

Figure S1. The identification of wing flaps of nestlings and control sounds (the common chaffinch *Fringilla coelebs*) from a sonogram (frame length is about 6 s). Wing flaps produce a specific pattern because of high variation in frequency. The amplitude (the maximum absolute value of the signal or the loudness of sound) is the difference from the zero reference value.

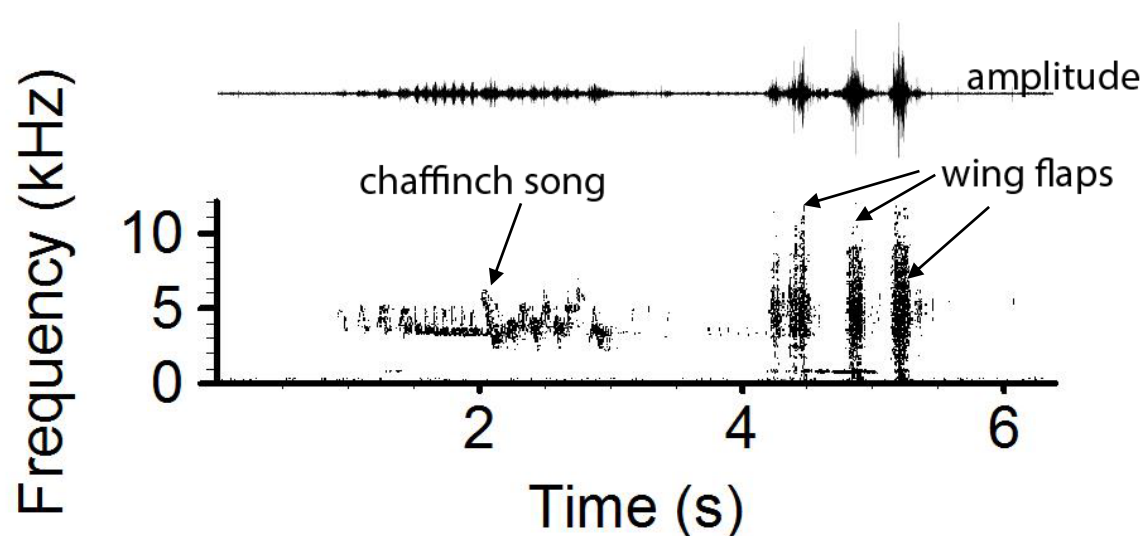


Figure S2. The identification of wing flaps and the playback sounds (nestling alarm calls) from a sonogram (frame length is about 6 s).

