



**FIGURE 15.4.** Random drift of the mean bristle number in five replicate populations of *Drosophila melanogaster*. There were  $N = 20$  breeding individuals per generation. The additive genetic variance in the base population was  $V_A = 6.0$ , and so random drift is expected to generate variance between lines of  $\sim V_A/N = 0.3$  per generation. Over the first ten generations, the rate of increase of variance between line means is greater than this ( $\sim 0.5$  per generation). This may be because the effective population size is smaller than the actual (cf. Fig. 15.3C), but the number of populations is so small that the difference is not significant. The shaded area indicates unscored generations.

15.4, redrawn from Clayton G.A. et al., *J. Genet.* **55**: 131–151, © 1957 Indian Academy of Sciences