



**FIGURE 16.6.** After two populations fixed for different alleles meet at a sharp boundary, gene flow will gradually broaden the transition between them. The figure shows the clines after 1, 10, 100, 1000, and 10,000 generations, when the clines are  $\sqrt{2\pi\sigma^2t} = 2.5\sigma$ ,  $7.9\sigma$ ,  $25\sigma$ ,  $79\sigma$ , and  $250\sigma$  wide, respectively (*red, green, purple, blue, and orange lines*). The cline width is defined by drawing a tangent to the steepest part of the cline (*dotted line*), as shown by the arrows for the cline at  $t = 10,000$  generations.