

Preliminary 2011 Salmon Enhancement Production in Japan

by

Kei Sasaki and Satoru Takahashi

*Salmon Resources Division, Hokkaido National Fisheries Research Institute,
Fisheries Research Agency, 2-2 Nakanoshima, Toyohira-ku, Sapporo 062-0922, Japan*

Submitted to the

NORTH PACIFIC ANADROMOUS FISH COMMISSION

by

JAPAN

September 2012

THIS PAPER MAY BE CITED IN THE FOLLOWING MANNER:

Sasaki, K. and S. Takahashi. 2012. Preliminary 2011 salmon enhancement production in Japan. NPAFC Doc. 1402. 3 pp. Salmon Resources Division, Hokkaido National Fisheries Research Institute, Fisheries Research Agency. (Available at www.npafc.org).

Preliminary 2011 Salmon Enhancement Production in Japan

Kei Sasaki and Satoru Takahashi

*Salmon Resources Division, Hokkaido National Fisheries Research Institute,
Fisheries Research Agency, 2-2 Nakanoshima, Toyohira-ku, Sapporo 062-0922, Japan*

Four species of anadromous Pacific salmon (chum, pink, masu, and sockeye salmon) are currently enhanced in Japan. This report does not include the number of anadromous salmon released from hatcheries along the Pacific Coast of Honshu, because the release data is not available due to the disaster caused by the East Japan Earthquake on March 11, 2011 (refer to Ito 2012). A total of 1,359 million juveniles and smolts were released from Japanese hatcheries in 2011 (Tables 1 and 2). Approximately 1,199 million chum salmon fry were released in the spring of 2011. Japanese hatcheries also released 148 million pink salmon fry, 11,866 thousand juveniles and smolts of masu salmon, and 378 thousand juveniles and smolts of sockeye salmon.

In 2011, the number of adult salmon captured in rivers along the Japanese coasts was 4,996 thousand fish (Table 3), which corresponded to 14,964 metric tonnes in weight (Table 4). The dominant and second dominant species were chum and pink salmon, contributing 87.8% and 11.9% in numbers of all salmon captured in rivers, respectively. Adult masu salmon occur in rivers of both Hokkaido and Honshu, but their number was not available in Honshu. The number of adult masu salmon returns in Hokkaido was approximately 17.6 thousand fish. Anadromous sockeye salmon were caught in several rivers in Hokkaido, where the number of catches was approximately 1.3 thousand fish.

Reference

Ito, F. 2012. Rehabilitation of Japanese salmon hatcheries hit by the March 11, 2011, earthquake and tsunami. NPAFC Newsletter 32: 1-3. (Available at www.npafc.org).

Table 1. Number (in thousands) of anadromous salmon released from Japanese hatcheries in 2011.

Area	Total	Species			
		Sockeye	Chum	Pink	Masu
Hokkaido					
Pacific Coast	672,234	378	617,614	54,229	391
Japan Sea Coast	204,507		198,506	10	5,991
Okhotsk Sea Coast	329,548		235,020	93,366	1,162
Honshu					
Pacific Coast	NA*		NA*		NA*
Japan Sea Coast	152,420		148,098		4,322
Total	1,358,709	378	1,199,238	147,605	11,866

*NA, Data not available.

Table 2. Weight (in tonnes) of anadromous salmon released from Japanese hatcheries in 2011.

Area	Total	Species			
		Sockeye	Chum	Pink	Masu
Hokkaido					
Pacific Coast	892.1	5.2	874.9	14.9	2.3
Japan Sea Coast	276.1		216.4		59.7
Okhotsk Sea Coast	317.7		282.1	30.0	5.6
Honshu					
Pacific Coast	NA*		NA*		NA*
Japan Sea Coast	154.3		134.9		19.4
Total	1,640.2	5.2	1,508.3	44.9	87.0

*NA, Data not available.

Table 3. Number (in thousands) of adult salmon caught in rivers along Japanese coasts in 2011.

Area	Total	Species			
		Sockeye	Chum	Pink	Masu
Hokkaido					
Pacific Coast	1,029.8	1.3	956.2	70.3	2.0
Japan Sea Coast	469.3		468.7		0.6
Okhotsk Sea Coast	2,369.7		1,832.6	522.1	15.0
Honshu					
Pacific Coast	802.3		802.3		NA *
Japan Sea Coast	324.5		324.5		NA *
Total	4,995.6	1.3	4,384.3	592.4	17.6

*NA, Data not available.

Table 4. Weight (in tonnes) of adult salmon caught in rivers along Japanese coasts in 2011.

Area	Total	Species			
		Sockeye	Chum	Pink	Masu
Hokkaido					
Pacific Coast	3,173.0	1.6	3,056.4	113.1	1.9
Japan Sea Coast	1,388.5		1,387.2		1.3
Okhotsk Sea Coast	6,711.9		5,864.2	830.1	17.6
Honshu					
Pacific Coast	2,639.5		2,639.5		NA *
Japan Sea Coast	1,051.3		1,051.3		NA *
Total	14,964.2	1.6	13,998.6	943.2	20.8

*NA, Data not available.