## S8 Analyses of untransformed parturition date data

We re-fitted the univariate animal model (equation 1) to the raw (i.e. untransformed) data of parturition date and re-estimated heritability and the rate of evolution based on the BLUP regression. Heritability was estimated at 0.10 (95%CI [0.06; 0.13]). The change in breeding values was estimated at -1.7 (95% CI[-4.0; 0.7]) using the most conservative method, and -2.3 days (95%CI [-5.7; 0.4]) using the less conservative method. Thus all estimates coincide with those from the analyses of the log-transformed data, but the models using untransformed data performed relatively poorly (skewed non-Gaussian residuals and poor MCMC mixing) which may impair the reliability of estimates.