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M.A. Kudzina, A.G. Ostroumov, V.G. Pogodin **An assessment of statistical relation in stock abundance dynamics of Pacific salmon (genus Oncorhynchus (Suckley) (Salmonidae)) populations reproducing in the rivers of Kamchatka //** *Issled. Biol. I dynam. chislen. I Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. P 70-77.*

On the results of statistical analysis carried out there have been determined the groups of spawn reservoirs on Kamchatka, for which the number of salmon spawners might be theoretically assessed through the correlation to the bench-mark river.

V.G. Erokhin **Distribution and biological characteristics of juvenile sockeye salmon Oncorhynchus nerka (Walbaum) (Salmonidae) in the east of the Sea of Okhotsk //** *Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. P. 124-131.*

Represented are the data on autumn distribution and biological characteristics of juvenile sockeye salmon Oncorhynchus nerka (Walbaum) in the east part of the Sea of Okhotsk. It has been shown that every year in September - first decade of October juveniles of the species aggregate in two stocks - more abundant one (45.5-92%) distributed to the south and another one northward. Body size of juveniles vary in ranges 15-30 cm and 50-295 g, majority of fishes (50.3-82.4%) have length 21-24 cm. Sockeye salmon distribution evidently is affected by the character of feeding interrelations within the trifle of abundant in the area species-competitors: O. gorbuscha, O. keta and O. nerka. Water currents on the shelf of West Kamchatka are to favour migration of sockeye salmon juveniles to the northward what is to enlarge feeding area.

*G. **H. Zorbidi*** **Morphobiological variety and survival of coho salmon Oncorhynchus kisutch (Walbaum) (Salmonidae) in early ontogenesis (for «later» morph)** *// Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. P131-140.*

Analysis of the morphobiological variety of coho salmon in embryonic and postembryonic periods makes revealed closely correlation between average variance of size characteristics and survival level. Variety at early ontogenetic stages results in the time of emergence, yolk resorption rate and size characteristics of juveniles. Time when the buoyancy has been gained generally depends on the rate of digestion system development. Subdividing into the groups with different rates of metabolism takes place at the stage of the late larvae, then it causes differentiation in feeding strategy and age composition of population.

G.V. Zaporojets, O.M. Zaporojets **Experimental estimation of the stable $SrCl_2$ usage as a maker to investigate migrations of Pacific salmon //** *Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. P 146-153.*

For the period of 2.5 months the ration of artificially reared juvenile chum salmon was supplied three times with different dozes of combined stable strontium (respectively 5, 10, 15 g of $SrCl_2$ per kilogram of food). Afterward effects had been observed. There were studied growth, survival, swimming and osmoregulation of the fishes in comparison to the group of control fishes, moreover, there were studied cumulating of Sr and of some other microelements in the muscles, vertabrae and body of fish in a whole. It was found that Sr concentration in the vertabrae of experimental fishes after a month since Sr supply had been over was already independent on consumed doze, although over the following 2.5 months it being higher in ten times as minimum compared to the control. Sr cumulated in muscles had been removed relatively soon - long time before finishing Sr supply. Tests indicated of muscle and nervous systems affected by maximum concentration of Sr. Using the concentration of $SrCl_2$ 5 g/kg to mark chum salmon juveniles could be reckoned as enough sufficient and biologically reasonable. That mark should be stable at least while juveniles stay in fresh water and used to study their migration.

O.M. Zaporojets, G.V. Zaporojets **Development of sockeye salmon Oncorhynchus nerka (Walbaum) (Salmonidae) from different (river and lake) populations under the same conditions of rearing //** *Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. P. 153-160.*

There was found at comparison of two races of sockeye salmon (river and lake) from four populations in growth rate and character of smoltification and migration activity that development of juveniles under the same conditions of artificial rearing is similar. That is why all the populations have been reckoned as convenient to be used for the industrial farming.

A.S. Nikolayev **Register of echosounder records on biophysical water unhomogeneity in Kamchatkan lakes //** *Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. P 172-176.*

The list of typical biophysical water images recorded by echosounder in the coarse of fish-husbandry bonitation of 12 lakes on Kamchatka in summer-autumn period for 1973-1996 has been systematized. The work implied creation a manual one could prevent methodological delusion when assessing the abundance of fishes in the inland reservoirs of Kamchatka with using facilities of hydroacustics.

