

**Table S4 Variance parameters for the overall and maturity-group-specific growth models of body mass.**

Term	Var	SE	Var/SE	$\chi^2_1$	P
<b>A overall</b>					
<i>spl(Time)</i>	7.0E-05	1.7E-04	0.4	0.2	0.643
<i>spl(Time):Sediment</i>	1.1E-04	1.1E-04	1.0	7.3	0.007
<i>spl(Time):Cross:Maturity</i>	5.3E-05	1.9E-05	2.7	52.2	<0.001
<i>dev(Time):Maturity</i>	1.5E-04	1.1E-04	1.4	19.4	<0.001
<i>Sediment:Salinity:Cross:Maturity:dev(Time)</i>	3.3E-05	1.1E-05	3.0	18.3	<0.001
<sup>a</sup> Tank	2.9E-09	1.4E-10	20.8	NA	NA
<sup>a</sup> Tank: <i>Time</i>	5.2E-11	2.5E-12	20.8	NA	NA
Tank: <i>dev(Time)</i>	7.4E-05	2.7E-05	2.7	94.3	<0.001
WW-females intercept	7.4E-02	1.2E-02	6.0		
WW-females cov(intercept, slope)	1.7E-05	3.9E-04	0.0		
WW-females: <i>Time</i>	1.4E-04	2.5E-05	5.5		
WW-males intercept	9.7E-02	1.6E-02	6.0		
WW-males cov(intercept, slope)	3.8E-04	4.7E-04	0.8		
WW-males: <i>Time</i>	1.6E-04	2.8E-05	5.6		
WW- immature intercept	8.5E-02	2.2E-02	4.0		
WW- immature cov(intercept, slope)	1.5E-04	8.3E-04	0.2		
WW- immature: <i>Time</i>	2.4E-04	6.4E-05	3.8		
BC-females intercept	2.1E-01	4.5E-02	4.7		
BC-females cov(intercept, slope)	2.7E-04	9.6E-04	0.3		
BC-females: <i>Time</i>	1.8E-04	4.0E-05	4.4		
BC-males intercept	1.1E-01	2.4E-02	4.6		
BC-males cov(intercept, slope)	6.7E-04	8.2E-04	0.8		
BC-males: <i>Time</i>	2.4E-04	5.4E-05	4.4		
BC- immature intercept	8.6E-02	1.3E-02	6.7		
BC- immature cov(intercept, slope)	-2.1E-04	5.2E-04	-0.4		
BC- immature: <i>Time</i>	2.7E-04	4.1E-05	6.4		
F1-females intercept	1.8E-01	4.0E-02	4.4		
F1-females cov(intercept, slope)	2.5E-03	1.0E-03	2.4		
F1-females: <i>Time</i>	1.9E-04	4.6E-05	4.1		
F1-males intercept	1.5E-01	2.8E-02	5.2		
F1-males cov(intercept, slope)	1.8E-03	8.1E-04	2.3		
F1-males: <i>Time</i>	2.1E-04	4.3E-05	4.9		
F1- immature intercept	1.4E-01	2.0E-02	7.0		
F1- immature cov(intercept, slope)	2.1E-03	6.6E-04	3.2		
F1- immature: <i>Time</i>	2.6E-04	3.9E-05	6.7		

