A. Diversity Within Subpopulations

B. Total Diversity

Figure S1 – Diversity in a subdivided population. We simulated the evolution of a neutral site with two alleles and equal mutation rates both ways ($\mu = 10^{-6}$) in a population of 10,000 haploid individuals divided into 100 subpopulations. We varied the total number of migrants per generation from 0.01 (minimal mixing) to 9,900 (no subpopulation structure). (A) For a neutral site, the average diversity within a subpopulation drops as the migration rate decreases. Note log x axis. For comparison, we show the theoretical prediction. (B) At low migration rates, the total neutral diversity across the population can be far higher than the diversity within subpopulations. For comparison, we show the theoretical predictions for both total diversity and within-subpopulation diversity.