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The Norwegian Statistics for the Salmon and Sea-Trout
Fishery 1876-1965 with some Comments

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In Norway there are more than 200 salmon and sea-trout rivers and several thousands of smaller rivers and brooks where sea-trout enter but salmon seldom or never. At present we possess figures for about 170 rivers in the statistics, but in the first years up to 1883 we only find 55 rivers mentioned. We do not know exactly the quantities of sea-trout, but we estimated them to be less than 10% of the salmon catch.

The sea-trout fishery is on the whole based on fish of Norwegian origin. We know, however, from numerous tagging experiments that our salmon fishery is to some degree based upon salmon which originate from the U.S.S.R. in the northern part of Norway and especially in Finnmark, and we also know that in the southern part of Norway we fish some salmon which originate from Sweden and the British Isles. On the whole, salmon from foreign countries amount only to a very small proportion of the total fishery.

In Table 1 we find figures for the total catch, catch at sea, catch in rivers, the number of bag-nets, and the catch per bag-net for the years 1876-1965. As most of the salmon in this period have been caught in bag-nets the varying catch per bag-net gives a fairly good idea of the fluctuations in the salmon stock. The bag-nets of to-day may, however, be somewhat more efficient than those used in former days; now they are made of nylon thread and are able to better stand the pressure of waves and currents.

In Figure 1 we find a graphical picture of the total yield of salmon and sea-trout, the yield at sea, in the rivers and the number of bag-nets. From 1876 up to the "nineties" the total yield increased with the increase in the number of bag-nets. From that time on the yield decreased in spite of the increase in the number of bag-nets. This fact has usually been explained by the biologists as an effect of overfishing, but the professor in statistics, Per Ottestad, could find no statistical proof for this being so.

Up to the beginning of the "fifties" the yield of salmon fluctuated between 713.000 kg and 1.320.000 kg. The number of bag-nets varied at the same time between about 5000 and 9000. From the beginning of the "fifties" we have had a steady increase in the yield of salmon in spite of a rather constant number of bag-nets. During this period we have had an increasing number of drift-nets and other types of nets, which have certainly exploited the salmon stock for some hundred thousands kilos.

From Figure 2, where the catch per bag-net is shown, it should, however, be clear that there must have been a remarkable increase in the salmon stock. The catch per bag-net is even higher now when we have 7-8000 bag-nets than it was in the "seventies" and "eighties", when the number of bag-nets were from less than 2000 up to slightly more than 4000.

The conclusion is, therefore, that the salmon stock in Norway is at present at a rather high level. Apart from the probably good natural conditions prevailing, the reason for this may also be the better control of illegal fishing, especially in the weekly closed time, increased artificial propagation and the construction of a large number of fish ways, especially in the northern part of Norway.

The increase in the drift-net fishery and, perhaps even more the increase in the number of other gill-nets is alarming. We do fear that overfishing may take place if we do not find some way of controlling this fishery.

TABLE 1.

