

and individual cases of very successful angling. The main runs in the Canterbury rivers apparently ended before March was out, and very few fish were taken in April. In the Waitaki River, on the other hand, where angling was prosecuted with more success than in any previous season, fair numbers of fish were taken near the mouth in the first half of April and the runs continued intermittently till the end of this month.

Our records of catches of quinnat salmon are confined to the returns made by the holders of licenses permitting the sale of rod-caught salmon who represent a very small fraction of the total number of quinnat-salmon anglers, although perhaps they are the most continuous in their operations, and on that account a satisfactory source of statistical information as to the productivity of the fishing.

The following table gives in summary form the figures obtained from these returns for the principal fishing rivers.

	Males.	Females.	Sex not given.	Total.
Waimakariri River, 23/2/30 to 25/4/30 (eleven rods)—				
Number of fish caught	60	90	11	161
Weight of fish, in pounds	691	1,210	130	2,031
Average weight, in pounds	11.5	13.4	11.8	14.7
Rakaia River, 16/2/30 to 15/4/30 (nine rods)—				
Number of fish caught	148	110	16	274
Weight of fish, in pounds	2,246	1,589	205	4,040
Average weight, in pounds	15.1	14.4	12.8	14.7
Rangitata River, 12/2/30 to 8/4/30 (seven rods)—				
Number of fish caught	37	38	43	118
Weight of fish, in pounds	605	555	601	1,761
Average weight, in pounds	16.4	14.6	14.0	14.9
Waitaki River, 21/3/30 to 11/5/30 (four rods)—				
Number of fish caught	63	28	..	91
Weight of fish, in pounds	1,106	492	..	1,598
Average weight, in pounds	17.6	17.6	..	17.6
Combined rivers, 12/2/30 to 11/5/30 (thirty-one rods)—				
Number of fish caught	308	266	70	644
Weight of fish, in pounds	4,648	3,846	936	9,430
Average weight, in pounds	15.1	14.5	13.4	14.6

By comparing this table with the one prepared from similar returns last year it would appear that more fish were taken by the holders of selling licenses from the Waimakariri and the Rakaia and fewer from the Rangitata than in the 1929 season. In general, however, it seems certain that there were fewer fish caught and fewer fish to catch in the main Canterbury rivers this year than last. The Rangitata run, which was commented on as "the worst for years," may have been also affected by the partial closure of the mouth of the river by shifting of shingle to which it is occasionally liable; but it seems probable that this was only a minor factor.

Fishing in the Waitaki was more successful than it has been in previous years. Probably this was entirely a question of the phenomenal lowness of the river which would tend to delay the ascent of the salmon to the tributary streams and would make suitable fishing pools in the lower reaches more accessible.

A large proportion of small males was a characteristic of this year's runs, though there were a few fish caught which exceeded 30 lb. It was remarked that the eating quality of the fish was excellent this season. There was also a much smaller proportion of scarred fish among the catches than usual.

ATLANTIC SALMON.

For the capture of ripe fish for the production of ova for the hatchery at Te Anau the usual rack was placed in the Upokororo River on the 23rd March, 1929. The first fish were taken on the 27th March, but they did not appear in considerable numbers until the river rose on the 8th May, when 144 fish were taken in the three following days. Before the next flood over 300 fish were counted lying in the pools below the bridge, which were expected to move up into the trap with the next rise of the river. When on the 5th June the flood came the river rose so rapidly that practically all the fish got past the rack. After that only odd fish were taken. The last capture was on the 7th August, when, with a heavy flood in the river, the trap was taken out. The total number of eggs collected was 374,000 of which 210,000 were sent to Kakahi for liberation in the Wanganui River system and 153,000 were handed over to the Southland Acclimatization Society for the stocking of the Waiau system.

As the result of discussion with the Council of the Southland Acclimatization Society the decision has been made that in future not more than 50 per cent. of the ova taken from Waiau salmon should be sent out of the Waiau system. It seems evident that the salmon stock here cannot be expected to withstand the demands made by the greatly increased fishing in Lake Te Anau, and also by the abstraction of practically all the products of artificial culture, as has been the case for a succession of years. I am of opinion that this principle of restoring to the parent waters 50 per cent. of the ova taken by stripping for hatchery purposes is one that should be followed in most cases, but especially where there is evidence of comparatively little natural reproduction in the stream from which the parent fish are taken.