Starovoitov A.N. **Distribution and biological indices of chum salmon in western Kamchatka waters during summer 1996** //Abstr. Conference of young scientist "Biomonitoring and rational exploitation of hydrobionts resources. - Vladivostok: TINRO-Centre.- 1997.- p. 64-66.

Chum salmon distribution, dynamics of biomass and abundance are analyzed basing on result of trawl surveys which were carried out in the north-eastern waters of Okhotsk sea and Kamchatka waters during summer 1996. The specialties of chum salmon distribution and change of biological indices of fishes are considered. Increase of chum salmon abundance (from 3.73 to 10.34 mln sp.) and biomass (from 9.04 to 23.66 thousand t) in Kamchatka region is marked from July to August. Influence of hydrological conditions to a distribution of chum salmon was not determined.

Temnykh O.S. **Primorye Pink Salmon Growth at High and Low Abundance** // NPAFC Technical Report. - Vancouver. Canada. 1998. - P. 20-22.

The comparative analysis of Primorye pink salmon growth peculiarities at high and low abundance has been conducted. Average pink salmon size reduction at low abundance (1970-1990) was due to the growth rate mainly during second summer period at sea. Increase of feeding competition between different pink salmon stocks in period of high Japanese abundance is a reason of pink salmon rate growth increase. In this regard. The role of the Amur pink salmon with respect to the other Japan Sea stocks is of particular interest. There is significant decrease in average size of pink salmon in Primorye coupled with an increase in the percentage of Amur stock in total pink salmon catch in the Japan Sea.

Glebov I.I. **Features of coho salmon (Oncorhynchus kisutch, Walbaum) distribution in the Sea of Okhotsk and adjacent pacific waters** // Biologiya morya. - 1998. - N 6.

The data of 13 combined surveys, carried out by TINRO in 1991-95 are presented. Distribution and some features of coho salmon migration in the Sea of Okhotsk and adjacent pacific waters in summer - fall period are considered. Mature coho entered into Russian economic zone in mid June, Okhotsk Sea - in mid August and migrated into inshore near mouth waters in late August. Two main migration pathways appear to be distinguished, whose value depends on hydrological regime. During catadromous migrations coho occurred in Okhotsk Sea from July to mid November and left for Pacific ocean through the middle and northern Kuril Straits.

Glebov I.I. **Features of the coho salmon (Oncorhynchus kisutch) distribution in the north-western Pacific in winter-spring period** // Voprosy Ikhtiologii. - 1998. - N 1.

Distribution features and biology of coho salmon in winter-spring period in north-western Pacific are considered. It was shown that the distribution of coho salmon depend on temperature and horizontal structure of water.

Radchenko V.I. **Inter-annual dynamics of pink salmon abundance in the Sea of Okhotck populations in 1990s** // NPAFC Technical Report. – Vancouver. Canada. P. 11-13.

During 1990s a significant increase was found for numbers of salmon juveniles migrating in the offshore Okhotsk Sea and Pacific waters around Kuriles: from 250-450 mln. fish in 1990-1992 to 807-1000 mln. fish in 1993-1996. However, survival of these juveniles was gradually declined in ocean: as for anadromous pink salmon numbers (estimations of marine trawl survey) - from 61,6% to 25,2%, as for coastal catch and escapement - from 36,4% to 12-14,1% (with least value in 1995). Total pink approaches in even years sharply increased in 1994 - up to 215 mln. fish. Since 1994, it prevails the pink approaches in odd years. This dominance is determined by drastic growth of the western Kamchatka pink salmon stocks in 1994 and 1996. In 1996-1997 average natural mortality rates in estuarine and marine periods were close to upper level of previous estimations: 75,7% and 68,9%, accordingly. It can be related with discussed changes in the North Pacific pelagic ecosystems.

M.V. Kalinina **Dynamics of hematological indices of young masu salmon Oncorhynchus masu from southern Primorye rivers** // Biologiya Morya. - 1997. Vol. 23. N 5. pp. 314-318.

