

Salmon in Ormarsá and Deildará 2000

1. Ormarsá

The river was investigated august 25- 28, 2000. The river was fished with electricity and nets were set in Arnarstaðavatn.

Results

The catch of salmon parr at various sites is shown graphically in fig.1 and listed in table 1.

General

The summer 2000 was warm in N-Iceland, figure 6 shows the mean daily temperature at Raufarhöfn in June - August 1997 - 2000. These favourable conditions were reflected by dense bottom vegetation in the rivers and good growth of parr. The growth of parr is the best from 1994.

The fishing sites:

1. The stretch Arnarstaðavatn - Einarsskarðskvísl.

The river was fished at nine sites, evenly distributed from Einarsskarðskvísl up to a site approximately 1 km below Arnarstaðavatn. Total area fished was 450 m². The parr population was extremely poor. A one site only, 0+ salmon parr was found. It seems that the spawning in 1999 was sporadic. Few larger parr and pre-smolts were found and these were released. The 0+ parr were exceptionally big, 4.8 cm on the average.

2. Above 21

The river is here 25 m wide, shallow with a coarse bottom. Dense moss vegetation and high density of parr at all sizes.

3. Bláskriða

High densities of parr, difficult to catch due to dense moss vegetation. Char parr were also numerous at this site.

4. Above pool 14, below a small island in the river.

River loaded with parr, dense moss.

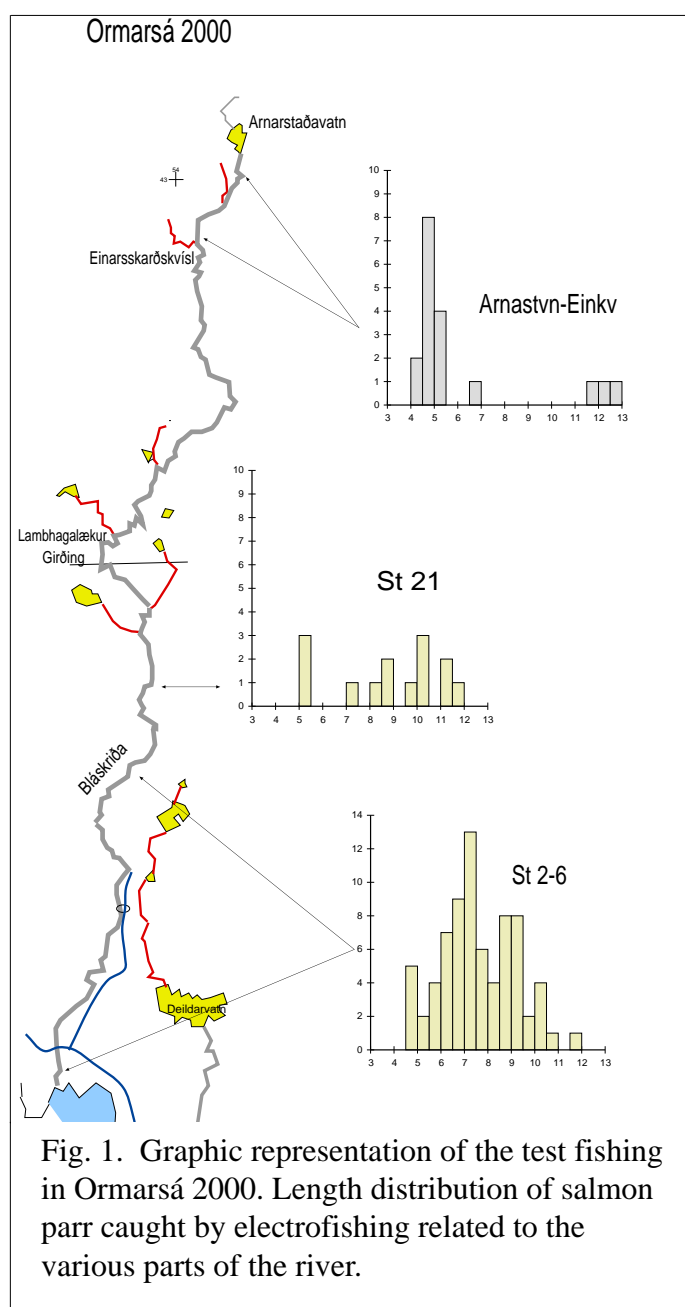


Table 1. Mean length at age, and number of salmon parr caught at various sites in Ormarsá august 25-28th 2000. Number of fish in brackets.

