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Grilse Salmon Relationship in two Irish Rivers

by

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Details of the fluctuations in the catches etc. in the Rivers Foyle and Shannon up to and including 1969 have been given in Went and Twomey (1971) and additional information has been added for 1970 and 1971 in the tables below.

Both in the River Foyle and the River Shannon samples of schles have been taken for age determination for a considerable period of time. Scale sampling has been continuous in the River Shannon since 1944 and in the River Foyle intermittenly since 1954. The results have been processed to obtain a division into the four dominent age groups found in Irish rivers. In the River Shennon there are also records of 3 sec winter fish but since the '60s the numbers in the total catch have been very small.

It c n be seen from Table 1 that the River Foyle is prodominantly a grilse river. However, there well more of the older age croups present in the catches in the 1950s them in the 1960s. The data presented for the River Shannon cover the period from 1944 to 1971 (Table 2), Grilso were the dominant age group throughout. The 2 and 2+ sec. winter fish were f.irly constant up to 1959. The ye rs 1960 and 1961 were poor both for salmon and grilse. There was an increase in the runs of salmon from 1962 to 1965 but from 1966 onwards a decline set in.

REFERENCE:

Went, A.B.J. Twomey E. (1971) Fluctuations in the Characteristics in Irish Salvon. Irish Fish Invest. Series A. No.7

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Table 1. Flucuations in the catches in the River Foyle of the different age groups 1954/8, 1962/3 and 1967/71, (numbers to the nearest 1,000).

| Year | Age Groups (sea ::inters) | | | | | | | | |
|------------------|---------------------------|----|----|----------|-------|--|--|--|--|
| | 1+ | 2 | 2+ | With Sms | Total | | | | |
| 1954 | 618 | 37 | 36 | 60 | 751 | | | | |
| 1955 | 423 | 22 | 52 | 31 | 518 | | | | |
| 1956 | 515 | 37 | 54 | 27 | 633 | | | | |
| 1957 | 84.9 | 74 | 86 | 45 | 994 | | | | |
| 19 58 | 824 | 38 | 42 | 32 | 936 | | | | |
| 1962 x | 1,155 | 1 | 9 | 53 | 1,218 | | | | |
| 196 3 m | 1,197 | 3 | 15 | 24 | 1,239 | | | | |
| 1967 | 1,186 | 22 | 55 | 14 | 1,277 | | | | |
| 1968 | 1,134 | 21 | 53 | IJ | 1,221 | | | | |
| 196 9 | 995 | 7 | 61 | 6 | 1,069 | | | | |
| 1970 | 1,057 | 20 | 56 | 3 | 1,136 | | | | |
| 1971 | 917 | 2 | 20 | .4 | 943 | | | | |

[·] x Catches only from June to August included, therefore, the 2 and 24 age groups would be greatly understated compared with conditions in the river.

[#] The figures given in Went, 1964 have been revised and the final figures for this year have been used instead of the provisional figure as in the previous report.

Table 2. Number of fish in the different age groups (to the nearest 10) for each year. (Based on Went, 1964a Twomey, 1957 and 1967, and Went and Twomey, 1971.

AGE GROUPS (SEA WINTERS)

| Year | 1+ | 2 | 2+ | 3 | With Sms | Total ⁺ |
|------|--------|-------|-------|-----|----------|--------------------|
| 1944 | 8,860 | 1,860 | 550 | 250 | 410 | 11,940 |
| 1945 | 4,350 | 1,280 | 460 | 140 | 380 | 6,610 |
| 1946 | 8,500 | 1,150 | 590 | 180 | 310 | 10,740 |
| 1947 | 6,470 | 1,150 | 180 | 130 | 420 | 8.390 |
| 1948 | 7,060 | 2,290 | 160 | 140 | 230 | 9,880 |
| 1949 | 9,260 | 3,200 | 330 | 230 | 230 | 13,280 |
| 1950 | 11,020 | 2;700 | 610 | 160 | 360 | 14,880 |
| 1951 | 10,190 | 2,430 | 790 | 260 | 450 | 1 |
| 1952 | 7,030 | 2,500 | 460 | 240 | 310 | 14,130 |
| 1953 | 13,910 | 1,900 | 820 | 70 | 730 | 10,540 |
| 1954 | 8,600 | 3,190 | 1,860 | 30 | 300 | 1 |
| 1955 | 5,280 | 1,670 | 1,120 | 360 | 460 | 13,990 |
| 1956 | 9,390 | 2,070 | 980 | 160 | 390 | 8,980 |
| 1957 | 9,920 | 1,750 | 1,300 | _ | 160 | 12,990 |
| 1958 | 9,260 | 1,800 | 570 | 110 | 240 | 1 . |
| L959 | 7,230 | 2,380 | 1,110 | 100 | 700 | 11,980 |
| 960 | 6,44C | 870 | 190 | 100 | 320 | 11,520 |
| 1961 | 4,230 | 690 | 110 | 10 | 50 | 7,920 |
| 1962 | 14,660 | 1,320 | 1,530 | - | 810 | 5,090 |
| 1963 | 14,320 | 1,630 | 410 | 20 | 530 | 18,320 |
| 1964 | 7,830 | 1,750 | 1,590 | _ | 1,660 | 16,960 |
| .965 | 12,150 | 1,250 | 1,850 | _ | 970 | 12,830 |
| .966 | 8,850 | 440 | 360 | - 1 | 240 | 16,220 |
| 967 | 15,520 | 710 | 450 | _ | 170 | 9,890 |
| 968 | 15,340 | 850 | 350 | 50 | 10 | 16,850 |
| 969 | 18,180 | 1,020 | 660 | 20 | 140 | 16,650 |
| | 11,700 | 340 | 480 | 40 | | 20,020 |
| 971 | 12,470 | 620 | 130 | - | - | 12,560 13,220 |

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