År Year	Total fangst Total yield	Fangst i sjøen Yield of seafishing	Fangst i elv Yield of riverfishing	Antall kilenøter No. of bagnets	Fangst pr. kilenot Catch per bagnet
1875					
6	547.787	361.928	185.859	1.718	152
7	538.174	348.399	189.775	1.726	141
8	530.980	348.992	181.988	1.780	131
9	460.175	315.851	144.324	1.905	94
1880	458.482	310.270	149.520	2.002	113
1	538.840	387.581	152.039	2.045	145
2	433.484	289.069	144.685	2.205	100
3	624.223	411.932	213.311	2.376	146
4	782.797	537.118	245.679	2.670	159
5	916.976	640.921	276.055	3.065	167
6	754.023	524.826	229.197	3.372	123
7	800.059	564.353	235.706	3.723	128
8	896.387	676.626	219.761	4.054	139
9	863.941	669.839	194.102	4.427	122
1890	899.105	654.447	244.658	4.747	112
1	1.145.852	896.779	249.073	5.273	137
2	1.016.298	780.723	235.575	5.522	113
3	877.783	679.729	198.054	5.687	107
4	765.984	566.225	199.759	5.847	87
5	926.991	705.544	221.447	5.898	100
6	966.737	759.410	207.327	6.339	97
7	1.228.731	966.513	262.218	6.641	115
8	997.661	767.719	229.942	7.045	85
9	1.001.034	805.325	195.709	7.213	87
1900	1.142.751	939.423	203.328	7.518	102
1	1.030.831	842.448	188.383	7.913	93
2	1.030.882	812.183	218.699	8.190	80
3	965.336	738.111	227.225	8.796	71
4	730.574	578.764	151.810	8.154	61
5	860.479	681.110	179.369	8.014	75
6	923.387	728.859	194.528	8.029	81
7	968.753	745.406	223.347	8.098	80
8	952.255	741.432	210.823	8.052	71
9	862.086	693.605	168.481	8.027	72
1910	879.194	689.459	189.735	7.847	72
1	935.382	735.314	200.068	7.747	81
2	908.278	718.124	190.154	7.591	82
3	884.558	699.626	184.932	7.281	84
4	1.044.123	839.650	204.473	7.277	101
5	965.587	770.771	194.816	6.713	96
6	785.665	622.134	163.531	5.917	90
7	792.600	655.068	137.532	5.292	107
8	713.755	565.647	148.108	5.060	84
9	888.985	715.016	173.969	5.276	113
1920	817.237	639.679	177.558	5.244	154
1	1.217.779	968.584	249.195	5.910	137
2	1.042.575	810.463	232.112	6.316	118
3	978.764	749.032	229.732	6.531	113
4	1.024.798	817.344	207.454	7.065	103
5	1.110.914	894.991	215.923	7.555	89

TABLE 1. (continued)

År Year	Total fangst Total yield	Fangst i sjøen Yield of sea fishing	Fangst i elv Yield of river fishing	Antall kilenøster No. of bagnets	Fangst pr. kilenøst Catch per bagnet
1926	1.320.924	1.102.288	218.636	8.171	116
7	1.208.128	1.030.159	177.969	8.734	108
8	905.654	748.971	156.683	8.704	76
9	844.315	704.759	139.556	8.671	74
1930	871.909	719.713	152.196	8.389	80
1	993.467	803.727	189.740	8.409	77
2	909.986	726.322	183.664	8.407	80
3	757.861	616.419	141.442	8.454	67
4	1.024.765	841.469	183.296	8.532	89
5	1.150.137	962.194	187.943	8.721	102
6	1.179.222	998.472	180.750	8.879	104
7	1.275.923	1.082.151	193.772	8.760	108
8	1.154.360	970.698	183.662	8.835	102
9	1.197.510	1.008.943	188.567	9.191	104
1940	877.341	723.831	154.203	5.967	112
1	867.854	746.328	121.526	6.865	102
2	876.732	749.867	126.865	6.585	107
3	838.096	701.679	136.417	6.608	99
4	863.551	719.275	144.276	6.547	102
5	849.783	696.195	153.588	5.772	114
6	981.538	794.945	186.593	6.405	117
7	954.085	780.734	173.351	6.458	109
8	988.978	812.220	176.758	6.663	111
9	1.089.427	908.325	181.102	6.733	125
1950	896.084	729.955	166.129	6.866	97
1	1.053.157	892.168	160.989	7.098	116
2	1.198.227	1.027.853	170.374	7.217	130
3	1.313.588	1.113.404	200.184	7.331	142
4	1.439.010	1.207.339	231.671	7.829	145
5	1.482.837	1.272.742	210.095	8.017	149
6	1.453.537	1.267.565	185.972	7.976	145
7	1.610.806	1.396.874	213.932	8.150	155
8	1.489.794	1.238.894	250.900	7.741	145
9	1.403.446	1.194.727	208.719	7.846	136
1960	1.658.988	1.422.153	236.835	7.446	172
1	1.533.061	1.334.853	198.208	7.331	158
2	1.934.506	1.670.787	263.719	7.313	175
3	1.785.997	1.552.576	233.421	7.162	177
4	2.156.962	1.836.943	320.019	7.348	195
5	1.999.936	1.705.862	294.074	7.114	172
6	1.841.724	1.583.554	258.192		

Figure 1.

Utbyttet av laksefisket i Norge 1876-1965 og antall kilenøtter i bruk i samme tidsrom.

— Total fangst - Total catch. — Fanget i elv - River catch.

