

**Supplementary Table 3** Variance attributable to random effects of dam and sire in the representation GLMMs. The residual variance in a binomial GLMM fit by the *glmer* function in R is always fixed at  $\pi^2/3$  ( $\approx 3.29$ ). The final two columns give the percentage of the total variation (after conditioning on the fixed effects) that is accounted for dam and sire effects, respectively.

Cohort	Sample	Dam variance	Sire variance	Residual variance	% explained by dam	% explained by sire
1993	Electrofishing Aug 1993 0+parr	0.009	0.091	3.29	0.26%	2.69%
1994	Electrofishing Aug 1994 0+parr	0.012	0.050	3.29	0.34%	1.48%
1994	Electrofishing Jun 1995 1+parr	0.022	0.057	3.29	0.64%	1.69%
1998	Electrofishing Aug 1998 0+parr	0.034	0.002	3.29	1.03%	0.05%
1993	Trapped parr May 1993- May 1994	0.000	0.268	3.29	0.00%	7.53%
1993	Trapped pre-smolts + smolts Sep 1994-Apr 1995	0.002	0.066	3.29	0.06%	1.97%
1994	Trapped parr May 1994- May 1995	0.062	0.237	3.29	1.73%	6.61%
1994	Trapped pre-smolts + smolts Sep 1995-Apr 1996	0.099	0.000	3.29	2.92%	0.00%
1998	Trapped parr May 1998- May 1999	0.195	0.000	3.29	5.60%	0.00%
1998	Trapped pre-smolts + smolts 1998 cohort	0.084	0.000	3.29	2.48%	0.00%
1993	Hatchery controls 0+parr Aug 1993	0.055	0.000	3.29	1.65%	0.00%
1993	Hatchery controls mature 0+parr Nov 1993	0.144	0.427	3.29	3.72%	11.07%
1993	Hatchery controls smolts Mar 1994	0.225	0.127	3.29	6.19%	3.48%
1994	Hatchery controls smolts Mar 1995	0.000	0.000	3.29	0.00%	0.00%