Term	Var	SE	Var/SE	$X_1^2$	P
F2-females intercept	1.2E-01	3.0E-02	3.9		
F2-females cov(intercept, slope)	1.1E-03	9.3E-04	1.2		
F2-females: <i>Time</i>	2.0E-04	5.4E-05	3.7		
F2-males intercept	1.6E-01	3.3E-02	5.0		
F2-males cov(intercept, slope)	-1.1E-03	8.6E-04	-1.2		
F2-males: <i>Time</i>	2.0E-04	4.3E-05	4.7		
F2- immature intercept	8.2E-02	1.1E-02	7.2		
F2-immature cov(intercept, slope)	1.2E-04	4.1E-04	0.3		
F2- immature: <i>Time</i>	2.0E-04	3.0E-05	6.8		
DD-females intercept	4.7E-02	1.4E-02	3.4		
DD-females cov(intercept, slope)	1.0E-03	7.9E-04	1.3		
DD-females: <i>Time</i>	2.6E-04	8.2E-05	3.2		
DD-males intercept	9.6E-02	1.6E-02	6.1		
DD-males cov(intercept, slope)	1.7E-03	7.0E-04	2.5		
DD-males: <i>Time</i>	3.4E-04	5.8E-05	5.9		
DD- immature intercept	6.7E-02	1.0E-02	6.4		
DD-immature cov(intercept, slope)	1.7E-03	6.1E-04	2.7		
DD- immature: <i>Time</i>	4.0E-04	6.4E-05	6.3		
WW-females:spl( <i>Time</i> )	2.4E-04	4.5E-05	5.3		
WW-males:spl( <i>Time</i> )	1.6E-04	3.3E-05	4.8		
WW-immature:spl( <i>Time</i> )	2.0E-04	5.8E-05	3.4		
BC-females:spl( <i>Time</i> )	2.1E-04	4.9E-05	4.4		
BC-males:spl( <i>Time</i> )	2.1E-04	5.6E-05	3.8		
BC-immature:spl( <i>Time</i> )	2.6E-04	4.3E-05	6.1		
F1-females:spl( <i>Time</i> )	4.3E-04	9.8E-05	4.4		
F1-males:spl( <i>Time</i> )	1.6E-04	4.0E-05	4.0		
F1-immature:spl( <i>Time</i> )	2.1E-04	3.4E-05	6.1		
F2-females:spl( <i>Time</i> )	3.9E-04	1.1E-04	3.7		
F2-males:spl( <i>Time</i> )	2.1E-04	5.1E-05	4.1		
F2-immature):IND:spl( <i>Time</i> )	2.3E-04	3.8E-05	6.2		
DD-females:spl( <i>Time</i> )	7.3E-04	2.0E-04	3.7		
DD-males:spl( <i>Time</i> )	3.0E-04	5.4E-05	5.6		
DD-immature:spl( <i>Time</i> )	2.3E-04	4.0E-05	5.7		
Residuals	5.1E-04	2.5E-05	20.8		
<b>B immature</b>					
spl( <i>Time</i> )	4.0E-04	3.8E-04	1.1	2.9	0.089
spl( <i>Time</i> ): <i>Sediment</i>	7.4E-05	8.6E-05	0.9	4.2	0.040
spl( <i>Time</i> ): <i>Sediment</i> : <i>Salinity</i> : <i>Cross</i>	2.4E-05	1.3E-05	1.9	7.3	0.007

<b>Term</b>	<b>Var</b>	<b>SE</b>	<b>Var/SE</b>	<b>X<sub>1</sub><sup>2</sup></b>	<b>P</b>
<i>Sediment:Cross:dev(Time)</i>	1.9E-05	1.5E-05	1.3	3.8	0.051
<sup>a</sup> Tank	NA	NA	NA	NA	NA
<sup>a</sup> Tank:Time	NA	NA	NA	NA	NA
Tank:dev(Time)	8.2E-05	3.4E-05	2.4	58.4	<0.001
WW intercept	8.2E-02	2.1E-02	4.0		
WW cov(intercept, slope)	2.1E-04	8.1E-04	0.3		
WW:Time	2.4E-04	6.3E-05	3.8		
BC intercept	8.6E-02	1.3E-02	6.7		
BC cov(intercept, slope)	-2.8E-04	5.2E-04	-0.5		
BC:Time	2.8E-04	4.3E-05	6.5		
F1 intercept	1.4E-01	2.0E-02	7.0		
F1 cov(intercept, slope)	2.1E-03	6.7E-04	3.2		
F1:Time	2.7E-04	4.0E-05	6.7		
F2 intercept	8.1E-02	1.1E-02	7.2		
F2 cov(intercept, slope)	1.4E-04	4.1E-04	0.3		
F2:Time	2.0E-04	2.9E-05	6.9		
DD intercept	7.0E-02	1.1E-02	6.4		
DD cov(intercept, slope)	1.8E-03	6.2E-04	2.9		
DD:Time	4.1E-04	6.4E-05	6.3		
WWspl(Time)	2.1E-04	6.0E-05	3.5		
BC:spl(Time)	3.0E-04	4.7E-05	6.3		
F1:spl(Time)	2.4E-04	3.7E-05	6.4		
F2:spl(Time)	2.8E-04	4.3E-05	6.5		
DD:spl(Time)	2.6E-04	4.4E-05	5.9		
Residuals	4.1E-04	3.2E-05	12.9		
<b>C females</b>					
<i>spl(Time):Sediment</i>	2.6E-04	1.9E-04	1.4	12.9	<0.001
<i>spl(Time):Cross</i>	5.0E-05	3.4E-05	1.5	9.4	0.002
<sup>a</sup> Tank	NA	NA	NA	NA	NA
<sup>a</sup> Tank:Time	NA	NA	NA	NA	NA
<i>dev(Time):Tank</i>	7.4E-05	3.9E-05	1.9	12.4	<0.001
WW intercept	7.5E-02	1.2E-02	6.0		
WW cov(intercept, slope)	1.9E-05	3.9E-04	0.0		
WW:Time	1.4E-04	2.5E-05	5.4		
BC intercept	2.1E-01	4.5E-02	4.7		
BC cov(intercept, slope)	2.9E-04	9.5E-04	0.3		
BC:Time	1.8E-04	4.0E-05	4.4		
F1 intercept	1.7E-01	3.9E-02	4.4		