Site No	Location	Areal (m ²)	Density				4+Fish/100 m ²
			0+	1+	2+	3+	
1	Einarskkv Arnv.	450	4.8(14)	6.7(1)		12.0(8)	6
2	Above 21	40	5.1(3)	8.1(4)	10.0(4)	11.3(3)	38
3	Blaskrida	30		6.7(3)	8.9(2)		17
4	Pool 14	60		6.5(12)	8.6(9)	10.0(1)	37
5	12b - 13	100		6.9(4)	8.7(2)		6
6	200 m Below Foss	60	4.6(5)	7.2(8)	8.9(3)	10.4(1)	28
7	Pool 4	50		6.4(10)	9.1(2)	2(10.9)	24
8	Bridge	100		7.0(2)			2
Total:		950+	(22)	(44)	(22)	(23)	12

5. Between 12b and 13, where the gravel for the road was taken .

Moderate to low density of parr. River is deep with high current and catch rate of parr is low due to that. It has been considered to build a fence at this site to delay the upwards migration of the salmon and count them. This is not recommended, it would be complicated operation of a to great magnitude.

6. Where the road comes to the river 200 m below Foss.

Very good population of 0+ and 1+ fish. Growth is very good, the 0+ fish are 1 cm larger, and 1+ fish are more than 1 cm larger, than fish of same age were in 1998.

7. Above fishing pool no. 4.

Very high densities of parr. Bottom was covered with moss close to the shore. Catch figures do not reflect true density as the parr are hidden and protected by the dense moss.

8. Below the bridge at the estuary.

Only two 1 year old were found in an area of 100 m², this stretch is almost free for parr.

Net fishing in Arnarstaðavatn.

Five nets, with 21- 45 mm meshes were set in the lake for one night. Catch was low, three sea run char and 16 stationary chars. No salmon was caught. Netting is very difficult in the lake due to algae carried by the river, and the current created by the river. Nets get blocked very quickly and lay flat to the bottom.

Year	1 SW	2 SW
74	68	55
75	71	46
76	108	39
77	195	80
78	74	212
79	50	69
80	4	120
81	47	7
82	11	34
83	62	25
84	23	50
85	168	16
86	155	195
87	120	155
88	191	87
89	139	125
90	64	122
91	114	42
92	280	55
93	157	209
94	60	109
95	153	10
96	89	92
97	109	32
98	85	35
99	47	59
00	129	20

Table 2. Catch of grilse (1 SW) and salmon (2 SW) in Ormarsá 1974-2000

Comments

Parr density in the lower part of Ormarsá is high and growth is very good, better than in 1998 which also was a year with good growth. However, the upper part, from Arnastaðavatn to Einarsskarðskvísl, was very sparsely populated. Despite of that, release of salmon parr is not recommended. The smolt production of the upper part is probably more controlled by the brown trout in the middle section of the river than the net production of the upper section.

The river will be producing a good smolt run 2001 but al always, the temperatures in the early summer is the main factor controlling the survival and return rate of the smolts.

It is to be expected that the salmon catch in 2001 will be around 80 fish and the grilse catch will either be stable or increase. Therefore, the overall catch will increase in 2001.

