

# Salmon in Haffjardara 2003

## Introduction

The salmon parr population in Haffjardara was investigated August 10 and 11, 2003. The river was fished with electricity at 5 sites. The fish were aged and density of the various year classes estimated. Water level was low, 10 cm below normal. All summer, water temperature was high and water level low.

## Results

Table 1 shows the results from the electrofishing. Water level was low, particularly in the upper part, therefore density was on the high side. Growth was very good and the condition of the parr was excellent. Density of fry (age 0+) was very high and they were bigger than usual. This is the result of unusually favourable growth conditions, i.e. early spring and high water temperature. Table 3 shows results from surveys in the upper part of Haffjardara since 1994.

Site No	Location	Date	Area (m <sup>2</sup> )	Year classes				Density Fish/100 m <sup>2</sup>
				0+	1+	2+	3+	
1	Upper Luncheon	11/8	20	3.9 (4)		9.3 (13)	10.7 (2)	95
2	Below Long Pool	11/8	20	3.8 (7)	6.4 (7)	8.7 (7)	10.0 (1)	110
3	Below Falls Pool	11/8	70	3.3 (26)	5.9 (4)	8.4 (5)		50
4	Home Pool	11/8	60	3.8 (21)	6.1 (14)	8.4 (3)	10.6 (1)	65
5	Below Sheep Pool	10/8	50	4.4 (9)	6.8 (7)	9.5 (9)		50
Total:			220	(67)	(32)	(37)	(4)	64

## The salmon catch in 2003

The total catch in 2003 was 1007 fish, which is the best fishing since 1986. The catch of grilse and salmon from 1983 is shown in table 2. Out of the 1007 fish caught in Haffjardara, 525 (52%)

were released. 73 fish were tagged and 22 (30%) were recaptured in the river 1-67 days after tagging. Therefore, we can assume that approximately 150 fish were captured twice in 2003. The grilse caught in 2003 were larger than in 2002 but number of fish below 2 kg. in 2003 increased compared to last year.

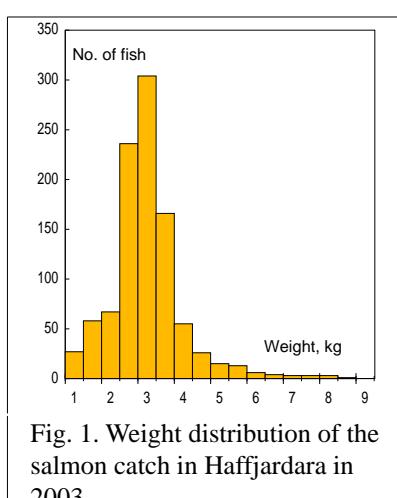


Fig. 1. Weight distribution of the salmon catch in Haffjardara in 2003.

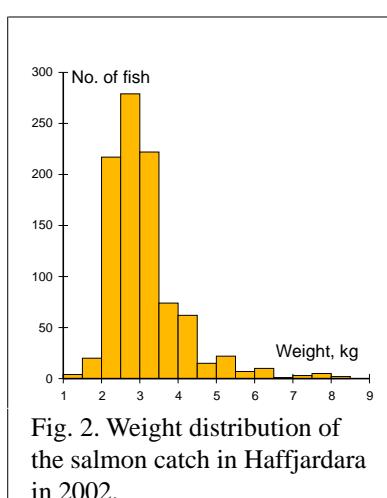


Fig. 2. Weight distribution of the salmon catch in Haffjardara in 2002.

Table 2. Catch of grilse (I SW) and salmon (II SW) in Haffjardara 1983-2003.

