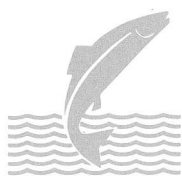


VÍÐIDALSÁ 1992
(preliminary rapport)

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January, 1993

VMST-N/93004



VEIÐIMÁLASTOFNUN
Norðurlandsdeild

SALMON STOCKS IN RIVER VÍÐIDALSÁ 1992

Introduction

The rod catch of salmon saw a dramatic improvement in Víðidalsá and Fitjá in 1992 after three disappointing seasons. The total recorded catch came to about 1480, more than double that of 1991. Previous catches however have often exceeded this and the catch in 1992 was well within the normal range, although better than the average catch of 1300 registered over a 17 year period from 1974 to 1990.

When we look at the composition of the of the catch, a different picture emerges. Of the total catch 1060 were returning as grilse, having spent only one year at sea before reaching maturity. This is the third best grilse year on record since 1974 and an increase not paralleled in the adjacent rivers, even if a substantial increase was also registered there. A good grilse run in one year is highly indicative of a good run of the larger 2 sea-winter salmon in the following year.

Origin of the adults

Usually, the adults will not only return to their native river for spawning but normally they will also return to the area within the river where they successfully completed their juvenile stage of their life history. Many however will be caught en route. The speed of upstream migration depends on many factors, not least water temperature and flow. In some years salmon originating from the top reaches of Fitjá may not venture that far to spawn. Tagging of juveniles released above impassable falls has shown that they contribute to the fishery throughout the length of the river, although their proportion in the catch increases the further upstream we go.

Analysis of growth patterns from scale samples indicate that over 40% of the catch in Víðidalsá and up to 50% in Fitjá in 1992 originated from juvenile releases above impassable falls. This is a very high proportion since the relative importance from juvenile releases usually decreases with increasing run size. The large increase in grilse runs in 1992 can therefore in part be attributed to increased smolt production from juvenile releases.

Although complete data are not yet available on the returns from releases of hatchery reared smolt in Víðidalsá, indications are that these have only played a minor role in the development of the catch. This is in sharp contrast to the neighbouring rivers. Further experimentation of smolt releases in Víðidalsá should only been seen in the context of influencing the distribution of

the catch rather than as a means to substantially increase runs. For that the further use of nursery areas inaccessible to migrating adults is of far greater importance in Víðidalsá.

Víðidalsá and Fitjá are both particularly well endowed with large areas above impassable falls which are suitable as nursery areas for juvenile salmon. By seeding these areas with juvenile salmon and monitoring their progress we are striving towards improving our use of these areas. Since 1990 the material used for stocking has improved. The juveniles from the hatchery have generally been larger and fitter at the time of their release and therefore a higher proportion has only had to spend two years in freshwater before migrating to sea. We therefore expect that the contribution of releases above impassable falls to the total run to remain high in the years to come. Indications are that smolt production of these areas was good in 1992, in spite of a blizzard in late June and relatively low water temperatures for the remainder of the summer.

In the areas where salmon reproduce naturally, smolt production is now particularly high in the upper reaches of Fitjá. There, lack of recruitment of new year classes in the last two years has caused improved growth and survival of older juveniles (the residence time of juveniles is generally four years in this area), resulting in good smolt production. This summer it will be necessary to seed this area again with hatchery juveniles to maintain its productivity.

In other areas, smolt age is increasing again, a trend which was temporarily reversed by the unusually favourable climatic condition in 1991. This development will inevitably reduce the smolt production of these areas.

The outlook for 1993

We can reasonably expect good or even excellent catches of 2 sea-winter salmon in 1993. We do expect a reduction in the grilse run from what it was in 1992, but not to the low levels of 1989-1991. Given a normal summer in Iceland in 1993, angling in River Víðidalsá should be excellent.

11 January 1993

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