



FIGURE 16.15. If a population has a long history of geographic isolation, then genealogies will tend to reflect this history. In this example, the present population formed through the merging of three parts, which had been isolated from each other for a long time. If genes are sampled from across the species' range (*black dots*), the genealogy that relates them falls into three divergent lineages, reflecting this history. *Colored dots* on the lineages indicate mutations. All individuals derived from the "red" population share four mutations (*red dots*), and similarly for the "green" and "blue" populations.