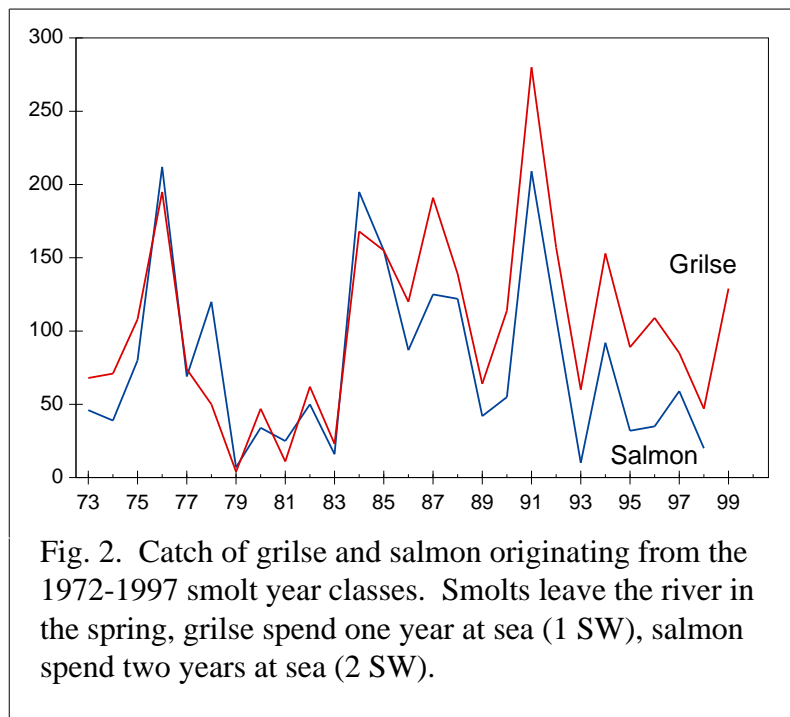


Fig. 2. Catch of grilse and salmon originating from the 1972-1997 smolt year classes. Smolts leave the river in the spring, grilse spend one year at sea (1 SW), salmon spend two years at sea (2 SW).

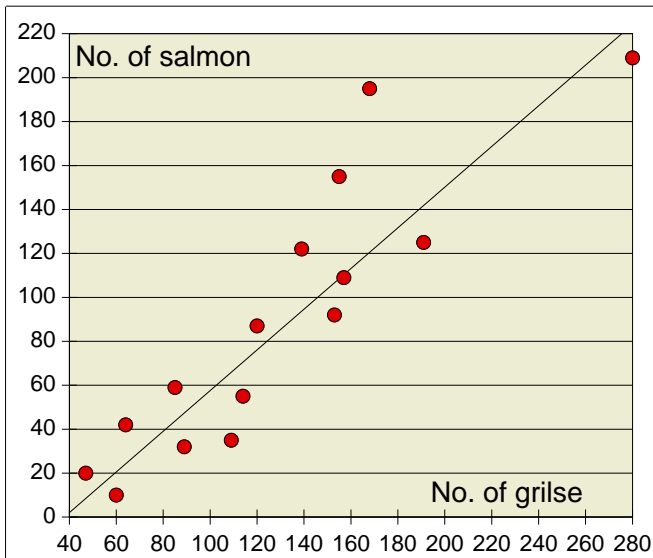


Fig. 3. Relationship between grilse and salmon originating from the same smolt year class 1984-1999.

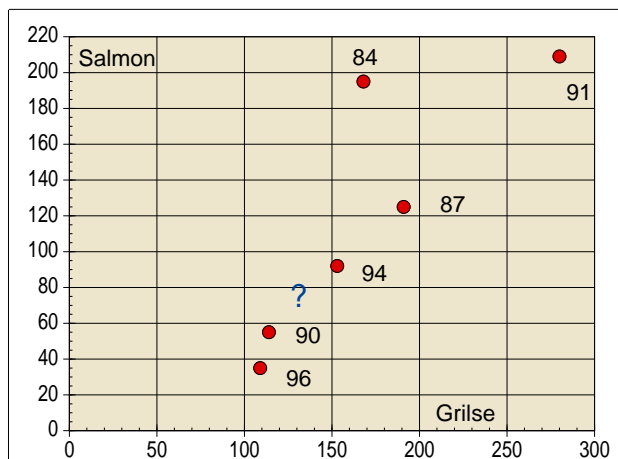


Fig. 4. Relationship between grilse- and salmon catch 1984-1996, in the smolt years when number of grilse had increased from the year before. The ? mark represents the estimated salmon catch in 2001.

