



FIGURE 17.17. In the long run, the rate of increase of an allele depends on its geometric mean fitness. (A) In this example, the fitness of allele P relative to Q fluctuates randomly, with a geometric mean 1.01. (B) The ratio of allele frequencies, on a logarithmic scale. An allele with a constant advantage of $s = 0.01$ would increase steadily, with a frequency increasing as a straight line on this scale. The actual allele frequency fluctuates greatly, but in the long term increases at a rate given by $s = 0.01$. (C) Allele frequency on the original scale.