Summary Table for the 2 Part Whistle (2PW) Motif. Data are presented as means±1SE with ranges in brackets.

| n=8 phrases | First syllable | Second syllable |
|-------------|----------------|-----------------|
| Duration (msec) | 201.83±13.46 (151.98-251.00) | 122.48±8.96 (75.99-161.85) |
| starting F (kHz) | 24.26±2.00 (15.03-31.74) | 31.76±1.81 (22.38-39.09) |
| ending F (kHz) | 21.78±1.05 (15.7-24.7) | 28.99±0.94 (24.72-31.40) |
| high F (kHz) | 25.90±0.82 (21.4-31.7) | 32.84±1.24 (29.06-39.09) |
| low F (kHz) | 20.15±1.27 (15.0-24.38) | 27.90±1.20 (22.38-31.40) |
| bandwidth (kHz) | 5.74±0.82 (3.34-9.69) | 5.03±0.69 (0.33-13.70) |
| F at maximum amplitude (kHz) | 24.83±1.30 (19.4-30.6) | 26.44±0.60 (24.57-29.72) |
| Slope (kHz/msec) | 0.06±0.03 (0.02-0.23) | 0.10±0.04 (0.03-0.41) |
| Duration between the two syllables | 89.97±11.13 (33.04-138.77) |
Summary Table for the 3 Part Whistle (3PW) Motif. Data are presented as means±1SE with ranges in brackets.

| n=18 phrases | First syllable | Second syllable | Third syllable |
|--------------|----------------|-----------------|----------------|
| **Duration (msec)** | 157.12±9.30 (102.20-238.99) | 161.55±8.82 (114.98-240.09) | 139.58±10.31 (79.74-235.68) |
| **starting F (kHz)** | 21.19±1.44 (12.28-33.74) | 23.54±1.63 (13.26-33.19) | 24.24±1.66 (14.24-34.74) |
| **ending F (kHz)** | 19.15±1.15 (11.79-28.40) | 23.20±1.75 (12.77-32.07) | 28.24±2.88 (12.77-34.74) |
| **high F (kHz)** | 23.48±1.74 (12.28-37.08) | 28.03±2.30 (14.73-42.09) | 27.77±2.09 (15.72-39.09) |
| **low F (kHz)** | 18.70±1.06 (11.79-28.40) | 22.34±1.64 (12.77-32.07) | 23.23±1.75 (12.77-34.74) |
| **bandwidth (kHz)** | 2.95±0.64 (0.46-10.02) | 2.05±0.38 (0.00-5.35) | 1.87±0.39 (0.00-6.01) |
| **F at maximum amplitude (kHz)** | 21.40±1.45 (13.35-36.64) | 24.35±0.38 (13.35-33.19) | 26.24±2.09 (14.21-34.91) |
| **Slope (kHz/msec)** | 0.07±0.02 (0.003-0.27) | 0.13±0.04 (0.01-0.46) | 0.10±0.03 (0.01-0.45) |
| **Duration between the first and second syllable** | 123.59±10.01 (70.49-198.24) | 130.81±10.82 (77.09-226.87) |
Summary Table for the 4 Part Whistle (4PW) Motif. Data are presented as means±1SE with ranges in brackets.

|                         | n=13 phrases | First syllable n=13 | Second syllable n=13 | Third syllable n=13 | Fourth syllable* n=10 |
|-------------------------|--------------|----------------------|-----------------------|----------------------|------------------------|
| Duration (msec)         |              | 85.74±9.36           | 172.97±7.94           | 144.40±6.49          | 65.55±8.04             |
|                         |              | (26.65-123.35)       | (107.95-216.87)       | (104.63-182.82)      | (40.08-117.84)         |
| starting F (kHz)        |              | 21.71±2.12           | 25.58±1.31            | 24.78±1.53           | 28.15±1.68             |
|                         |              | (15.22-45.10)        | (20.67-35.77)         | (19.38-38.09)        | (23.28-36.75)          |
| ending F (kHz)          |              | 17.24±0.65           | 21.87±1.21            | 23.28±1.37           | 25.65±1.81             |
|                         |              | (13.26-21.11)        | (15.72-29.47)         | (18.17-30.45)        | (20.05-33.74)          |
| high F (kHz)            |              | 21.71±2.12           | 26.71±1.57            | 27.34±1.98           | 28.45±1.75             |
|                         |              | (15.22-45.10)        | (20.67-37.75)         | (19.38-38.09)        | (23.28-36.75)          |
| low F (kHz)             |              | 17.24±0.65           | 21.64±1.12            | 22.71±1.21           | 25.59±1.79             |
|                         |              | (13.26-21.11)        | (15.72-29.47)         | (18.17-30.45)        | (20.04-33.74)          |
| bandwidth (kHz)         |              | 4.47±1.80            | 4.17±0.98             | 2.65±0.96            | 2.6±0.48               |
|                         |              | (1.00-25.27)         | (0.05-14.40)          | (0.00-13.70)         | (0.49-5.68)            |
| F at maximum amplitude (kHz) |      | 19.69±1.33           | 25.02±1.47            | 24.95±1.60           | 26.72±2.11             |
|                         |              | (14.64-33.62)        | (18.53-33.62)         | (18.53-35.75)        | (19.40-35.75)          |
| Slope (kHz/msec)        |              | 0.07±0.04            | 0.03±0.01             | 0.07±0.03            | 0.07±0.01              |
|                         |              | (0.01-0.60)          | (0.00-0.15)           | (0.00-0.40)          | (0.01-0.16)            |
| Duration between the first and second syllable | | 125.55±12.30         | (50.66-182.82)        | |
| Duration between the second and third syllable | | 139.95±17.04         | (59.47-213.66)        | |
| Duration between the third and fourth syllable | | 147.04±12.81         | (83.70-242.29)        | |