The hematological indices of young masu salmon from natural populations in southern Primorye rivers are characterizes in relation to the age and functional state of the fish. Red blood indices are recommended for the fishery purposes because they are more stable and better reflect the physiological state and energy level of metabolic processes in the fish.

A.V. Podlesnykh, S.V. Paschenko **Efficiency of reproduction in epigenetic groups in the sockeye salmon Oncorhynchus nerka in relation to density spawners** // Biologiya Morya. - 1997. - Vol. 23, N 6. pp. 370-375.

An experimental study was made of the influence of the overgrowding of spawning areas and size-age structure of sockeye salmon spawners on brood survival in embryogenesis. Brood survival in early stages tended to increase with increasing density and size of male sockeye salmon.

N.N. Semenchenko, V.I. Ostrovsky **Method for determination of oxygen consumption in the sockeye salmon Oncorhynchus nerka during spawning** // Voprosy Ikhthyologii. 1998. V. 38. No. 3. P. 388-392.

A.Yu. Semenchenko, N.I. Krupyanko, S.F. Zolotukhin **Salmon genus Oncorhynchus in the Russian economic zone of the Sea of Japan. Migrations and seasonal distribution** // Voprosy Ikhthyologii. - 1997. – V. 37. No. 5. P. 603-611.

R-2 Stock Identification

Temnykh O.S. **The regional and interannual particularities of the scale scleritograms of pink salmon from rivers of the Okhotsk sea northern coast** // Abstr. Workshop "Northern-East of Russia: Last, Present, Future". Magadan, 1998. - V. 1. - P. 95.

The regional particularities of the scale scleritograms of pink salmon from rivers of the Okhotsk sea northern coast are revealed. The main differences of the scleritograms of pink salmon from rivers of the Okhotsk sea northern coast are absent of coastal zone on the scale. The method of northern pink salmon population differentiation using scale scleritigram are given.

M.Yu. Kovalev, A.I. Karpenko **Peculiarities of freshwater period in seasonal races of sockeye salmon of Lake Azabachye, eastern Kamchatka** // Biologiya Morya. - 1997. Vol. 23, N 5. pp. 298-303.

An attempt was made to develop a method for differentiating yuong sockeye salmon of two seasonal races in Lake Azabachye. The scale of adult fish of the 1977-1993 spawning seasons was examined to separate the groups. The freshwater zone of the scale proved to be an unsuccessful criterion for differentiating races. Young sockeye salmon of the summer race left the redds later than spring young but towards the start of the downstream migration both groups of young fish had attained similar sizes. Smoltification age was the same in the two groups in spite of different time of spawning and hydrology of spawning areas. The correlation between numbers of slowly and fast growing fish was also

the same in the two races. The study showed that young sockeye salmon of both seasonal races in Lake Azabachye have the same habitats and feeding spectra.

R-3 Environmental Impact

N.B. Markevich, N.M. Kinas **Timing of juvenile pink salmon Oncorhynchus gorbuscha (Walbaum) (Salmonidae) migration to the sea and adult return of the generation in Utka river (Western Kamchatka)** *// Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. 1998. Issue 4. P 77-85.*

There have been analyzed the data on juvenile migration of pink salmon in the Utka River (West Kamchatka) throughout of 23 generations. It has been shown that the date when 50% of juveniles have migrated generally relates to the number of juvenile migrants. In this relation the parameter used has been reckoned as insufficiently telling. The proposal to compare the timing (the date when 50% of juveniles in generation has migrated) in different years is to use the parameter of difference between real and expected dates of 50% migration in respect to the number of juveniles observed in generation. It has been shown that the difference closely relates to adaptability of parental stock to the conditions during the spawn. In it's turn, the survival of pink salmon in the sea, it being usually assessed as real return of adults divided to expected return in a respect to observed number of juvenile migrants, as well relates to both adaptability of parental stock and difference between dates of 50% migration. Actually, less favorable and more favorable situations take place when 50% of juveniles have really escaped respectively earlier and later than the time expected. Absolutely unfavorable situation takes place when real timing of migration leaves behind expected timing in more than 2 days. Minus-adapted generations are highly variable both in difference between real and expected timing of migration and survival rate in the sea if to compare the parameters to those in plus-adapted generations.

