

Appendix A from A. B. Duthie and J. M. Reid, “Evolution of Inbreeding Avoidance and Inbreeding Preference through Mate Choice among Interacting Relatives”

(Am. Nat., vol. 188, no. 6, p. 000)

Extended Model Description

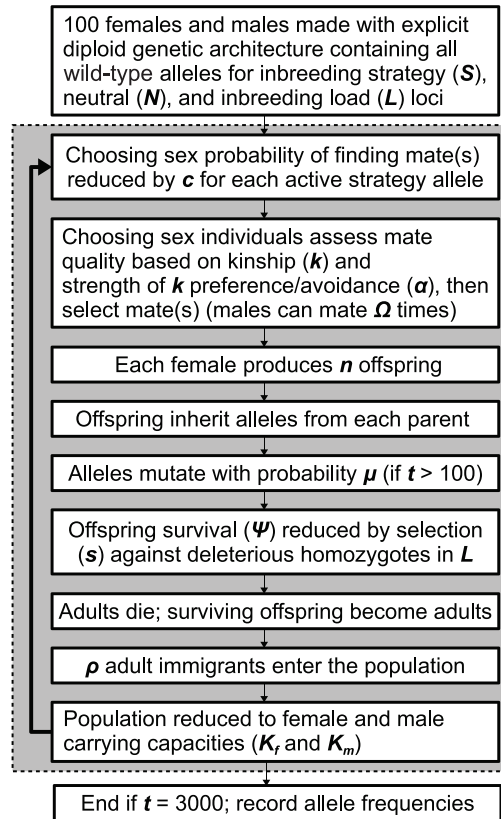


Figure A1: General model overview. A single iteration lasting 3,000 generations is shown.

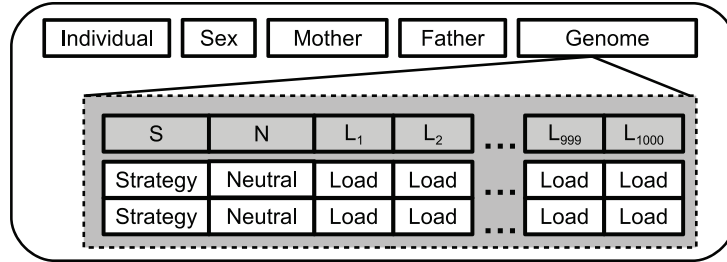


Figure A2: General overview of individual attributes. Attributes tracked for each individual include individual identity number, sex, mother, and father. Each individual also has a unique diploid genotype (gray box), which includes alleles that affect inbreeding strategy (one additive locus), neutral alleles (one neutral locus), and alleles that potentially affect genetic load (1,000 dominant-recessive loci) and, therefore, cause inbreeding depression.

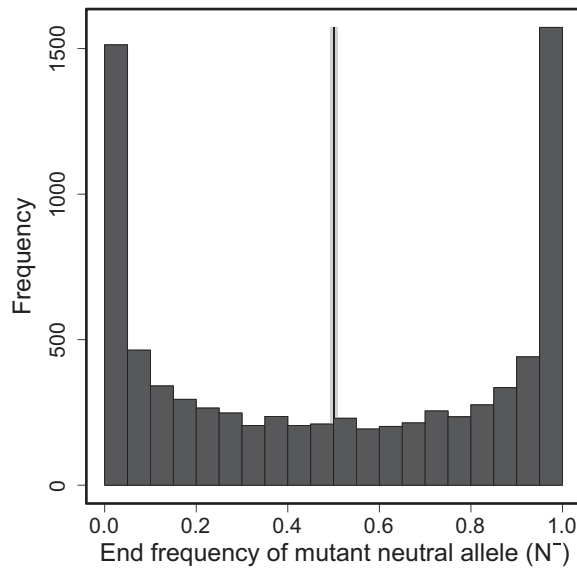


Figure A3: Frequencies of a mutant allele that is neutral with respect to selection (N^-) after 3,000 generations across all primary simulations in which populations persisted (7,936 total). The vertical line shows the mean of the distribution ($\mu = 0.500$, $SD = 0.379$), and gray shading shows the 95% bootstrapped confidence interval.