FILE S2

Interactions with population size

TABLE S1

N	W_{m11}	
	1.05	1.10
100	1.57*	1.78*
500	2.01*	2.58*
1,000	2.17*	2.93*

Combined influence of homozygote and population size on the probability of functional transfer, represented by the Odds Ratio (relative to neutral homozygotes). To enforce balance, comparisons were limited to neutral or deleterious heterzygote fitness ($w_{m10} \leq 1.00$). Note that increases in homozygote fitness have a greater influence on the odds ratio in large than small populations, suggesting an interaction among theses parameters. * signifies $p < 0.05$. Above, all results significant at the 0.05 level are also significant at the 0.001 level.

TABLE S2

N	W_{m10}	
	0.95	1.00
100	1.00	1.02-
500	1.04*	1.09*
1,000	1.06*	1.12*

Combined influence of heterozygote and population size on the probability of functional transfer, represented by the Odds Ratio (relative to strongly deleterious heterozygote, i.e. $w_{m10} = 0.90$). To enforce balance, comparisons were limited to neutral or deleterious heterozygote fitness. Note that increases in heterozygote fitness have a greater influence on the odds ratio in large than small populations, suggesting an interaction among theses parameters. * signifies $p < 0.05$. Above, all results significant at the 0.05 level are also significant at the 0.001 level.
– $p = 0.043$

TABLE S3

N	Selfing Rate									
	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
100	0.98	1.01	0.98	0.98	1.01	0.99	1.02	1.03	1.09*	1.16*
500	0.89*	0.94*	0.92*	0.93*	1.00	0.93*	1.06*	1.22*	1.58*	2.03*
1,000	0.86*	0.92*	0.91*	0.97*	1.00	1.01	1.10*	1.36*	1.99*	2.83*

Combined influence of selfing rate and population size on the probability of functional transfer, represented by the Odds Ratio (relative to obligate outcrossing in a population of size N). Note that large selfing rates have a greater influence on the odds ratio in large than small populations, suggesting an interaction among theses parameters. * signifies $p < 0.05$. Above, all results significant at the 0.05 level are also significant at the 0.001 level.

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TABLE S4

N	m_n		
	10^{-5}	10^{-4}	10^{-3}
100	1.01	0.70*	0.38*
500	0.99	0.89*	0.42*
1,000	1.00	0.87*	0.41*

Combined influence of nuclear mutation rate and population size on the probability of functional transfer, represented by the Odds Ratio (relative to low nuclear mutation rates, $m_n = 10^{-6}$). Note that the influence of nuclear mutation rate on the odds ratio is relatively constant across population sizes, suggesting no interaction among these parameters. * signifies $p < 0.05$. Above, all results significant at the 0.05 level are also significant at the 0.001 level.

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TABLE S5

N	m_m		
	10^{-5}	10^{-4}	10^{-3}
100	1.24*	1.77*	3.08*
500	0.99	1.54*	4.12*
1,000	1.00	1.61*	5.30*

Combined influence of mitochondrial mutation rate and population size on the probability of functional transfer, represented by the Odds Ratio (relative to low nuclear mutation rates, $m_m = 10^{-6}$). Note that the influence of mitochondrial mutation rate on the odds ratio is relatively constant across population sizes, suggesting no interaction among these parameters. * signifies $p < 0.05$. Above, all results significant at the 0.05 level are also significant at the 0.001 level.