MYRIAD VOICES IN THE AVIAN CHOIR

There are as many different bird songs as there are bird species. In this circular family tree of songbirds (Passeriformes), those species with low voices are highlighted in red, and those with high voices in blue. The distribution of the colors reveals that neighboring — i.e., closely related — species within the family tree often have similar voice pitches. The pitch at which a particular bird sings is therefore largely determined by its ancestors’ vocal pitch. (Each of the birds depicted represents one of ten groups within the Passeriformes order.)

DIFFERENT ACOUSTICS

A blackbird in a forest can hear the song of another blackbird from over twice the distance as in the city, where the noise level is higher.
In addition to evolutionary history, the song pitch of a given bird species also depends to a large extent on its size, and therefore on that of its syrinx. The size difference between males and females also affects the maximum pitch.