2.Deildará

The river was fished at two sites August 29th, 2000. This was a very brief investigation and only few fish were killed for ageing. The river seemed in a very good state with high densities of parr in good condition. Growth was very good, 0+ fish were 1 cm longer on the average than 1998. Parr of age 1+ were 1.5 cm longer than in 1998. If migration conditions (normally warm spring) in 2001 will be normal the outlook for 2001 is very promising

Comment on the fishing sites:

1. Above pool 10.

Pool 10 was full of jumping parr of large size. The stretch above the pool had high density of parr with good growth.

2. Above the bridge at the main road.

There was a large number of parrs of all age classes. I saw no point in fishing a lot of parr as the production seemed to be in a very good state.

Table 3. Mean length at age, and number of salmon parr caught in Deildará August 29th 2000. Number of fish in brackets.

0+	1+	2+	3+
5.1(8)	7.9(11)	9.6(2)	12.0(3)

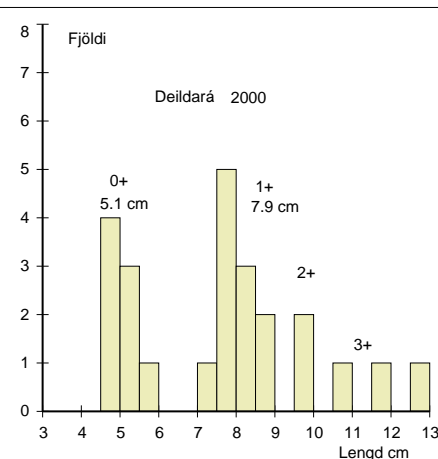


Fig. 5. Length distribution of parr caught in Deildará August 29th 2000.

River / year:	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	2000
Laxá í Aðaldal	1109	1256	1911	2730	2422	2255	1619	1543	1439	2295	1983	1226	1116	1047	1227	1928	845	916
Reykjadalsá	210	155	344	373	241	435	241	272	191	280	249	110	119	132	109	65	64	39
Mýrarkvísl	248	215	388	490	252	287	239	188	243	390	266	139	234	160	270	212	122	49
Ormarsá	87	73	203	350	275	278	264	187	156	335	366	169	163	181	141	134	108	163
Deildará	55	69	234	253	178	173	145	142	88	281	391	173	206	82	141	192	65	144
Svalbarðsá	41	29	161	171	176	198	238	135	136	289	384	145	215	177	98	159	124	92
Sandá	47	35	257	340	403	290	182	81	100	354	434	204	209	152	91	177	190	143
Hölná	25	11	109	121	131	144	105	91	55	150	130	45	78	44	36	53	47	59
Hafralónsá	52	25	132	223	296	361	313	223	123	266	402	147	234	222	221	260	254	315
Miðjarðará	39	32	116	168	206	186	235	136	101	192	172	60	170	96	101	145	116	108
Selá í Vopnafirði	229	123	627	1258	1523	1102	895	634	772	1318	1092	631	1160	737	685	1140	991	1360
Vesturdalsá	61	47	280	197	380	231	226	163	116	264	321	218	329	201	216	159	71	129
Hofsá	258	185	1219	1631	1710	1210	809	552	642	2238	2028	1012	1028	826	607	1008	1020	804

Table 4. Salmon catch in NE- Iceland 1983-2000.

