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# The Danish Salmon Fishery in the Eastern Baltic in the Season 1961/62.

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## Yield of the Salmon Fishery.

The Danish catches of salmon in the eastern Baltic during the season 1961/62 (July 61 - June 62) amounted to 1.410 tons. This is the best result of the Danish salmon fishery since information on total yield per season became available, i.e. since 1952/53, probably it is the best season at all.

In Table 1 is shown the Danish total catches of salmon in the eastern Baltic in the last lo seasons. The catches mentioned in this paper also include landings in Sweden by Danish fishing-boats. All statements of weight are referring to gutted salmon.

Table 1. Danish salmon catches in tons in the season 1952/53 - 1961/62.

1952/53	1953/54	1954/55	1955/56	1956/57	1957/58	1958/59	1959/60	1960/61	1961/62
858	741	969	644	1.072	761	1.107	744	1.241	1.410

#### Monthly Catches.

Like the preceding one the salmon fishing season 1961/62 started very early. The yield of the fishery in the month of september was relatively large. But contrary to the season 1960/61 good landings were made as late as in the beginning of June. The main fishing months were however October - January, making a total of nearly 70 % of the catches of the whole season. Table 2 shows the monthly catches in 1961/62 in tons as well as in per cent of the total yield of the season.

Table 2. Monthly catches in 1961/62.

Months	ton	%
July	0	
August	3 <b>,</b> 8	0,3
September	58,6	4,2
October	155,3	11,0
November	290,2	20,6
December	320,5	22,7
January	199,9	14,2
February	86,4	6,1
March	124,4	8,8
April	84,1	6,0
May	60,3	4,3
June	26,5	1,9
Total	1.410,0	ons

## Size and Age Composition of the Catches.

The distribution of the total yield of salmon in 1961/62 by weight groups (market categories) as shown in Table 3 is worked out on the basis of 36 % of the total catches.

Table 3. The distribution of the total catches 1961/62 by market categories.

Marke	t categories	Number	%	Tons	%	
I	9 kg and more	12.000	3,3	120,2	8,5	
II	7 - 9 kg	24.600	6,8	188,6	13,4	
III	5 <b>-</b> 7 "	37.600	10,4	214,7	15,2	
IV	3 - 5 "	162.000	44,9	595,3	42,2	
v	1 - 3 "	124.700	34,5	291,1	20,6	
VI	< 1 "	200	< 0,1	0,1	<0,1	

In Table 4 the size composition of the catches in 1958/59, 1959/60 and 1960/61 is compared with the season 1960/61. In addition to the total number,

the total weight and average weight per salmon is given for the seasons in question.

Table 4. The distribution of the total catches 1958/59 - 1961/62 by market categories.

Market categories		1958/59		1959/60		1960/61		1961/62	
		Number	%	Number	龙	Number	5%	Number	96
I	9 kg and more	4.600	1,6	9.800	5,8	8.400	3,0	12.000	3,3
II	7 - 9 kg	19.100	6,6	26.600	15,8	20.300	7,5	24.600	6,8
III	5 - 7 "	23.800	8,3	17.500	10,4	48.800	17,6	37.600	10,4
IV	3 - 5 "	148.100	51,4	50.900	30,2	160.300	58,0	162.000	44,9
v	1 - 3 "	92.300	32,0	60.700	36,0	37.400	13,5	124.700	34,5
VI	< 1 "	400	0,1	3.200	1,9	800	·0,3	200	<0,1
Total number		288.300		168.700		276.500		361.100	
Total weight		1.107,1 tons		744,2 tons		1.241,0 tons		1.410,0 tons	
Average weight		3,84 kg		4,41 kg		4,49 kg		3,90 kg	

In the seasons from 1957/58 to 1961/62 salmon catches were examined on the fish market in Rønne. Salmon from several landings were measured and weighed, and scale samples were collected and analysed. The results of these investigations showed that the relation between the number of salmon in the weightgroups IV, V (1 - 5 kg) and the weightgroups I, II, III (5 kg and more) reflected the relation between the age classes A.1+ and A.2+, A.3+ in the season 1957/58, 1958/59, 1959/60 and 1961/62. The differences between the relationships within the above mentioned weight groups and the corresponding age groups were less than 2 %. In the season 1960/61 the size of the age group A.1+ was extraordinary large, about 10 % of this age group belonged to the weight group III.

## Species Composition of the Catches.

Among the salmon catches examined on the fish market in January 1962, 2074 (93,7%) were true salmon, and the rest 131 (0,3%) were sea trout. 1961 of these salmonids were caught in the southeastern part of the Baltic (20-40)

miles east - 20-40 miles north of Brüsterort). In this case the percentage of sea trout was 6,6. The remaining part of the sample examined were caught near Bornholm, and here the percentage of sea trout was only 0,8.

As pointed out in the report to the Councils meeting 1961 (no.92) the ... weighers do no distinguish between the two species, therefore salmon and sea trout from the eastern Baltic are not separated in the fishery statistics. For that reason an unknown part of the salmon yield stated in this paper is in fact sea trout. Neither is it possible to estimate the total yield of sea trout per season from a single market examination, as the percentage of this species in the catches varies regarding to fishing area as well as to time of the year.

#### Catch per Unit of Effort.

Information on the number of salmon caught and the number of nets and hooks used from 16 fishing boats, representing 5.4% of the total catches of the season 1961/62 gave the fellowing results:

Average number of salmon caught per loo nets: 5,4

## Recaptures of Tagged Salmon.

In addition to the information on their catches 4 fishermen have reported recaptures of salmon tagged in Sweden. On the basis of this information which only comprises 115 recaptures, the percentage of Swedish tagged salmon in these catches amounted to 3,0.