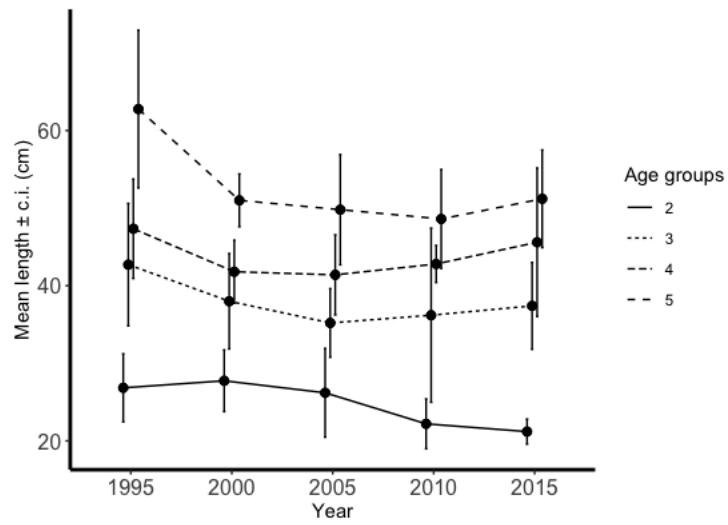**Supplementary figures.**

Figure S1. The length for the nominal age group 2-5 of the studied Baltic cod, collected in SD 25 in the Baltic Sea.
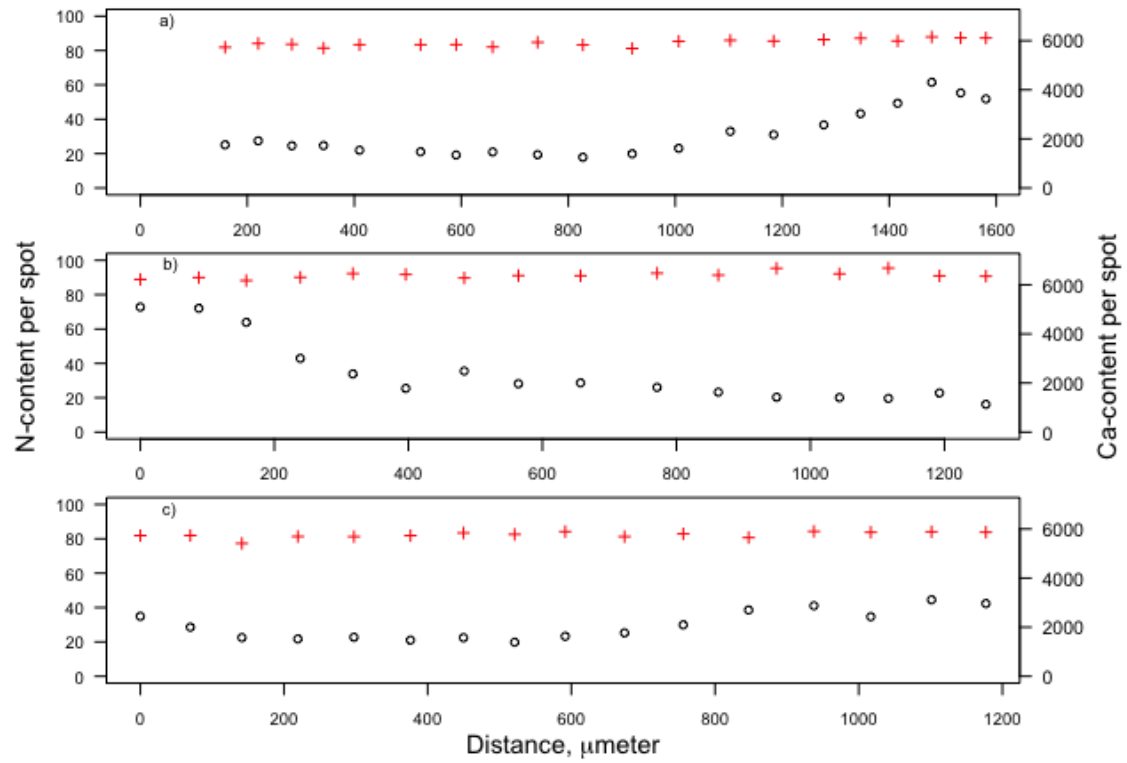
Figure S2. Examples on estimation in three otoliths of N-content (*y*-axis on the left) and Ca-content (*y*-axis on the right) by the distance from the otolith core (μm). a) Preparation number 32, a) Preparation number 45, c) Preparation number 79 (for supplementary information, see Table S3).
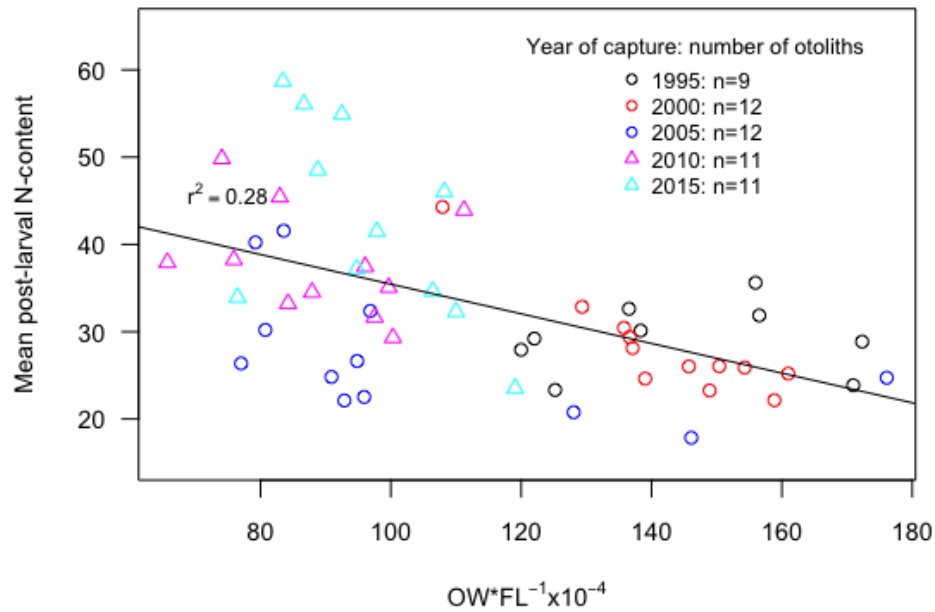
Figure S3. Scatter plot of the mean post-larval N-content by year *versus* the relative otolith size (otolith width/ fish length) for all cod included in the study. A linear regression line is fitted to the data ($p<0.001$, $r^2=0.28$). Year of capture: Black points – 1995, red points – 2000, blue points – 2005, pink triangles – 2010, light blue triangles – 2015.