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Salmon in Haffjarðará 1993

Haffjarðará is one of the very few rivers in Iceland that has never been stocked by fish of any kind. The catch is very stable, yearly average catch for the last 20 years is 622 salmons. the lowest catch was 1981, 465 fish, the highest catch was in 1986, 1131 fish.
In order to look closer at the smolt production of the river some research has been conducted. Good and stable production of healthy parrs and smolts is the key to good salmon runs.

Electrofishing

The growth rate of the salmon parr is a vital parameter in any river system. The food supply, general environmental conditions and the structure of the river bed determine the growth rate. If the growth rate is high, mortality is low and production is high, depending on the absolute number of pars in the system of course.
In order to investigate the growth and relative density of the salmon parrs, the river was fished with electricity at several selected sites. Parrs were collected for aging. This is done by looking at their otholites in a microscope.

Figure 1. shows the length distribution and age of the salmon parrs caught in september 1993. There are three year classes, the 0+ from the eggs of 1992 fall, age one parrs (1+) and two year old parrs. This means that the smolts leave the river at the age of three. This is a very good growth. Most other icelandic rivers have a high proportion of four and even five year old smolts. The density of parrs in Haffjarjará was high, indicating that the smolt production at the time of investigation was high, giving good outlooks for the next few years, provided that other factors affecting the salmon runs being normal. It is suspected that the catch rate in Haffjarðará is low, one of the causes is fly fishing only, leaving ample spawning stock each fall, well distributed in the whole river system.

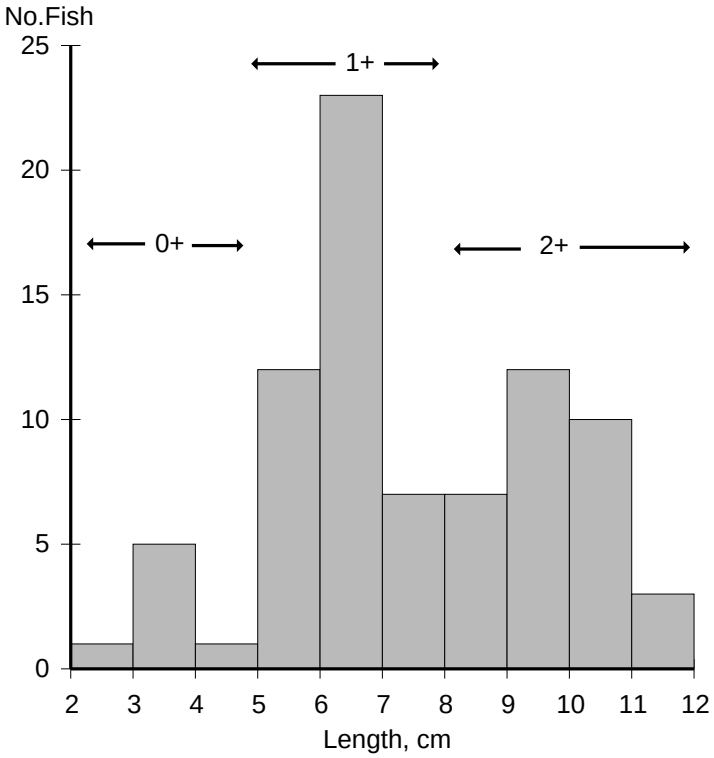


Figure 1.
Length distribution og salmon parrs caught in Haffjarðará in september 1993. Age of the fish is shown, arrows show the length span in each year class. There is no overlapping in length between year classes, the growth is very good.