

FIG. S1 The distribution of fixed effects over time in the example simulation shown in Fig. 2. Each panel shows the effects of all mutations fixed by time T. The T < 10N panel corresponds to Fig. 2B. To check for convergence to the steady state, we ran each set of simulations until the distribution of fixed effects was symmetric about zero.

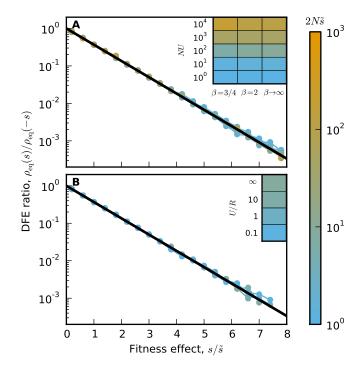


FIG. S2 The equilibrium DFE for different underlying DFEs and recombination rates. A) The equilibrium ratio of beneficial mutations to deleterious mutations for mutations with absolute effect |s|, averaged over 100 replicate simulations. We examined the effect of underlying DFEs in the stretched exponential family, $\rho_0(|s|) \propto \exp[-(s/s_0)^{\beta}]$. Specifically, we simulated heavy-tailed stretched exponential $(\beta = 3/4)$, half-Gaussian $(\beta = 2)$, and uniform $(\beta \to \infty)$ underlying DFEs. $Ns_0 = 100$ for all simulations. B) The equilibrium DFE ratio in populations with recombination. As the recombination rate increases, $2N\tilde{s} \to 1$ as mutations begin to fix independently. NU = 100, $Ns_0 = 10$ for all simulations. We used FFPopsim (Zanini and Neher, 2012) to simulate recombining populations.

REFERENCES

ZANINI, F. AND NEHER, R. A. 2012. FFPopSim: An efficient forward simulation package for the evolution of large populations. Bioinformatics 28:3332–3333.

Table of parameters for all simulations included in the main text and supplemental figures

Available for download as a .csv file at http://www.genetics.org/lookup/suppl/doi:10.1534/genetics.114.173815/-/DC1