Description

This data set was created from a controlled laboratory breeding study of wild-caught side blotched lizards (*Uta stansburiana*), conducted in 2004 and 2006. Each dam is mated to a single sire, and data on their throat colors and mating outcomes are provided. Please see Lancaster et al. (2007, 2010), in addition to the publication associated with this deposition, for details of animal collection, monitoring and husbandry in the lab.

Please contact the corresponding author, Lesley T. Lancaster, for any additional questions regarding this data set.

Data file columns are as follows:

1. year of the study
2. sire’s unique ID
3. sire’s throat color genotype
4. number of orange alleles carried by the sire
5. number of blue alleles carried by the sire
6. number of yellow alleles carried by the sire
7. sire’s throat color morphotype (oo, yo, bo = O, yy, by = Y, bb = B)
8. dam’s unique ID
9. dam’s throat color genotype
10. number of orange alleles carried by the dam
11. number of blue alleles carried by the dam
12. number of yellow alleles carried by the dam
13. sire’s throat color morphotype (oo, yo, bo = O, yy, by = Y, bb = B)
14. total number of clutches laid by the dam, over the season
15. Total number of eggs laid by the dam
16. Total number of fertilized eggs laid by the dam
17. Total number of progeny hatching from eggs laid by the dam
18. Total number of progeny that survived in the wild until adulthood. Progeny were released to the wild at randomized locations within 3 days of birth.
19. Probability that sons inherited the blue morphotype, with probabilities based on Mendelian inheritance, calculated using a punnet square
20. Probability that sons inherited the yellow morphotype, calculated as above
21. Probability that sons inherited the orange morphotype
22. Estimated son fitness, based on their probability of inheriting each morphotype (columns S-U) and the estimated fitness of that morphotype in the year in which they matured. See text for more details, especially table 1.
23. Binary: whether sire and dam share the same morphotype (i.e., whether the female was mated assortatively or disassortatively by morphotype)
24. Conditional male quality = predicted fitness of sons who inherited their sire’s morphotype, calculated as in column V and as described in the text
25. The frequency of the sire’s genotype in the wild within the year of the study
26. The relative frequency of the sire’s genotype (column Y, divided by the long-term average frequency of each morphotype in the wild)

References:

Lancaster, L. T., A. G. McAdam, J. C. Wingfield, and B. R. Sinervo. 2007. Adaptive social and maternal induction of antipredator dorsal patterns in a lizard with alternative social strategies. Ecology Letters 10:798-808.

Lancaster, L. T., A. G. McAdam, and B. Sinervo. 2010. Maternal adjustment of egg size organizes alternative escape behaviors, promoting adaptive phenotypic integration. Evolution 64:1607-1621.

Lancaster, L. T., A. G. McAdam, C. A. Hipsley, and B. Sinervo. In press. Frequency-dependent and correlational selection pressures have conflicting consequences for assortative mating in a color-polymorphic lizard, *Uta stansburiana*. American Naturalist.