**README**

**Multivariate phenotypic selection on a complex sexual signal, Tanner et al. 2017**

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The data in the accompanying spreadsheet are from a series of single-stimulus and two-stimulus phonotaxis tests (see the paper for details). The data is presented here in the wide format.

**Individual Identity**

Individuals are identified with a 5-digit code in the column “FrogID”. The first two digits indicate the year in which that female was collected and tested, while the next three digits are a unique identifier.

**Independent Variables**

We manipulated five call traits, and each female was given an alternative stimulus with a unique combination of these five traits. The trait values specific to each female are given in columns 2-6: “AlternativeCD” (call duration), ”AlternativeCR” (call rate), “AlternativeDF” (dominant frequency), “AlternativeRA” (relative amplitude), and “AlternativePR” (pulse rate).

**Dependent Variables**

Response latencies for each of the six single-stimulus tests are given in columns 7-12. Latencies from trials with a standard call as the stimulus are given in seconds as “Standard1”, “Standard2”, and “Standard3”. Latencies from trials with an alternative call as the stimulus are given in seconds as “Alternative1”, “Alternative2”, and “Alternative3”.

Responses from two-stimulus tests include both a response latency, given in seconds under “TwoChoiceLatency” and description of which call the female chose, given as a name under “TwoChoice” and a binary value under “ChoiceBinary”, with 0 indicating a female chose the standard and 1 indicating she chose the alternative.

Mean latencies to respond were calculated for standard trials and alternative trials independently, and are presented in columns “StandardAverage” and “AlternativeAverage” respectively. Phonotaxis scores were calculated as discussed in the paper, and are given in the column “PhonotaxisScore”.

We calculated binary outcomes from phonotaxis scores, where a negative score indicated a preference for the standard and a positive score indicated a preference for the alternative. These binary outcomes are given in “ScorePreference”. We also counted the number of times the binary outcomes of the two-stimulus and single-stimulus trials were mismatched; these are given in “Mismatch”.

**Balance and Control**

The experimental design balanced which call was presented first (“FirstPresented”). We also balanced which speaker was primarily used (“SpeakerPosition”); for each female, this indicates which speaker was used for all single-stimulus trials and to play the alternative call in the two-stimulus trial.