



FIGURE 5.13. Ancestral and derived traits. (A) Derived traits. Consider a clade of species ABCD, with a trait present in species C and D but not A and B. If the trait evolved in the common ancestor of C and D (labeled E), then this is a derived trait in the group of ABCD because it was not present in the common ancestor of all four species. (B) Ancestral traits. Consider a clade of species ABCD, with a trait present in species A and B but not C and D. If the trait evolved in the common ancestor of A and B (labeled G), then this is an ancestral trait in the group of ABCD because it was present in the common ancestor of all four species. (Incidentally, the trait was subsequently lost in the lineage ECD.)