2600 — Fanget i sjøen - Seacatch. --- Antall kilenøtter - Noof bagnets. 26000

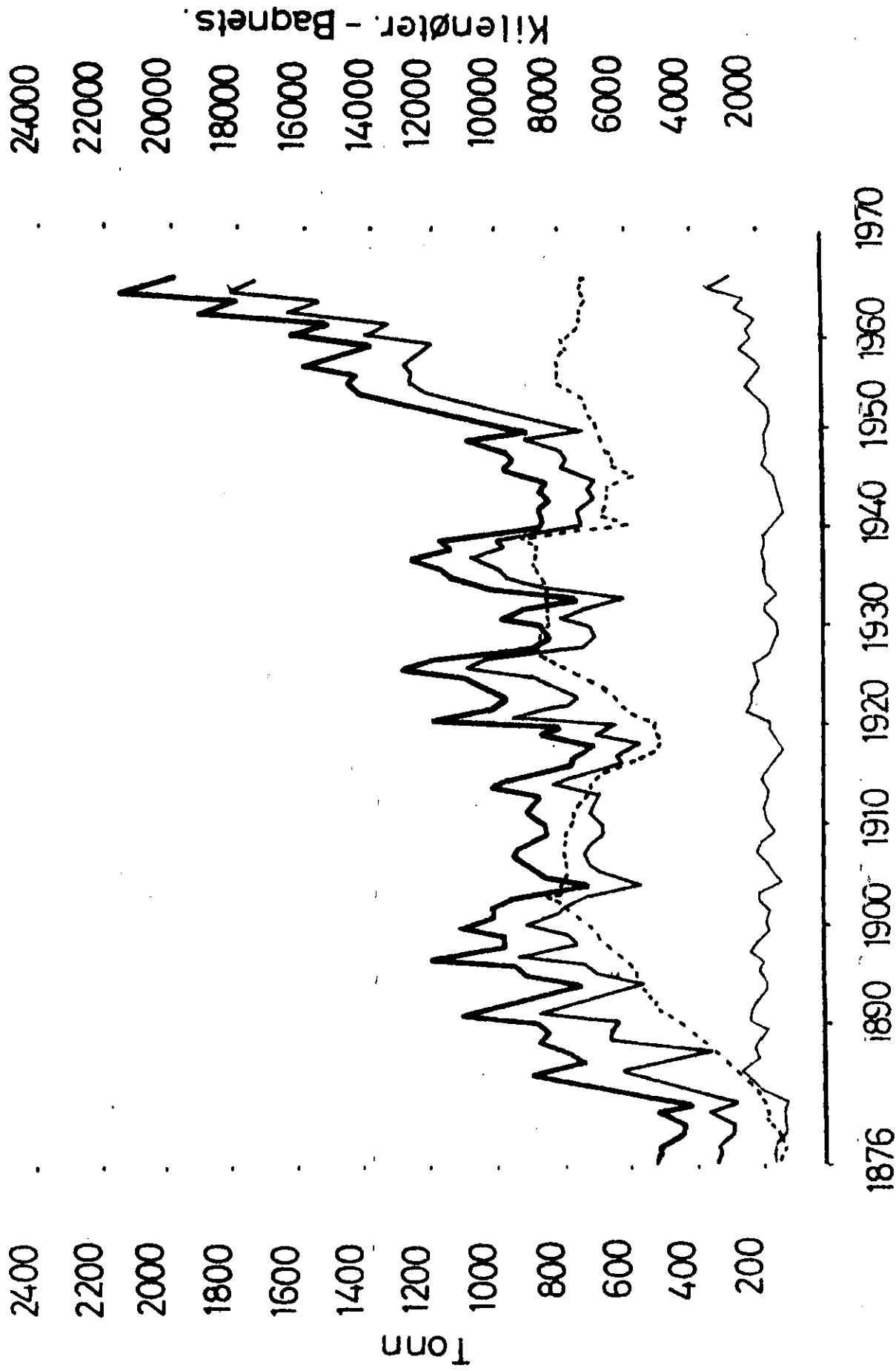


Figure 2.

Utbyttet av laks, setisket i sjøen i Norge 1876 - 1965.
 Yield of Salmonfishery in the sea in Norway 1876 - 1965.

— Fangst pr. kilenot - catch per bagnets.
 — Fangst i sjøen - sea catch. - - - - Antall kilenøtter - no. of bagnets.

