

3-1. Migration and Distribution of Salmon (Oral-1)

**Bering-Aleutian Salmon International Survey (BASIS):
Population-Biological Researches in the Western Part of Bering Sea
(Russian Economic Zone). Part 1 - Chum Salmon *Oncorhynchus keta***

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This work has represented results of identification of regional local stocks of immature chum salmon on the data of trawl surveys of the R/V "TINRO" in the Bering–Aleutian Salmon International Surveys (BASIS) in the Western Bering Sea in summer-fall periods in 2002-2003. The system of districts of the Bering Sea part of the EEZ of RF, accepted in TINRO-Center for making biocenological researches was used in this work. Scale structure was used as a criterion for differentiation. The age composition of mixed marine samples was estimated for the total sample size of 4837 chum salmon individuals, including 3877 fishes which ages were identified in particular. In the analysis there were used three age groups - 0.1, 0.2 and 0.3, taking in the total more than 99% of immature chum salmon in the trawl catches. The basis scale line consisted of 5055 chum salmon individuals from the age groups 0.3 and 0.4. The results of the identification of the complexes of local stocks are as next: three stock complexes predominated in the Western Bering Sea in September-October 2002 in the districts 1-8 - Japan (41,1 %), Sakhalin (Kuriles) + the Amur (34,8 %) and the motherland shore of the Okhotsk Sea + Kamchatka (23,4 %). In the districts 9-12 the dominants were two complexes - Sakhalin-Amur (47,5 %) and Okhotsk Sea (32,1 %). The percent of fishes originated in Japan was visibly lower (20,3 %). The occurrence of Alaskan and Chukotkan chum salmon was extremely insufficient. In July-August 2003 in the districts 1-8 the ratio between chum salmon complexes was as next: Japan – 35,4%; Sakhalin (Kuriles) + Amur – 23,5%; the motherland shore of the Okhotsk Sea + Kamchatka – 28,9%; Alaska – 10,3%; Chukotka – 1,9%. The occurrence of the complex of Alaska there was maximal for the whole observation period 2002-2003. In the districts 9-12 the part of Japan stocks was visibly lower – 9,2%. To the opposite the parts of Sakhalin-Amur (41,6%) and Okhotsk + Kamchatka (44,3%) complexes were higher. The occurrence of Alaskan and Chukotkan chum salmon was minimal – respectively 3,5 and 1,4%. In September-October the part of chum salmon of Japan increased visibly. In the districts 3-8 its' part reached up to 56,7% and in the districts 9-12 – up to 46,8%. The occurrence of the complexes of the Okhotsk Sea +Kamchatka was also high: 38,8% in the districts 3-8 and 48,7% in the districts 9-12. The parts of the complexes of Chukotka and Alaska were low, but the occurrence of American chum salmon was little bit increased up to 2,4% in the districts 3-8 and up to 3,3% in the districts 9-12.