N.B. Markevich **Adaptation of pink salmon Oncorhynchus gorbuscha (Walbaum) (Salmonidae) to the temperature conditions during the spawning**

period and its effects to the reproduction (Utka river stock) *// Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. P 85-94.*

It has been carried out the analysis of the data on juvenile pink salmon production in the Utka River (West Kamchatka) and further return of adults in relation to the different temperature conditions over the spawn and embryogenesis to both parental and progeny pink salmon stocks which had been caused by year-to-year dynamics of water temperature in nature. It has been shown that the more temperature range, the less adaptability of return stock to the temperature conditions of reproduction and, therefore, the less production of juveniles in the stock. All pink salmon stocks returned can be divided in two groups: reproduced at higher temperatures comparing them to the temperatures in previous reproduction cycle (plus-adapted stocks) and reproduced at lower temperatures (minus-adapted stocks). Reproduction a lot of juveniles is characteristic to minus-adapted stocks if to compare them to plus-adapted stocks. However, the survival of minus-adapted stock progenies in the sea is lower. At the same abundance of parental stock the return from minus-adapted stock, it being usually assessed like a sum of individuals catched out by gill net system in the river outlet and escapement of adult, has been found lower than from plus-adapted stock in two times approximately.

N.A. Chebanov, T.A. Popova **Assessment of the relation between dominate male absence time within sockeye salmon Oncorhynchus nerka (Walbaum) (Salmonidse) spawning group and further hierarchical rang of the male and reproduction success //** *Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. P 98-107.*

The character of correlation between dominate male absence time within sockeye salmon Oncorhynchus nerka (Walbaum) spawning group, dynamics of the hierarchical structure and reproduction success of the other members of the group has been analyzed from materials of field experiments carried out at the spawning grounds of the Karymaysky Creeck (Bolshaya River, West Kamchatka). It has been found that the more absence time, the more likely the changes in the hierarchical rang of the dominate male (to be lower since return), moreover, broken hierarchical balance cause mortality increased either in the progeny of terminal dominate male

and of the rest males in the group. Important role of the dynamics of hierarchical structure in the coarse of spawn has been emphasized due to it's influence to the epigenetics and finally abundance of generation.

N.A. Chebanov **Influence of density and sex ratio of sockeye salmon Oncorhynchus nerka (Walbaum) (Salmonidae) spawners at the spawning grounds on the embryonal mortality of progeny //** *Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. P107-115.*

The character of summary influence of density and sex ratio of sockeye salmon Oncorhynchus nerka (Walbaum) (Salmonidae) spawners on the embryonal mortality of progeny has been analyzed on materials collected from the field experiments carried out at the spawning grounds of the Karymaysky Creeck (Bolshaya River, West Kamchatka). Some correlations have been revealed in a respect to which an increase of the number of males per one female up to 7 and decrease in density of spawners at least from 0.50 (dominate number of males - up to 7 per one female) or 0.75 (equal number of males and females) up to 2.25 square m per one fish (3 males per 1 female) or from 1.26-2.00 to 9.00 square m per one female the embryonal mortality of their progenies has been proportionally decreasing. To the opposite, upon the more number of males in spawning groups up to 10 or more per one female (0.82 m per one fish or 9.00 m per one female) mortality has been increasing.

A.S. Nikolayev, A.A. Nikolayeva **Limnological aspects forming sockeye salmon Oncorhynchus nerka (Walbaum) (Salmonidae) spawning stock in sockeye nursery lakes of Kamchatka** *// Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4.P. 107-115.*

Morpho-limnological mechanism to form sockeye salmon spawning stock of spring and summer sockeye races reproducing in 9 sockeye nursery lakes on Kamchatka (in the lakes themselves and their tributary nets) has been studied. Statistical matrix of contingencies has included 114 pairs combined among 19 various parameters. Spawning stock of spring sockeye from the tributary net has not positive correlation aside from to the square of spawning grounds in the lake. Spawning stock of summer sockeye from the lakes themselves and tributary nets has

been determined by factors independent of zone - by the square of spawning grounds in the lake, as well as by both depth (average and maximum) and transparency of water in the lake. The factor of transparency is dominate because 38-69% of spawning stock dispersion of race result the influence. There has been proposed strategy to manage potential production of fish in sockeye salmon nursery lakes studied.