Term	Var	SE	Var/SE	$X_1^2$	P
F1 cov(intercept, slope)	2.5E-03	1.0E-03	2.5		
F1:Time	1.8E-04	4.5E-05	4.1		
F2 intercept	1.2E-01	3.0E-02	3.9		
F2 cov(intercept, slope)	1.1E-03	9.4E-04	1.2		
F2:Time	2.1E-04	5.6E-05	3.7		
DD intercept	4.8E-02	1.4E-02	3.4		
DD cov(intercept, slope)	1.1E-03	8.0E-04	1.4		
DD:Time	2.6E-04	8.2E-05	3.2		
WWspl(Time)	2.1E-04	4.4E-05	4.9		
BC:spl(Time)	2.0E-04	4.8E-05	4.1		
F1:spl(Time)	3.9E-04	9.3E-05	4.2		
F2:spl(Time)	3.4E-04	1.0E-04	3.4		
DD:spl(Time)	7.4E-04	2.1E-04	3.6		
Residuals	6.1E-04	5.9E-05	10.3		
<b>D males</b>					
spl(Time):Cross	1.5E-04	7.0E-05	2.1	89.3	<0.001
Sediment:dev(Time)	1.5E-04	1.2E-04	1.3	12.4	<0.001
<sup>a</sup> Tank	NA	NA	NA	NA	NA
Tank:Time	1.3E-06	4.3E-06	0.3	0.1	0.756
Tank:spl(Time)	3.8E-05	2.0E-05	1.9	20.9	<0.001
WW intercept	9.9E-02	1.6E-02	6.0		
WW cov(intercept, slope)	3.8E-04	4.8E-04	0.8		
WW:Time	1.6E-04	2.8E-05	5.6		
BC intercept	1.1E-01	2.4E-02	4.6		
BC cov(intercept, slope)	5.8E-04	8.1E-04	0.7		
BC:Time	2.4E-04	5.4E-05	4.3		
F1 intercept	1.4E-01	2.8E-02	5.2		
F1 cov(intercept, slope)	1.8E-03	8.4E-04	2.1		
F1:Time	2.3E-04	4.7E-05	4.9		
F2 intercept	1.6E-01	3.3E-02	5.0		
F2 cov(intercept, slope)	-1.1E-03	8.6E-04	-1.2		
F2:Time	2.1E-04	4.4E-05	4.7		
DD intercept	9.7E-02	1.6E-02	6.1		
DD cov(intercept, slope)	1.7E-03	7.0E-04	2.4		
DD:Time	3.3E-04	5.7E-05	5.9		
WWspl(Time)	1.4E-04	3.3E-05	4.4		
BC:spl(Time)	1.8E-04	5.1E-05	3.4		
F1:spl(Time)	1.4E-04	3.9E-05	3.7		

<b>Term</b>	<b>Var</b>	<b>SE</b>	<b>Var/SE</b>	<b><math>\chi^2_1</math></b>	<b>P</b>
F2:spl( <i>Time</i> )	1.6E-04	4.6E-05	3.6		
DD:spl( <i>Time</i> )	2.8E-04	5.4E-05	5.2		
Residuals	6.0E-04	4.7E-05	12.7		

<sup>a</sup>Variance was constrained to be positive and converged to zero.

Comments: Parameters are given for the overall model (**A**), and for maturity groups of immature individuals (**B**), females (**C**), and males (**D**). A colon between terms indicates the formation of the interaction. Some terms contain splines (spl(*Time*)) and deviations (dev(*Time*)) from linear trajectories. Among-individual (co)variances are given for each cross. Crosses are abbreviated with WW, wild; F1, first-generation hybrid; F2, second-generation hybrid; and DD, domesticated Atlantic salmon. The covariance between among-individual variances for intercepts and slopes (interaction of individual with *Time*) is abbreviated by 'cov'. For all among-group variance parameters, the results from REML-likelihood ratio tests (LRT) are given as test-statistic ( $\chi^2$ , all with 1 degree of freedom) and probability of being different from zero (P). LRT results for among-individual (co)variance terms are reported in supplementary Table S3.