At the 2014 Annual Meeting last May, a drawing was held for three cash awards for the public who returned high-seas salmon tags between 2012 and 2014. The drawing included entries from three Japanese, three Russian, and one US fishermen, meaning the odds of winning the drawing were high.

First prize (C$500) went to Mr. Chris Bourgeois of the US, who caught a tagged sockeye salmon while gillnetting in the Copper River Delta in central Alaska. The 2nd prize (C$300) was given to Mr. Alexey Taibulatov of Russia, who caught a large chum salmon while gillnetting near the Kalinin settlement on the Southwest coast of Sakhalin Island. Alexey’s fish was tagged and released in the Bering Sea on July 6, 2008, and he caught it on September 16, 2013. Based on fish scale analysis, this chum salmon returned to spawn after having spent eight winters at sea (estimated ocean age 8). Commonly, chum return to spawn
after having spent 2-5 winters at sea. The 3rd prize (C$200) was awarded to Mr. Kazuo Hasegawa from Ohmu Village in Japan. Ohmu Village is located on the Okhotsk Sea coast of Hokkaido, Japan. While pulling in a set-net on the morning of October 11, 2012, Mr. Hasegawa found an adult chum salmon with two disk tags and an electronic tag on its back.

The electronic tag was a small data logger that records the earth’s magnetic field strength, tilt of the fish’s body, swimming acceleration, and water temperature and depth. From measurements of the earth’s magnetic field strength, a relative magnetic field vector can be calculated, which is used to estimate the location (longitude and latitude) and directional movement of the fish over time. This exceptional recovery may be the first high-seas tagged salmon to provide evidence of the “geomagnetic imprinting hypothesis” that salmon use the earth’s magnetic forces to find their way back to their birthplace after migrating across thousands of miles of open sea (Bracis and Anderson 2012; Putman et al. 2013).

The high-seas salmon tagging and recovery program is an international cooperative research program, which has been going on for more than 50 years. The program continues to provide new evidence of stock-specific ocean distribution and migration and novel information on individual salmon behavioral responses to their ocean habitat. This information improves our knowledge of the mechanisms salmon and steelhead use to migrate across large distances of seemingly featureless sea.

The Working Group on Salmon Tagging (WGST) was established in 2007 to coordinate high seas tagging activities and to manage the INPFC-NPAFC salmon tag database, which contains information on more than twenty thousand recoveries of Pacific salmon and steelhead trout. Since 2004 NPAFC has sponsored a series of drawings for cash rewards to encourage the public to report high-seas tag recoveries.

References


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