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Preliminary 2012 Salmon Enhancement Production in Japan

by

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Four species of anadromous Pacific salmon (chum, pink, masu, and sockeye salmon) are currently enhanced in Japan. A total of 1,793 million fry, juveniles and smolts were released from Japanese hatcheries in 2012 (Tables 1 and 2). Number of chum salmon fry released in the spring of 2012 was approximately 1,641 million fish, which was lower than the average of annual releases (1,888 million fish) between 1993 and 2010, because some hatcheries along the Pacific coast of Honshu were damaged by the East Japan Earthquake in March 2011. Japanese hatcheries also released 138 million pink salmon fry, 13,058 thousand masu salmon fry, juveniles and smolts, and 284 thousand sockeye salmon fry, juveniles and smolts in the spring and fall of 2012.

In 2012, the number of adult salmon captured in rivers along the Japanese coasts was 5,778 thousand fish (Table 3), which corresponded to 16,289 metric tonnes in weight (Table 4). The dominant and second dominant species were chum and pink salmon, contributing 95.4% and 4.4% 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 returns in Hokkaido was approximately 8.2 thousand fish. Anadromous sockeye salmon were caught in several rivers in Hokkaido, where the number of catches was approximately 0.7 thousand fish.

Table 1. Number (in thousands) of anadromous salmon released from Japanese hatcheries in 2012.

Area	Total	Species			
		Sockeye	Chum	Pink	Masu
Hokkaido					
Pacific Coast	664,027	284	624,684	38,313	746
Japan Sea Coast	208,450		202,123	1,303	5,024
Okhotsk Sea Coast	336,458		237,117	98,155	1,186
Honshu					
Pacific Coast	441,290		439,350		1,940
Japan Sea Coast	142,387		138,225		4,162
Total	1,792,612	284	1,641,499	137,771	13,058

Table 2. Weight (in tonnes) of anadromous salmon released from Japanese hatcheries in 2012.

Area	Total	Species			
		Sockeye	Chum	Pink	Masu
Hokkaido					
Pacific Coast	798.8	3.7	782.2	10.5	2.4
Japan Sea Coast	292.9		219.4	0.3	73.2
Okhotsk Sea Coast	305.2		270.5	29.4	5.3
Honshu					
Pacific Coast	98.4		93.3* ¹		5.1* ²
Japan Sea Coast	138.3		121.4		16.9* ³
Total	1,633.6	3.7	1,486.8	40.2	102.9

*¹ Weight data of chum salmon released from hatcheries of Iwate, Miyagi, Fukushima and Ibaraki Prefectures is not included.

*² Weight data of masu salmon released from hatcheries of Aomori (approximately 693 thousand juveniles) and Iwate (approximately 350 thousand fry) Prefectures is not included.

*³ Weight data of masu salmon released from hatcheries of Aomori Prefecture (approximately 147 thousand juveniles) is not included.

Table 3. Number (in thousands) of adult salmon caught in rivers along Japanese coasts in 2012.

Area	Total	Species			
		Sockeye	Chum	Pink	Masu
Hokkaido					
Pacific Coast	979.2	0.7	952.6	24.7	1.2
Japan Sea Coast	682.7		682.2		0.5
Okhotsk Sea Coast	2,952.1		2,713.7	231.9	6.5
Honshu					
Pacific Coast	811.0		811.0		NA *
Japan Sea Coast	352.6		352.6		NA *
Total	5,777.6	0.7	5,512.1	256.6	8.2

*NA, Data not available.

Table 4. Weight (in tonnes) of adult salmon caught in rivers along Japanese coasts in 2012.

Area	Total	Species			
		Sockeye	Chum	Pink	Masu
Hokkaido					
Pacific Coast	2,778.0	1.4	2,735.2	40.3	1.1
Japan Sea Coast	1,892.5		1,891.5		1.0
Okhotsk Sea Coast	8,247.1		7,857.4	382.7	7.0
Honshu					
Pacific Coast	2,350.6		2,350.6		NA *
Japan Sea Coast	1,021.1		1,021.1		NA *
Total	16,289.3	1.4	15,855.8	423.0	9.1

*NA, Data not available.