

Supplementary table 1. Sampling date and year, number of samples and number of analyses (n) of the ovarian and muscle lipids and thyroid hormones (TH). Comparison of the ovarian lipid concentration between or among the sampling dates was made with t-test (unequal variances assumed) or one-way ANOVA using lg10-transformed values of the lipid data

<i>Year</i>	<i>Sampling date (lipids)</i>	<i>Number of samples (ovarian lipids)</i>	<i>Lipid analyses (Ovary) (n)</i>	<i>Comparison of ovarian lipid concentration between/among the sampling dates (t-test or ANOVA)</i>	<i>Lipid analyses (Muscle) (n)</i>	<i>Sampling date (TH)</i>	<i>Thyroid hormone analyses (n)</i>
1988	May 13, June20	2	41	t=1.509; p>0.05	39	-	-
1989	May 5, June 16	2	31	t=1.943; p>0.05	33		
1990	May 22, June 8, June20	3	44	F=1.411; p>0.05	30	June 8	15
1991	May20	1	-		15	-	-
1992	May14, June2	2	12	t=1.271; p>0.05	30	May 14	5
1993	June 2	1	15		15		-
1994	May31	1	20		20	(not recorded)	3
1995	May30	1	20		20		-
1996	May27, June18	1	15		30		-
1997	May12, June4	2	24	t=0.139; p>0.05	31		-
1998	May27, June4	2	9	t=-0.341; p>0.05	19		-
1999	June3	1	15		22	June3	5
2000	June9	1			10		-
2001	June6	1	19		20		-
2002	May31	1	15				-
2003	June9	1	14		15		-
2004	June4	1	11		15		-
2005	June9	1	-		12		-
2006	June9	1	10		22	June9	9
2010	June7	1	-			June7	11
2012	May30	1	13		11		-
2013	June 3	1	17		17		-
2014	May30	1	10		14	June5	12
2015	June6	1	10		10		-
2017		-	-			June6	7
2019	May21	1	15		15	May21	12
Total n		32	380		465		79

Supplementary table 2. Date of sampling (DOY; day-of-the-year as a running number from January 1 onwards), number of samples (n) and number of spawning females determined for length and fecundity (maturity stage 5-6; n) in the population samples of the Baltic herring collected in the Archipelago Sea in 1988-2019.

<i>Sampling period</i>				
<i>Year</i>	<i>(DOY)</i>	<i>n of samples</i>	<i>Length (n)</i>	<i>Fecundity (n)</i>
1988	131 - 187	14	486	486
1989	117 - 208	8	266	266
1990	118 - 214	19	822	822
1991	138 - 192	17	842	841
1992	135 - 163	2	54	54
1993	166 - 195	1	135	135
1994	147 - 204	17	667	667
1995	150	1	43	43
1996	148 - 175	5	174	174
1997	133 - 192	20	1185	1185
1998	132 - 216	36	2155	2157
1999	155 - 198	6	450	449
2000	161 - 178	5	324	322
2001	153 - 186	10	723	723
2002	152 - 169	5	304	304
2003	144 - 183	6	312	312
2004	152 - 175	4	287	287
2005	161 - 183	3	171	171
2006	161 - 165	2	152	152
2007	149	1	57	57
2008	no sampling			
2009	141 - 184	9	493	493
2010	147 - 182	6	337	337
2011	147 - 188	5	177	177
2012	151 - 167	3	229	229
2013	144 - 185	9	422	422
2014	151 - 184	4	240	240
2015	161 - 183	5	241	241
2016	152 - 182	4	172	171
2017	158 - 181	4	160	160
2018	137 - 178	3	167	167
2019	139 - 197	6	139	139
Total n		240	12386	12383