E.V. Lepskaya, E.G. Lupikina, L.V. Milovskaya, I.N. Sirotenko, V.D. Sviridenko **Phytoplankton in the Palana lake (Kamchatka) as an indicator of stability in the ecosystem**. *// Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. P 176-182.*

Analysis of species composition, seasonal dynamics of the abundance and of the biomass of phytoplankton in the Palana Lake for many years makes exposed dominate species and the biomass of phytoplankton determined by «forage» diatoms. Trophic type of the lake has been reckoned as α-olygotrophic.

E.V. Lepskaya, A.V. Maslov **Long-term dynamics of phytoplankters in the Kuril Lake (South Kamchatka)** *// Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. P 182-189.*

For the first time there has been addicted the list of phytoplankton species of the Kuril Lake defined more exactly in a respect to the indications of currently systematics; also the list is supplied with information on the cell size of dominate and subdominate phytoplankton species, many years dynamics of the abundance and of the biomass of planktonic algoflora have been analyzed, quasi-four-years periodism in the functioning of phytoplanktonic community has been shown. There have been discussed the causes of many-years phytoplankton successions in the Kuril Lake.

L.B. Klyashtorin **Cyclic climate changes and Pacific salmon stock fluctuations: a posibility for long-term forecasting** // NPAFC Technical Report. – Vancouver. Canada. P. 14-15.

A.S. Krovnin **Changes in abundance of Far East pink salmon (Oncorhynchus gorbuscha) stocks in the context of climatic variability in the North Pacific region** // NPAFC Technical Report. – Vancouver. Canada. P. 14-15.

V.V. Volobuev, A.Yu. Rogatnykh **Reproductive conditions of the salmon genus Oncorhynchus from the continental margin of the Sea of Okhotsk** // Voprosy Ikhthyologii. - 1997. – V. 37. No. 5. P. 612-618.

R-4 Feeding, Food Supply, and Role of Pacific Salmon in Pelagic Ecosystem of the Northwestern Pacific

V.V. Maximenkov **Food relationships in fish juveniles within the estuaries and coastal waters of the Bering Sea, Karaginsky Bay** // *Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. P 64-70.*

Represented are the results of the analysis of food composition of juveniles on sixteen mass fish species inhabiting in the Karaginsky Bay, Bering Sea. From the assessed consumption rate for every species and food similarity between fish guilds there have been figured the peculiarities of interrelationships between fish juveniles in feeding in the estuaries and coastal waters. Competition for the food among fish juveniles in the coastal waters is less intense than in the estuaries, also the spectrum of food there is poorer. In the estuaries the most favorable conditions of feeding have been reckoned to the three-spine stickleback, starry flounder and sand-lance, in the coastal waters - to the juvenile walleye pollock, Pacific herring, pink salmon and white-spotted greenling. Species can escape the zone of competition for the food at being it's food niche reduced, also at temporary or temporal isolation from other species-competitors occurring; in the opposite, increased stock abundance is to provide more success in the competition zone.

Andriyevskaya L.D. **Conditions forming production of pink salmon Oncorhynchus gorbuscha (Walbaum) (Salmonidae) broods in the south-west of the Bering Sea //** *Issled. Biol. I dinam. chislen. Prom. Ryb Kamchatskogo Shelfa. 1998. Issue 4. P 94-98.*

There have been demonstrated the results of comparative analysis made on feeding conditions and growth rate of pink salmon yearlings from generations with different abundance. Yearlings from low abundant generations have better conditions of feeding, i.e. their have more essential ration of food and growth rate. These yearlings gain comparatively more their weight and length to the beginning of migration to the open sea for wintering.

