

**FIGURE 15.1.** Random growth of a sexual population. The average number of offspring is 2.2, so that the population grows on average by 10% in each generation. However, the actual number of offspring is 0, 1, 2, ..., and so the actual growth of the population is erratic (here, 4, 6, 5, 10, 12, 14, ...). Allele frequencies (red vs. blue) also fluctuate erratically  $(\frac{3}{8}, \frac{5}{12'}, \frac{4}{10'}, \frac{5}{20'}, \frac{6}{24'}, \frac{7}{24'}, \cdots)$  both because of the random number of offspring from each individual and because of the randomness of meiosis.