

Proposed Otolith Marks for Salmon from Russia for Brood Year 2004

by

Elena Akinicheva

*«Magadan Research Institute
of Fisheries and Oceanography»,
Magadan, Russia*

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Mass marking of Pacific salmon is planned to conduct at all hatcheries in Kamchatka and Magadan regions of Russia. Marking at Sakhalin continues to be of experimental character, researches by definition of optimum types of marks will be continued, and therefore now types of marks for salmon of the Sakhalin hatcheries are not determined.

The possibility of chum salmon marking at Khabarovsk region hatcheries is elucidated at present time. The proposed mark to be used is included in the plan of marking.

Property to region of salmon reproduction will be coded as before in the first bloc of marks. They are 3 rings for Kamchatka; 4 – on chum salmon otoliths, 3 or 4 on pink salmon otoliths for Sakhalin, the reason is that Kamchatka hatcheries aren't engaged in pink salmon reproduction. Variations of marks with number of rings more than 4 will be used for salmon at Magadan and Khabarovsk hatcheries.

Magadan hatcheries will use dry method for marking (Akinicheva et al., 1998; Safronkov et al., 1999). It is proposed to mark all species of reared salmon. Each hatchery will use the same mark for all species.

Malkinskiy hatchery in Kamchatka will use thermal marking. Marking at the rest 4 hatcheries will be conducted by dry method.

The plan of marking of 2004 brood salmon at hatcheries in Russia is given in table 1.

Description of mark samples is represented in RBr (Munk and Geiger 1998; Hagen 1999) and Hatch Code (Hagen et al. 2000) formats.

References

Akinicheva E., A. Rogatnykh, and B. Safronkov. 1998. Mass marking of salmon and identification of hatchery fish in mixed stocks. (NPAFC Doc. 379). Pacific Research Institute of Fishery and Oceanography, Magadan Branch, Magadan, Russia. 8p.

Safronkov B. P., E.G. Akinicheva, and A.Y. Rogatnykh. The Dry Method of Salmon Otolith Mass Marking. 1999. International Symposium "Recent Changes in Ocean Production of Pacific Salmon". Juneau, Alaska, USA, November 1-2, 1999. p.81-82.

Munk, K. M., and H. J. Geiger. 1998. Thermal marking of otoliths: the "RBr" coding structure of thermal marks. (NPAFC Doc. 367) 19 p. CWT & Otolith Processing Lab., Alaska Department of Fish and Game, Juneau, Alaska, USA.

Hagen, P. 1999. A modeling approach to address the underlying structure and constraints of thermal mark codes and code notation. (NPAFC Doc. 395) 12 p. Alaska Department of Fish and Game, Juneau, Alaska 99801-5526, USA.

Table1. Proposed otolith Marks for Salmon from Russia for Brood Year 2004

ID#	MARK TYPE	BROOD YEAR	YEAR OF RELEASE	SPECIES	COUNTRY	STATE/ PROVINCE	AGENCY	FACILITY	FINAL RELEASE SITE	Rbr	HATCH CODE	GRAPHIC IMAGE	
												PREHATCH	POSTHATCH
1	2	3	4	5	6	7	8	9	10	13	14	15	16
R04-1	DM	2004	2005	Chum	Russia	Magadan	OhoiskRV	Armskiy	Tavy Bay	1:1.6	6H	111111	
R04-2	DM	2004	2005	Chum	Russia	Magadan	OhoiskRV	Yanskiy	Tavy Bay	1:1.8	8H	11111111	
R04-3	DM	2004	2005	Chum	Russia	Magadan	OhoiskRV	Olskiy	Tavy Bay	1:1.5	5H	11111	
R04-4	DM	2004	2005	Chum	Russia	Magadan	MagadanNIRO	Olskiy	Tavy Bay	1:1.6-2.2	6,2H	111111	11
R04-5	DM	2004	2005	Chum	Russia	Magadan	OhoiskRV	Tauyskiy	Tavy Bay	1:1.7	7H	1111111	
R04-6	DM	2004	2005	Pink	Russia	Magadan	OhoiskRV	Armskiy	Tavy Bay	1:1.6	6H	111111	
R04-7	DM	2004	2005	Pink	Russia	Magadan	OhoiskRV	Yanskiy	Tavy Bay	1:1.8	8H	11111111	
R04-8	DM	2004	2005	Pink	Russia	Magadan	OhoiskRV	Olskiy	Tavy Bay	1:1.5	5H	11111	
R04-9	DM	2004	2005	Pink	Russia	Magadan	OhoiskRV	Tauyskiy	Tavy Bay	1:1.7	7H	1111111	
R04-10	DM	2004	2005	Soockeye	Russia	Magadan	OhoiskRV	Armskiy	Tavy Bay	1:1.6	6H	1111111	
R04-11	DM	2004	2005	Soockeye	Russia	Magadan	OhoiskRV	Yanskiy	Tavy Bay	1:1.8	8H	11111111	
R04-12	DM	2004	2005	Soockeye	Russia	Magadan	OhoiskRV	Olskiy	Tavy Bay	1:1.5	5H	11111	
R04-13	DM	2004	2005	Soockeye	Russia	Magadan	OhoiskRV	Tauyskiy	Tavy Bay	1:1.7	7H	1111111	
R04-14	DM	2004	2005	Coho	Russia	Magadan	OhoiskRV	Armskiy	Tavy Bay	1:1.6	6H	111111	
R04-15	DM	2004	2005	Coho	Russia	Magadan	OhoiskRV	Yanskiy	Tavy Bay	1:1.8	8H	11111111	
R04-19	DM	2004	2005	Coho	Russia	Magadan	OhoiskRV	Olskiy	Tavy Bay	1:1.5	5H	11111	
R04-20	DM	2004	2005	Coho	Russia	Magadan	OhoiskRV	Tauyskiy	Tavy Bay	1:1.7	7H	1111111	
R04-21	DM	2004	2005	Chum	Russia	Kamchatka	KamchatRV	Ozerki	West Kam	1:1.3-2.5	3,5H	111	11111
R04-22	DM	2004	2005	Chum	Russia	Kamchatka	KamchatRV	Ketlinskiy	East Kam	1:1.3-2.3	3,3H	111	111
R04-23	DM	2004	2005	Chum	Russia	Kamchatka	KamchatRV	Paratunskiy	East Kam	1:1.3	3H	111	
R04-24	DM	2004	2005	Chum	Russia	Kamchatka	KamchatRV	Vilyuskiy	West Kam	1:1.3-2.2-3.2	3,2,2H	111	11
R04-25	TM	2004	2005	Soockeye	Russia	Kamchatka	KamchatRV	Malkinskiy	West Kam	1:1.3-2.1	3,1H	111	1
R04-26	DM	2004	2005	Soockeye	Russia	Kamchatka	KamchatRV	Ozerki	West Kam	1:1.3-2.5	3,5H	111	11111
R04-27	TM	2004	2005	Chinook	Russia	Kamchatka	KamchatRV	Malkinskiy	West Kam	1:1.3-2.4	H3,4		111

*Types of marks for salmon from Sakhalin will be submitted later