Shuntov V.P., Gorbatenko K.M., Nadtochy V.V., Kuznetsova N.A., Samko E.V., Zyablitskaya T.A. **Modern state of plankton and nekton communities in the epipelagic zone of Sakhalin and Kuril Islands** // Biologiya Morya. - 1998. - Vol. 24, N 3.- pp. 161-168.

The results from a large-scale survey carried out in the southern Sea of Okhotsk and the oceanic waters off the Kuril Islands during July and August of 1995 are generalized. The composition of plankton and nekton of the survey period is compared to that of 1991 and 1993. At almost all stations, the proportion of predatory plankton in 1994 and 1995 is lower than at the beginning of the 1990s. Among nekton, the numbers of Alaska pollock continue declining, while the abundance of herring increase. The total biomass of salmon still remains high.

Shuntov V.P., Gorbatenko K.M., Nadtochy V.V., Kuznetsova N.A., Samko E.V., Zyablitskaya T.A. **Current status of epipelagic communities in the northeastern Sea of Okhotsk** // Biologiya Morya. - 1998. - Vol. 24, N 2.- pp. 96-102.

The results of a large-scale survey of the northeastern Sea of Okhotsk, carried out in June-July 1995, are compared with the data from analogous studies of the 1980s and early 1990s. The proportion of predatory plankton (mainly chaetognaths) in Kamchatka waters in 1995 markedly declined, while in Shelekhov Bay and the Yamsko-Tauisky region it increased significantly. Pollack (80.7%) dominated in the nekton communities. Small numbers of herring in the study area are accounted for by a delay of the migration of feeding schools due to negative anomalies of water temperature.

Balanov A.A., Radchenko V.I. **New data on feeding habits and feeding behavior of daggertooth Anatopterus pharao** // Voprosy Ikhthyologii. - 1998. – V. 38. No. 4. - P. 492-498.

Basing on data of salmon trawl surveys, the feeding habits and feeding behavior of daggertooth *Anatopterus pharao* are analyzed. In summer the daggertooth is a common ichthyophagous predator in Pacific waters around Kuril Islands. Pacific salmon (*Oncorhynchus spp.*), saury (*Cololabis saira*), and arabesque greenling's juveniles (*Pleurogrammus azonus*) are the main food objects of this predatory fish. It is established that namely daggertooth responses for slash-marked wounds on the Pacific salmon bodies. Basing on wounds distribution and shape, it is concluded that daggertooth waits for prey keeping its body upward by head. Such position is a characteristic for many mesopelagic predators.

Radchenko V.I., Chuchukalo V.I., Volvenko V.I., Slabinsky A.M., Samko E.V., Starovoitov A.N. **Plankton and nekton of upper epipelagic layer in the Sea of Okhotsk off the Western Kamchatka in light of the hypothesis of intermediate state of communities** // Uspekhi Sovremennoi Biologii (Progress in Modern Biology) - 1998. – V. 118. Iss. 5. - P. 551-563.

The comparative analysis of complex survey data (plankton and nekton abundance and composition, distribution of some crustaceans and fishes, including Dolly varden and pink salmon) on the Okhotsk Sea epipelagic layer off the Western Kamchatka was performed (1991 – 1996). Some trends in the interannual dynamics of hydrological conditions in the region were revealed. The current state of hydrobiont communities was determined as intermediate due to high portion of predators in zooplankton and low fish biomass. Some signs of early stabilization were registered.

V.I. Karpenko, L.V. Piskunova, and M.V. Koval **Forage base and feeding of Pacific salmon in the sea** // NPAFC Technical Report. – Vancouver. Canada. P. 36-38.

This paper is devoted to the analysis of feeding of three Pacific salmon species – pink, chum, and sockeye salmon – during their marine life, i.e., from first entering the sea until finishing their anadromous (adult) migration. Data collected by the staff of the Marine Salmon Investigations Laboratory for the more than 40 years were used. The general area of the research comprised the southwestern part of the Bering Sea and adjacent waters of the North Pacific Ocean to the south from the Commander Islands. For additional information, some data concrning the area offshore of western Kamchatka in the Sea of Okhotsk and the waters adjacent to the Northern Kuril Islands were also presented. The majority of the data have already been published in Russia and, partially, abroad.