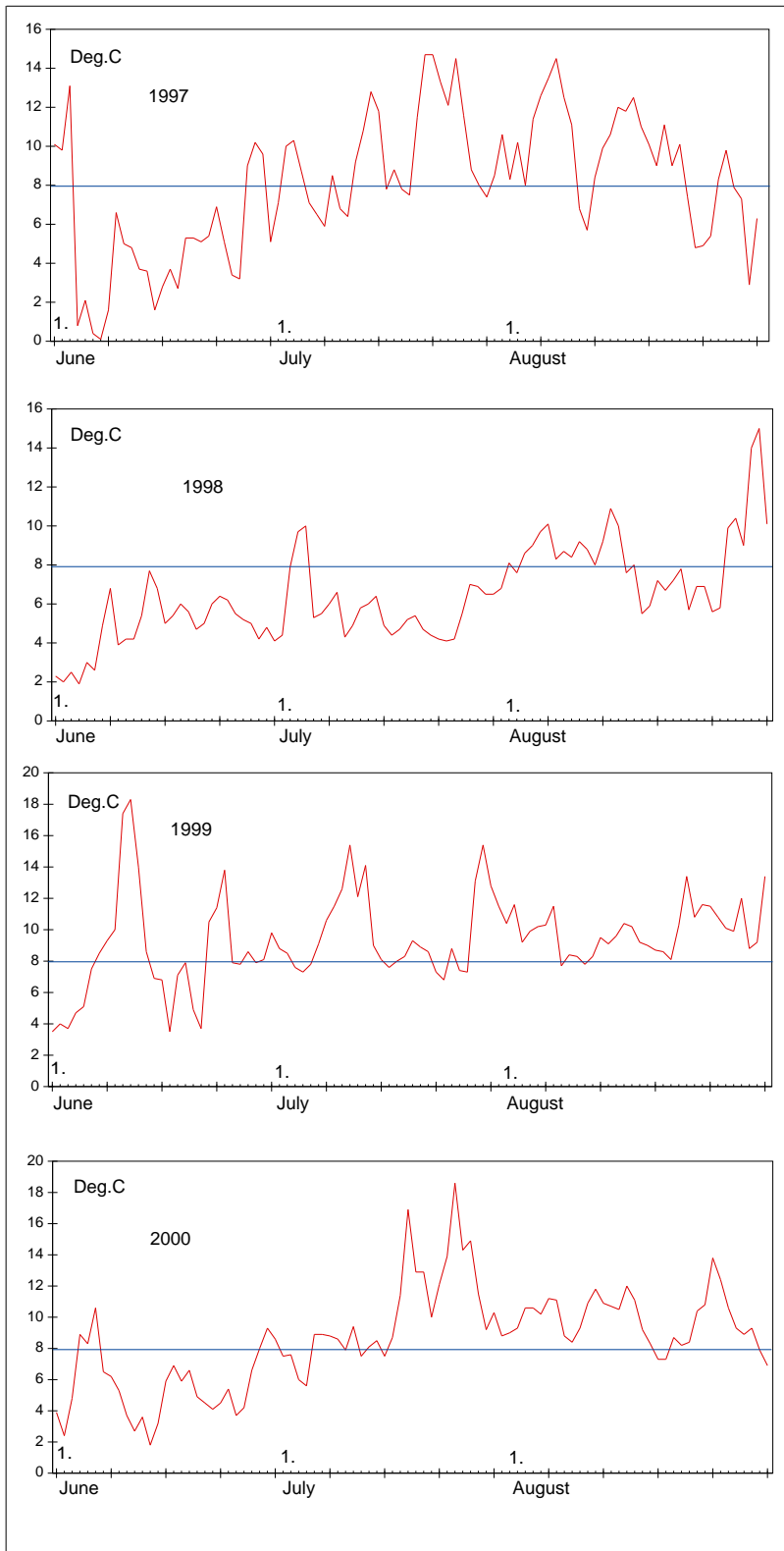


Fig. 6. Mean daily temperature at Raufarhöfnin in June, July and August 1997-2000.