

seven pounds on the various streams at the age of four years. The larger fish are those of more mature years, who have survived one spawning season, for it is a curious fact that nearly every salmon, both male and female, dies shortly after the act of spawning is completed. Were this not so, huge salmon would be more frequently caught, and, also, they would increase so rapidly as to literally fill the sea. The Quin-nat, whose scientific designations are *salmo quinnat* and *onchorynchus chonicha*, is known in various locali-ties by different titles.

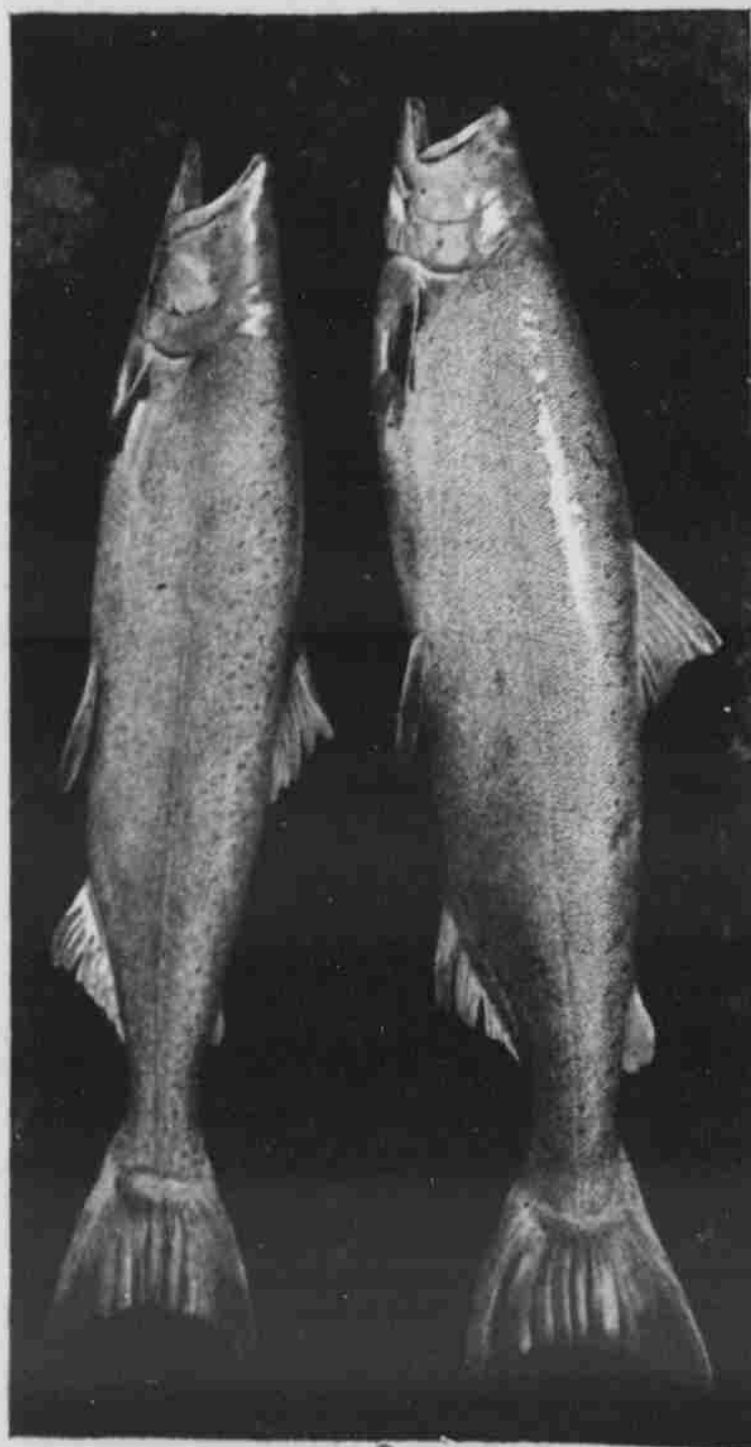
On the Sacramento it is called "California salm-on," and on the Columbia it is called "Chinook," or "Royal Chinook," a name similar in idea to that of "King salmon," given it on the Yukon, where it also bears the Russian ti-tle of "Chowecha," or "Tchawytcha." In Fra-ser river it is designated by the Indian title of "Sah-kwey," and on Pu-get sound it called "Col-umbia river salmon," or "Tyee" (chief).

Although the salmon procreates in fresh water, and there spends about one and one-half years of its life, it is a salt water fish, and gets its growth in the unknown depths of the ocean. In fact, only in the deep sea does it wax fat and grow, for the period of its life in the rivers, upon its return to them for spawning pur-poses, is one of deteriora-tion and final death, dur-ing which period, quite often extending to seven

months, it takes no food whatever. To this general rule there is an exception only in a few unimportant varieties. Besides the chinook salmon, there are nine distinct varieties in the Columbia, only three of which, the Blue Back (average weight five pounds), the Steel Head (five pounds), and the Weak Toothed (twelve pounds), have any commercial value, none of which approach the Chinook in quality, value or quantity. It is to the habits of this great fish and the methods of catching and marketing it, that this

article is especially devoted. Ordinarily the history of an animal should begin at its birth, but it seems better to take the Quinnat as he enters the river on his pilgrimage inland, and follow him, or his numer-ous progeny, until again lost in the limitless sea. Bi-ologists agree that the Chinook is four years of age when progenital promptings send him from his ocean home to the fresh waters of the interior. Where he has spent the period of his absence from his native waters, during which he has grown from a little sam-

let six inches long to a powerful fish weighing about twenty pounds, is a question not yet settled. Deep sea fishing has not revealed the ocean home of the salmon, but his movements in fresh water have been carefully ob-served, and have demon-strated the fact that in the sea only does he eat and grow. In March the advance guard of Chi-nooks makes its appear-ance at the mouth of the Columbia, and seems to be in no haste to ascend the stream, spending sev-eral weeks along the bor-der line of fresh and salt water. When, at last, they commence their long journey, often extending inland more than a thou-sand miles, they cease to take food, and from that time until their death, six or seven months later, ab-stain from all nourish-ment. To this peculiari-ty is attributed the fact of their death, for the in-tense exertion required to surmount the obstacles



FEMALE. 40 LBS.

CHINOOK SALMON.

MALE. 45 LBS.

encountered in their long journey up the river, and the injuries received by contact with rocks, so enfee-ble and mangle them that they have not sufficient en-ergy to attempt the return journey to salt water, in which element only can they find restoration. That this is a fact, and that millions of salmon die yearly, their festering carcasses strewn the banks of the rivers and creeks near the headwaters of the larger streams, has been settled beyond dispute by the care-ful observations of expert pisciculturists and others