

3-4. Production Trends and Carrying Capacity of Salmon (Poster-24)

Changes in Size and Growth Rate of Anadir River Chum Salmon (*Oncorhynchus keta*) in 1962-2007

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Annual changes in body size and growth rate of Anadir River chum salmon (age 0.3 and 0.4) in 1962-2007 were studied. Regression analysis showed that their fork length and mass significantly decreased from 1960s to 2000s. Body length of Anadir River chum salmon was the highest in 1972 and 1979, but the lowest in 1991 and 1994. The most pronounced decreasing of chum body size occurred from the early 1980s to the middle 1990s. In 1962-1980 and 1997-2007, their fork length and mass remained relatively stable. Growth analysis back-calculated from scales showed growth rate of Anadir River chum salmon did not change significantly during 1962-2007. Their growth reduction began from the second year and was the most intensive in the third year. Significant negative correlation was observed between annual total catches of Pacific salmon and fork lengths of Anadir River chum salmon.