Year	I SW	II SW	Total
83	414	211	625
84	202	351	553
85	364	215	579
86	978	161	1139
87	309	226	535
88	744	130	874
89	533	130	663
90	475	148	623
91	594	126	720
92	703	122	825
93	550	83	633
94	567	103	670
95	577	155	732
96	533	69	602
97	490	70	560
98	678	74	752
99	668	122	790
00	612	60	672
01	465	67	532
02	847	96	943
<b>03</b>	<b>912</b>	<b>95</b>	<b>1007</b>
Avg:	581	134	715

Table 3. Mean length at age, and number of salmon parr caught in the upper part of Haffjardara 1994-2003. Number of fish in brackets. Numbers are high in years 2001 and 2003 in very low water resulting in high concentration of parr.

Area (m <sup>2</sup> )	Age:				Density			Year	Date
	0+	1+	2+	3+	Fish/100 m <sup>2</sup>				
70	3.7 ( 7 )	6.1 ( 5 )	7.8 ( 4 )	9.7 (4)	29	1994	12/9		
50	3.4 ( 6 )	6.3 ( 7 )	8.5 ( 2 )	10.2 (2)	38	1995	10/9		
50	3.3 (12)	5.9 ( 6 )	7.4 ( 5 )	9.6 (3)	52	1996	23/7		
50	3.4 (15)	5.5 (11)	7.9 ( 6 )	9.4 (1)	66	1997	16/8		
50	3.8 ( 5 )	6.0 ( 3 )	8.2 (10)	10.4 (2)	46	1998	22/8		
30	3.6 ( 1 )	6.5 ( 8 )	9.0 ( 4 )	12.3 (2)	45	1999	16/9		
60	4.0 ( 9 )	6.8 ( 5 )	8.7 ( 6 )	-	33	2000	25/8		
40	4.0 (17)	6.8 (19)	10.0 (8)	-	110	2001	1/9		
80	-	6.0 (16)	8.2 (12)	9.8 (4)	38	2002	1/8		
40	3.8 (19)	6.4 ( 7 )	9.1 (20)	-	115	2003	11/8		

## Tagging Experiment

From 1/7 to 20/7, 73 fish were tagged and released. 22 (30%) were recaptured in the river 1-67 days after tagging. Results are shown in table 4. Seventeen fish were recaptured above the tagging site, one below and three on the tagging site, 46-67 days later.

Tag No	Tagged					Recaptured			
	Date	Sex	Weight Kg	Pool No.	Date	Pool No.	Timeout Days	Up/down No.pools	
75466	?				29.8	7			
75441	1.7	fe	2.6	2	1.7	7	0	5	
75408	1.7	fe	4.4	1	23.8	7	53	6	
75445	2.7	fe	2.8	23	7.9	33	67	10	
75441	2.7	fe	2.6	7	24.8	20	53	13	
75444	2.7	fe	2.7	23	24.7	31	22	8	
75410	2.7	m	7	7	7.9	7	67	0	
75386	3.7	m	2.5	2	10.8	2	38	0	
75385	3.7	m	2.2	2	1.9	33	60	31	
75433	4.7	fe	2.5	23	5.8	32	32	9	
75427	4.7	m	3	33	19.8	33	46	0	
75448	4.7	m	3.2	2	24.8	33	51	31	
67962	6.7	m	3.4	2	12.7	36	6	34	
67982	6.7	fe	2.5	2	16.7	32	10	30	
67995	10.7	fe			10	1.9	3	53	-7
67991	12.7	fe	2.2	1	6.9	26	56	25	
76671	14.7	fe	2.8	2	7.9	34	55	32	
76650	16.7	fe	2	2	29.8	17	44	15	
76689	17.7	fe	2.2	2	25.7	7	8	5	
76688	17.7	fe	2.3	2	5.8	23	19	21	
76693	17.7	fe	2.2	2	21.7	7	4	5	
76653	18.7	m	2.2	7	7.9	13	51	6	

Table 4. Tagged and recaptured salmon in Haffjardara 2003.  
'Time out' is the time between tagging and recapture.  
'Up/down' is the movement of the fish, how many pools the fish moved up or down (minus sign).