



Figure s1. Experimental set-ups for the receiver phonotaxis experiments. For the eavesdropper, nontarget receiver experiments (a), three stations of two speakers were positioned 10 m apart. Each of the three speaker stations simultaneously broadcast one of the three treatments: (i) calls at near-perfect synchrony (5 ms of latency), (ii) calls at natural average synchrony (79 ms of latency), or (iii) calls out of synchrony (alternating calls). Eavesdropping midge and bat attraction to the focal speaker (the speaker broadcasting “following” calls) was compared across treatments. For the target receiver experiment (b), two speaker stations were positioned 3 m apart in a 2 m×3 m semi-anechoic chamber. Each station broadcast either (i) synchronized calls (79 ms of latency) or (ii) alternating calls. The near-perfect synchrony treatment (5 ms latency) was not included in the target receiver experiment because the semi-anechoic sound chamber was restricted to 4 speakers (2 speaker station choice tests). Of the two synchrony treatments, calls broadcast with the average latency (79 ms) was chosen.