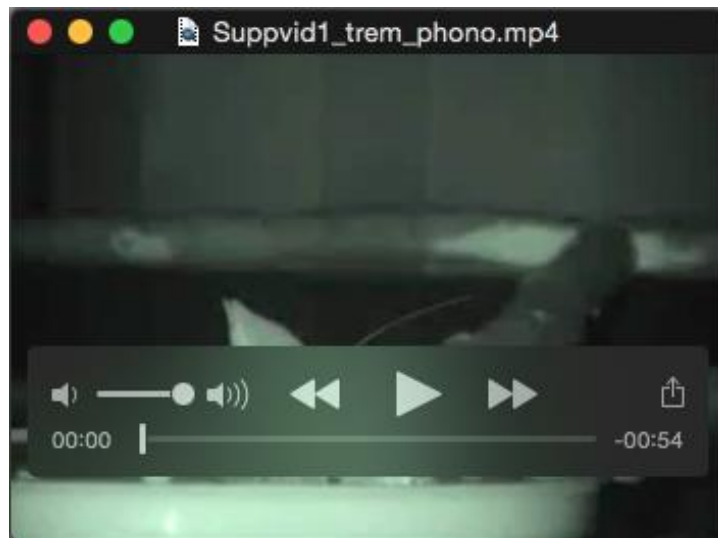
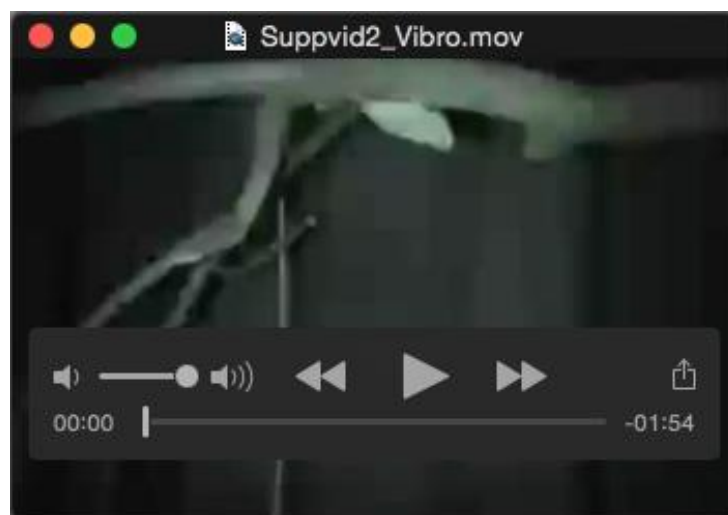


Fig. S1. The tremulation signal (upper black trace) measured 30 cm away from a *O. unnotatus* female sitting directly on a branch in response to the male call (upper grey trace), compared to the signal measured at the central branching point on the Y-shaped branch from the same female tremulating in a box coupled to the left terminal of the branch (as in Fig. 6C) (second black trace from above) in response to the male call (second grey trace from above); the simulated tremulation signal from an electromagnetic actuator coupled to the left terminal of the Y-shaped branch (third black trace from above); and the signal from a disconnected source of vibration (lowermost black trace), all measured 4 cm before the central branching point on the Y-shaped branch.



Movie 1. Tremulation. This video demonstrates a female tremulating briefly and then performing phonotaxis in response to chirps of the male call played back from a loudspeaker.



Movie 2. Vibrotaxis, i.e. male localization of a tremulation signal. The male is able to localize a played back vibratory signal simulating female tremulation, by localizing the branch attached to the electromagnetic actuator from which the vibratory signal is played.