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Preliminary 2013 Salmon Enhancement Production in Japan

by

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Preliminary 2013 Salmon Enhancement Production in Japan

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Four species of anadromous Pacific salmon (chum, pink, masu, and sockeye salmon) are currently enhanced in Japan. A total of 1,729 million fry, juveniles and smolts were released from Japanese hatcheries in 2013 (Tables 1 and 2). Number of chum salmon fry released in the spring of 2013 was approximately 1,615 million fish. Japanese hatcheries also released 102 million pink salmon fry, 11,926 thousand masu salmon fry, juveniles and smolts, and 192 thousand sockeye salmon fry and smolts in the spring and fall of 2013.

In 2013, the number of adult salmon captured in rivers along the Japanese coasts was 5,304 thousand fish (Table 3), which corresponded to 16,393 metric tonnes in weight (Table 4). The dominant and second dominant species were chum and pink salmon, contributing 90.9% and 9.0% in numbers of all salmon captured in rivers, respectively. Adult masu salmon occur in rivers of both Hokkaido and Honshu, but number of catches was not available in Honshu. The number of adult masu salmon caught in rivers of Hokkaido was approximately 6.7 thousand fish. Anadromous sockeye salmon were caught in three rivers along the Pacific coast of Hokkaido, where the number of catches was approximately 360 fish.

Table 1. Number (in thousands) of anadromous salmon released from Japanese hatcheries in 2013.

Area	Total	Species			
		Sockeye	Chum	Pink	Masu
Hokkaido					
Pacific Coast	590,404	192	574,236	15,304	671
Japan Sea Coast	211,357		205,125	1,021	5,211
Okhotsk Sea Coast	316,911		230,507	85,297	1,107
Honshu					
Pacific Coast	469,370		468,899		471
Japan Sea Coast	140,479		136,014 ^{*1}		4,466 ^{*1}

Total	1,728,521	192	1,614,781	101,622	11,926
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*¹ Number of chum and masu salmon released from hatcheries of Toyama Prefectures along Japan Sea coast was estimated from the enhancement plan.

Table 2. Weight (in tonnes) of anadromous salmon released from Japanese hatcheries in 2013.

Area	Total	Species			
		Sockeye	Chum	Pink	Masu
Hokkaido					
Pacific Coast	771.4	3.8	759.3	4.0	4.3
Japan Sea Coast	268.8		215.0	0.2	53.5
Okhotsk Sea Coast	284.6		251.1	29.4	4.1
Honshu					
Pacific Coast	NA ^{*1}		NA ^{*1}		NA ^{*1}
Japan Sea Coast	92.5		82.9 ^{*2}		9.6 ^{*3}
Total	1,417.2	3.8	1,308.3	33.6	71.5

*¹ NA, Data not available. The weight data of released fish in prefectures along the Pacific coast of Honshu (Aomori, Iwate, Miyagi, Fukushima, and Ibaraki) are not reported.

*² Weight data of chum salmon released from hatcheries in Aomori (approximately 21 million fry) and Toyama (20 million fry in planning) prefectures are not included.

*³ Weight data of masu salmon released from hatcheries in Aomori (approximately 36 thousand fry and 108 thousand juveniles) and Toyama prefectures are not included.

Table 3. Number (in thousands) of adult salmon caught in rivers along Japanese coasts in 2013.

Area	Total	Species			
		Sockeye	Chum	Pink	Masu
Hokkaido					
Pacific Coast	1,107.6	0.4	1,084.7	22.0	0.5
Japan Sea Coast	362.7		359.1		3.6
Okhotsk Sea Coast	2,501.8		2,044.1	455.1	2.6
Honshu					
Pacific Coast	894.6		894.6		NA *
Japan Sea Coast	436.8		436.8		NA *
Total	5,303.5	0.4	4,819.3	477.1	6.7

*NA, Data not available.

Table 4. Weight (in tonnes) of adult salmon caught in rivers along Japanese coasts in 2013.

Area	Total	Species			
		Sockeye	Chum	Pink	Masu
Hokkaido					
Pacific Coast	3,494.5	0.4	3,455.6	38.1	0.4
Japan Sea Coast	1,153.6		1,146.1		7.5
Okhotsk Sea Coast	7,475.1		6,625.9	846.5	2.7
Honshu					
Pacific Coast	2,870.4		2,870.4		NA *
Japan Sea Coast	1,399.3		1,399.3		NA *
Total	16,392.9	0.4	15,497.3	884.6	10.6

*NA, Data not available.