

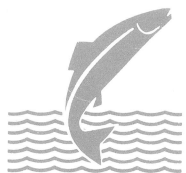
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Investigation of informations extracted
from Data collected at the Fish-reception
operated by the Egilsstaðir Co-operative
for Trout and Arctic Char during the summer
1983.

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INTRODUCTION.

This report is an english summary of a more detailed icelandic version (A.Helgason, 1983), and presents statistics on Trout and Arctic Char delivered to the Fish-reception operated by the Co-operative at Egilsstaðir in the eastern part of Iceland. The operation of a collecting point for Trout and Arctic char in this area is connected to the SSA-salmonid project which commenced in 1983 and has the aim to evaluate the **potential** of commercial exploitation of Trout and Arctic char in lakes in the area. The reason for the project is the abundance of good Trout and Arctic char lakes, and the fact, that the exploitation of the fish stocks are at present very little, and has decreased greatly during the last decades.

The report is an attempt to evaluate the data collected at the Fish-reception from biological point of view i.e. wether it is possible to use these information to base management decisions on the fisheries in different lakes.

RESULTS.

At the Fish-reception the following details were collected:

1. Date of delivery.
2. Lake which the fish originated from.
3. Name of Fisherman.
4. Kilos of gutted fish delivered, but no distinction made betwee Trout and Arctic Char.
5. Kilos of delivered fish in each of 4 different classes (Table 1).

Table 1. Four price groups based on weight of gutted fish were used at the Egilsstaðir Fish-reception.

I	class	750 grammes or more	65 IKR/Kilo
II	"	350 - 749 grammes	55 "
III	"	180 - 349 grammes	30 "
IV	"	179 grammes or less	15 "

The total quantity of Trout and Arctic Char delivered during the 91 day period (16th June - 15th September) is 5155 Kilos which amounts to approx. 6 metric tons gross weight. (Table 2).

Table 2. Delivered fish at the Egilstadir Fish-reception during the period between 16.06.83 - 15.09.83.

<u>Month</u>	<u>No. of days</u>	<u>Kilos del.</u>	<u>Number of lakes</u>	<u>Kg/day</u>
June	14	1164	10	83
July	31	2907	12	93
August	31	751	3	24
September	15	333	5	22
Totals	91	5155	-	-
Means	-	-	-	56.6

The percentage of the total quantity contributed by the various lakes ranged from 0.2 % to 28.6% reflecting both the size of the lakes which to a certain extent affects the possible yield, but even more the fishing effort made in different lakes.

Fig.1 shows in a Pie-chart how the fish quantity delivered to the Fish reception is distributed between different lakes.

The maximum quantity from a single lake was 1474 kilos, but the minimum was 8 kilos. (Table 3)

Mean price per kilo paid to the fisherman was 46.20 IKR, but ranging from 28.7 to 63.0 IKR/kg which reflects the different mean weight of individual fish in the catches from different lakes. On the average 8.5% was class I fish, 53.1% class II fish, and 36.4% III and IV class fish. (Table 3). Individual lakes ranged from 100.00% of I and II class fish to 88.00% III and IV class fish (Table 3).

The fishing intensity as measured by the information in the data from the Fish-reception ranges from 0.5 kg/hectare to 6.4 kg/hectare.

Figure 1. Percentage of the total quantity of Trout and Arctic Char, delivered to the Egilsstaðir Fish-reception, yielded by different lakes.



AHH/VAUST/1983		Kg per price class				Total	% per price class				Value			
Number	Lake	I	II	III	IV	KG.	I	II	III	IV	Total IKR	IKR/Kg	Ha.	Kg/ha.
7504-102	Lagarfljót	162	602	188	11	963	16.8	62.5	19.5	1.1	50.303	52.20	?	?
7504-122	Núpavatn	0	9	27	24	58	0.0	15.5	46.6	41.4	1.665	28.70	?	?
7504-124	Sænavatn	67	762	552	93	1474	4.5	51.7	37.4	6.3	64.222	43.60	230	6.4
7505-001	Anavatn	29	246	58	7	340	8.5	72.4	17.1	2.0	17.260	50.80	490	1.5
7506-001	Múlavatn	46	271	44	6	367	12.5	73.8	12.0	1.6	19.305	52.60	?	?
7506-002	Urriðavatn	31	172	130	19	352	8.8	48.9	36.9	5.4	16.497	46.90	110	3.2
7506-004	Langavatn	20	57	49	12	138	14.5	41.3	35.5	8.7	6.610	47.90	40	3.5
7507-010	Reyðarvatn	1	2	7	5	15	6.7	13.3	46.7	33.3	778	52.00	?	?
7507-020	Pórisvatn	17	24	3	0	44	38.6	54.5	6.8	0.0	2.773	63.00	48	0.9
7507-024	Stekkavatn	17	13	0	0	30	56.7	43.3	0.0	0.0	2.120	70.70	?	?
7508-016	Alftavatn	0	35	32	1	68	0.0	51.5	47.1	1.4	3.188	46.90	?	?
7601-001	Kílatjörn	0	2	6	0	8	0.0	25.0	75.0	0.0	413	51.70	15	0.5
7604-004	Skríðuvatn	3	77	55	24	159	1.9	48.4	34.6	15.1	7.840	49.30	125	1.3
7604-005	Arnarvatn	13	68	15	3	99	13.1	68.7	15.2	3.0	5.058	51.10	14	7.1
7604-006	Grafarvatn	23	93	30	4	150	15.3	62.0	20.0	2.7	7.557	50.40	42	3.6
	Eiðavatn	11	305	427	147	890	1.2	34.3	48.0	16.5	32.505	36.50	170	5.2
TOTAL		440	2738	1623	356	5155					238.094		-	-
Average							8.5	53.1	31.5	6.9		46.20	-	-

Explanations:

- IKR : Icelandic currency (Kronur)
- IKR/Kg : Mean price per kilo
- Ha. : Hectare (10,000 sq.m)
- Kg/ha. : Fishing intensity. This figure should be increased by approx. 15% to find the gross weight.

Number

- : The reference number of the lakes are based on standard references for different countries, and a serial number for the lake.

Table 3. Statistics for delivered Trout and Arctic Char in the Egilsstaðir Fish-reception during the period from 16th June 1983 to 15th September 1983.

CONCLUSIONS.

The period immediately after the lakes become free of ice is the time which gives the greatest yield per unit effort due to the increased mobility of fish during the emigration time of Chironomadae which in turn increases the fishability of passive fishing gear like gill-nets. This fact is to some extent highlighted in greater quantities of fish during the June-July period than later (Table 2).

The reliability of the data collected at the Egilsstaðir Fish-reception are somewhat doubtful due to the fact, that an un-known quantity of fish is marketed through other channels, and this is variable between lakes, and difficult to assess with the present control system.

It is of importance that a more reliable system to collect data about the Trout and Arctic char fisheries in lakes, which will provide a sound basis for future management. Preferably this should involve the fishermen themselves.

References.:

- Árni Helgason, 1983: Athuganir á upplýsingum úr aflaskýrslum hjá fiskmóttöku KHB sumarið 1983.
VAUST/8306, 12.12.1983