

February 1995

## Salmon in Ormarsá 1994

### Introduction

The salmon parr population in the middle and lower parts of Ormarsá was investigated 4-5. september 1994.

The river was fished with electricity at four sites, from the estuary up to pool no. 21. The fish were aged and density of the various year classes estimated. In this report, the results from 1994 are compared with results from previous years obtained by similar methods.

### Results

The length distribution of all salmon parr caught is shown in fig. 1. Table 1 shows how many parrs of each yearclass were caught at each site.

In all, 32 parrs were caught in an aerea of 650 m<sup>2</sup>. This is very poor catch, indicating very low densities of salmon parrs in the river. Also, 4 trout parrs 6.6-7.0 cm long and 8 chars 5.0-10.1 cm long were caught.

The most obvious result is that one year old fish is almost absent. It was suggested in the report for 1993 that the 0+ yearclass was very poor and this is now confirmed. The reason is the extreemly cold summer of 1993. Another striking thing is the total absence of fish 1+ and older in the lowest part of the river, locations 1 and 2.

In 1993, a lot of 2+ fish was found at these locations.

In 1994 they were absent. This is hard to explain. On july 22. 1993 the 1+ fish were 4.5 cm long and the 2+

fish were 7.5 cm. Fish of that size could not possibly grow to smolt size in the spring of 1994 and thus leave the river. Since there was no trace of them in september 1994 they are probably dead. Salmon presmolts (large parrs, becoming smolts next spring) were observed in large numbers in one large pool. It is possible that parrs already had left their "home grounds" for overwintering in pools. As little is known about such migrations, this can be regarded as a speculation.

Fig. 1. Length distribution of salmon parrs caught in Ormarsá 4-5. september 1994.

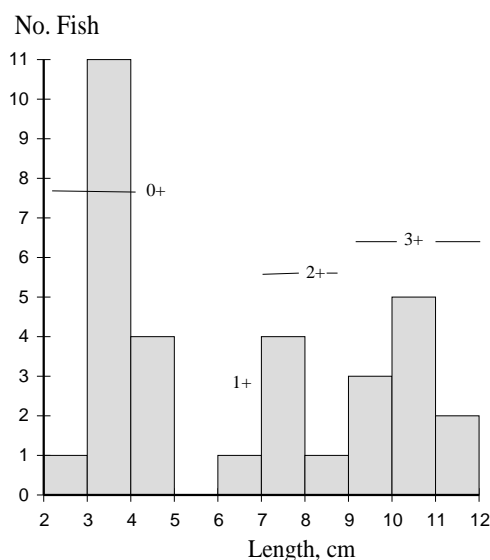


Table 1. Number and age of salmon parrs caught at various sites in Ormarsá 4.-5. september 1994.

Site no.	Location	areal, m <sup>2</sup>	0+	1+	2+	3+	trout	char
1	Below bridge	150	10					4
2	100 m below fishing hut	200	6	1				
3	Bláskriða	150			5	4		4
4	Above island at pool 21	150				6	4	
Sums:		650	16	1	5	10	4	8

Table 2 shows the relative densities of parrs in the years 1986-94. Densities of all year classes is low except of the 0+ fish. Densities of 1 and 2+ fish is in agreement with what was found in 1993 but there is a discrepancy in the 3+ fish compared with the 2+ in 1993.

Since the 0+ are so numerous, putting out 1 summer fish in 1995 is a waste and should not be done. Generally, releasing parr in so long a river as Ormarsá would require such large numbers of fish that it would not be cost effective. Results from smolt releases are so poor that they should not even be considered.

Table 2. Relative densities of salmon parrs in Ormarsá 1986-1994. Number of parrs caught pr. 100 m<sup>2</sup>

Year:	86	89	91	93	<b>94</b>
Date:	18/7	10/8	17/7	22/7	<b>5/9</b>
Age					
0+	1,3	1,0	2,4	0,0	<b>2,5</b>
1+	2,3	3,6	4,5	0,5	<b>0,2</b>
2+	0,0	9,2	1,0	7,0	<b>0,8</b>
3+	1,0	0,0	5,6	2,6	<b>1,5</b>
4+	0,0	0,0	1,2	0,7	<b>0,0</b>

## Outlooks for 1995

In 1994, 60 grilse (1 SW) and 109 salmons (2 SW) were caught in Ormarsá. This is identical to the catch in 1990 and is the second lowest catch in the river since 1984.

In the rivers of NE-Iceland there is a strong correlation between numbers of grilse caught one year and number of salmons caught the following year. These fish originate from the same year class of smolts.

Fig. 2 shows the relationship between grilse and salmons in Ormarsá from the smolt yearclasses 1973-1992. The correlation is almost perfect in the range below 160 1SW except for one point (50,120), originating from the 1978 class of smolts.

Fig. 3. Shows the catch of smolts and salmons from the 1937-92 smolt classes on a time scale. As the grilse catch in 1994 was 60 fish, the salmon catch in 1995 is expected to be in the order of 40-50 fish. This means that the earlier part of the season is likely to be poor. The grilse catch in 1995 is more difficult to predict but most likely it will be normal- low or in the order of 100-150 fish.

Fig 2. Relationship between catch of grilse and salmons in Ormarsá 1972-1992

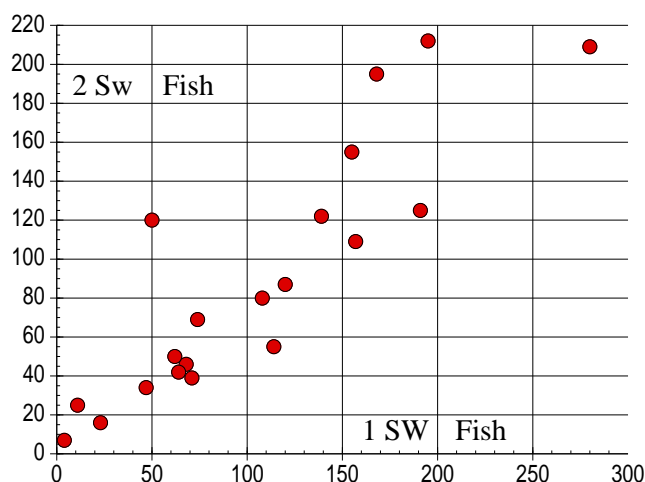


Fig. 3. Catch of grilse and salmon in Ormarsá. Fish originating from the smolt-yearclasses of the years 1972-1992

