern Kamchatka	47661.0	33462.0	20276.0				101399.0
Kuriles							
The Sea of Okhotsk							
Western Kamchatka	4920.0	3938.0	2472.0				11330.0
Continental coast							
Sakhalin coast							
Amur Basin							
The Sea of Japan							
Primor'e							
Southwestern Sakhalin							
Total	52581.0	37400.0	22748.0				112729.0

Table 12

Total masou salmon catch in Russia (Far East) by regions, subregions and month in number of fish, 2009

Region,subregion	June	July	August	September	October	November	Total
Western Bering Sea							
Eastern Kamchatka							
Kuriles							
The Sea of Okhotsk							
Western Kamchatka							
Continental coast							0.0
Sakhalin coast	4476.0						4476.0
Amur Basin							
The Sea of Japan							
Primor'e	900.0	750.0	235.0	250.0			2135.0
Southwestern Sakhalin							0.0
Total	5376.0	750.0	235.0	250.0			6611.0

Table 13

Escapement of adult pacific salmon to spawning areas in Russia, by species, region and subregion in thousands of fishes, 2009

Region,subregion	Pink	Chum	Sockeye	Coho	Chinook	Masu	Total
Western Bering Sea	170.00	1943.00	150.00				2093.000
Eastern Kamchatka	77448.000	375.010	1584.639	216.495	115.935		79740.079
Kuriles	1548.600	249.600					1798.200
The Sea of Okhotsk							
Western Kamchatka	118.350	715.990	2046.325	361.005	49.990		3291.660
Continental coast	28038.847	8828.107	87.200	235.478			37189.632
Sakhalin coast	18669.800	509.000					19178.800
Amur Basin	2927.000	20079.000					23006.000
The Sea of Japan							
Primor'e	292.670	142.000				6.700	441.370
Southwestern Sakhalin	638.000	14.300					652.300
Total	129851.267	32856.007	3868.164	812.978	165.925	6.700	167561.041