**ReadMe for JEB-2018-00050**

This spreadsheet provides data for the effects of maternal inbreeding (maternal inbreeding experiment) or offspring inbreeding (offspring inbreeding experiment) on traits associated with early offspring fitness in the burying beetle *Nicrophorus vespilloides*. Each row represents a clutch. Missing data are recorded as NA.

Inbreeding status = the inbreeding status of experimentally generated individuals.

In the maternal inbreeding experiment: whether the female was outbred (her parents were unrelated at the grandparent level), moderately inbred (her parents were cousins) or highly inbred (her parents were siblings).

In the offspring inbreeding experiment: whether the offspring were outbred (their mother mated with a male with whom she did not share a common grandparent or a closer relative), moderately inbred (their mother mated with her cousin) or highly inbred (their mother mated with her brother).

Clutch size = the total number of eggs laid before the first egg hatched.

Delay until laying = the number of hours after the female was placed on the carcass until the first egg was laid.

Laying skew index = an index reflecting the extent to which laying is skewed towards the earlier part of the laying period, calculated using the formula Σ((ti -tm)/tm)pi, where pi is the proportion of the total clutch that is laid in a given time interval, ti is the time interval in relation to the initiation of oviposition, and tm is the middle of the laying period.

Laying spread = the number of hours between the first and last egg being laid.

Egg size = the average volume in mm3 of the first five measurable eggs in each clutch assuming their shape approximates a prolate spheroid. The volume is calculated using the equation V = (1/6)πw2L, where w is the width and L the length of the egg.

Eggs hatching = the number of eggs that hatched.

Eggs not hatching = the number of eggs that did not hatch.

Larvae surviving = the number larvae dispersing from the carcass.

Larvae dying = the number of larvae that died between hatching and dispersal.

Larval development time = the time in hours from when the first egg in the clutch was predicted to hatch until the larvae dispersed into the soil. We calculated the predicted time of hatching for the first egg by adding the average duration of egg development (59 hours) to the number of hours after the female was placed on the carcass until the first egg was laid.

Average larval mass = the mass of the brood at the time of dispersal divided by the number of larvae in the brood.