

The First Tagged Salmon (*Salmo salar* L.) from the River Drawa, Grown in the Sea

by

St. Zarnecki

Last year, at a Symposium for Scale-Reading of Salmon, Professor Chrzan presented the first results concerning scales of salmon from the river Drawa, a tributary of the Noteć and the Warta, situated in the basin of the river Odra. Contrary to the opinion that salmon has completely ceased to exist in the basin of the Odra, a not very numerous salmon population has maintained itself in the Drawa and spawns there every year. It is a most interesting population characterised by exceptionally large dimensions. Individuals of a length surpassing 1 m and weighing about 20 kg are not rare, while individuals of a size below 90 cm are only seldom seen.

While discussing this peculiar salmon form certain difficulties arise as to the interpretation of sclerite fields, corresponding to the first summer spent in the sea. It was generally stated at the Symposium that this case can only be elucidated by means of tagging experiments which are lacking.

We can already present the first results of tagging of a small group of 101 2-year-old smolts, 17 cm long on the average, which were released on 30 March, 1960, into the river Plocziczna, an affluent of the Drawa.

Of this amount one smolt was recaptured in the sea near the island of Rügen in Klein Hoff, westwards of the mouth of the Odra (see Figure 1).

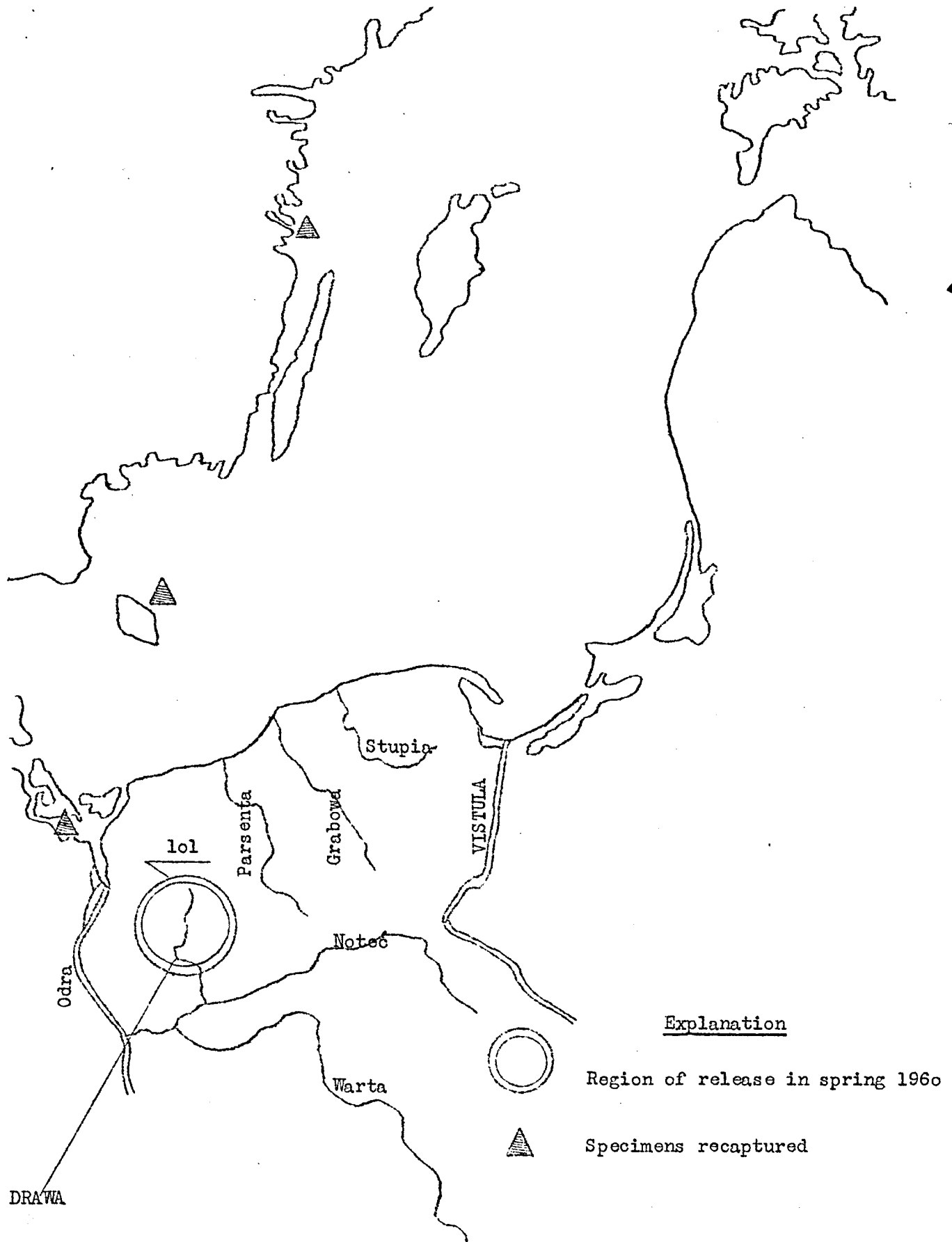
In the next year two more individuals, already grown in the sea were caught (the pictures of their scales shall be demonstrated):-

1. No. 3498, captured to the west of the mouth of the Odra in the region of Bornholm, 200 m SO from Gudhjem, on April 18, 1961. It spent 386 days during its migration seawards and in the sea, attaining a length of 48 cm and a weight of 1200 g.
2. No. 3531, captured at a distance of 3 miles from Vestervik on October 30, 1961. It spent 581 days migrating to the sea and in the sea, attaining a length of 70 cm and a weight of 6500 g. It resulted from a previous reading that in the first year it was 46 cm long, having thus approximately the length of the first individual. The growth rate after two summer seasons, stated for the second individual, lies within the normal limits seen in other Baltic salmon.

However, both salmon demonstrated in the first year of sea life a distinct superiority in their rate of growth in comparison with the rate most often seen in salmon from Swedish rivers and also from the Vistula salmon (commonly 36-42 cm). Drawa salmon has a ratio of growth resembling rather that of the Vistula sea-trout.

In relation to this more rapid growth rate of the salmon from the Drawa in the first summer of sea life, the fact of attaining considerably larger dimensions by the smolts of this Drawa salmon according to Chrzan 1961 (about 18 cm on the average) ought to be stressed. This would undoubtedly be one of the factors influencing the growth rate in the initial period of sea life.

It might seem that a too small importance is attached to the relationship between the size of the smolt and the increase of length and weight in the sea that follows.



Explanation

○ Region of release in spring 1960

▲ Specimens recaptured