

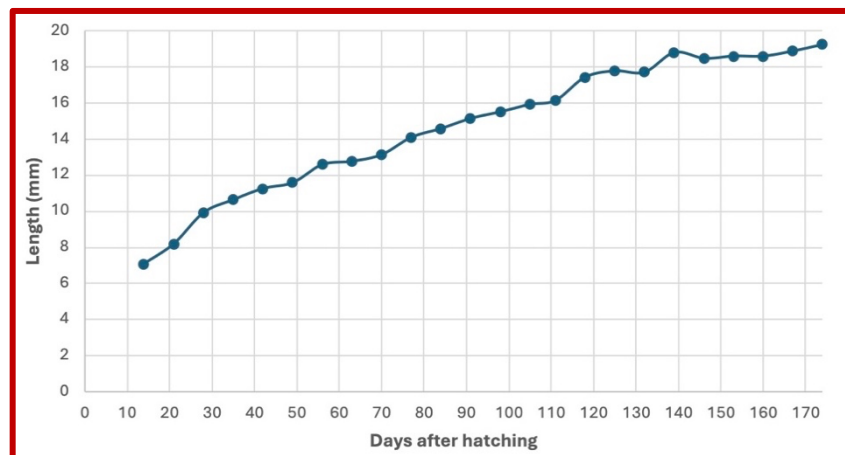
Stepwise improvements

In the second half of 2024, we have taken further steps to improve the growth and survival of the eel larvae. Our focus is mainly on the survival of the young stages (up to 42 days), because that is where the most gains can be made. The survival of the pre-larvae (0 to 14 days after hatching) averaged 26% over the whole of 2024, almost double compared to 2023 (14%). The average is strongly influenced by a bad batch in the summer of 2024. In the third and fourth quarters, the figures were better (24 to 42%). Through continuous adjustments to the breeding protocol and a less labor-intensive treatment of the tanks, we can do more parallel experiments in the last six months, which increases the chance of a breakthrough.

Life-stage of larvae	All of 2023	Q3 2024	Q4 2024	All of 2024	Target
Fertilised eggs (%)	100	100	100	100	100
Egg hatching (%)	40	61	39	36	90
Survival 0-14 days (%)	14	24	42	26	80
Survival 14-42 days (%)	17	27	23	22	60
42 dph to leptocephalus (%)	4.5	9	3	6	50
Leptocephalus to glass eel (%)	0	0	0	0	50
Overall efficiency (%)	0	0	0	0	10.8

The survival of young larvae (14 to 42 days) has also improved, from an average of 17% in 2023 to 22% in 2024. We are currently paying less attention to improving the average egg hatchability, because if we increase the percentage, we do not have enough space to use the large numbers of larvae in experiments. We do not consider this step as crucial because we have also reached every now and then 80% (target is 90%).

Once the larvae have reached the leptocephalus stage, the rate of survival increases significantly; we can now continue to grow larvae for up to almost 300 days, but growth does not continue. The graph shows that the initial growth in length is 0.14 mm per day, but later levels off.



The target is 0.2 mm per day, up to 6 cm. The diet of the leptocephalus is probably crucial. We are trying to solve this problem with a subsidy from the European Maritime, Fisheries and Aquaculture Fund that was awarded in October 2024. We are working (under strict confidentiality) with specialists in fish nutrition from the Aquaculture and Fisheries group of Wageningen University.