



FIGURE 19.19. The ancestry of a population quickly traces back to the small fraction that is free of deleterious mutation. The histogram (*below*) shows the proportion of genomes carrying 0, 1, 2, ... deleterious mutations, and the diagram at the *top* shows how deleterious mutations (*crosses*) move individual genomes into less fit classes (i.e., to the *right*). The *blue lines* indicate ancestral lineages. Although most genes carry several mutations, they trace back to recent ancestors with fitter genomes. Ultimately, the ancestry of the whole population traces back into the fittest class, at left.