*3 syllables cut off by tape and not included in the analysis
Summary Table for the Short 20 (S20) Motif. Data are presented as means±1SE with ranges in brackets.

|                     | First syllable | Second syllable |
|---------------------|----------------|-----------------|
|                     | n=8 phrases*   | n=8             | n=7             |
| Duration (msec)     | 28.44±3.24     | 35.83±7.12      |
|                     | (16.39-42.84)  | (14.60-69.75)   |
| high F (kHz)        | 20.56±1.02     | 21.25±0.64      |
|                     | (14.24-23.26)  | (18.66-23.26)   |
| low F (kHz)         | 19.78±0.93     | 20.54±0.63      |
|                     | (14.24-22.40)  | (18.17-22.59)   |
| bandwidth (kHz)     | 0.78±0.31      | 0.71±0.20       |
|                     | (0.49-2.45)    | (0-1.47)        |
| F at maximum amplitude (kHz) | 20.19±0.83 | 20.99±0.44 |
|                     | (15.07-22.40)  | (19.38-22.40)   |
| Slope (kHz/msec)    | 0.04±0.01      | 0.03±0.01       |
|                     | (0.00-0.09)    | (0.00-0.10)     |
| Duration between the first and second syllable (n=7) | 357.93±25.16 |               |
|                     | (319.38-506.61)|                |
| Duration between the second and third syllable (n=6) | 436.49±45.54 |               |
|                     | (317.18-654.19)|                |

*The number of syllables in each phrase was 1-4. The first two syllables (where possible) were selected from each phrase and the first and second intervals (where possible) were selected from each phrase.
Summary Table for the Frequency Modulated Short20 (FMS20) Motif. Data are presented as means±1SE with ranges in brackets.

| n=5 phrases* | Second syllable | Third syllable |
|--------------|-----------------|----------------|
| Duration (msec) | 22.54±5.06 (11.34-40.42) | 38.58±6.28 (16.17-53.74) |
| high F (kHz) | 33.66±7.62 (18.17-58.79) | 45.68±5.97 (24.72-60.78) |
| low F (kHz) | 22.63±2.56 (16.70-29.96) | 22.44±1.94 (17.19-28.86) |
| bandwidth (kHz) | 11.03±6.81 (1.47-36.75) | 23.24±6.81 (1.34-38.06) |
| F at maximum amplitude (kHz) | 23.27±1.64 (18.95-28.42) | 22.41±1.83 (17.23-28.42) |
| Slope (kHz/msec) | 0.47±0.24 (0.08-1.17) | 0.80±0.31 (0.03-1.84) |
| Duration between the first and second syllable | 352.86±26.74 (312.78-451.54) | |
| Duration between the second and third syllable | 370.48±30.77 (286.34-455.94) | |

*The number of syllables in each phrase was 4. The two middle syllables were selected from each phrase and the first and second intervals were selected from each phrase.
Summary Table for the Long 20 (L20) Motif. Data are presented as means±1SE with ranges in brackets.

| n=9 phrases* | First syllable n=9 | Second syllable n=7 |
|--------------|---------------------|---------------------|
| Duration (msec) | 188.26±23.81 (58.44-262.12) | 165.26±23.49 (42.29-222.47) |
| high F of fundamental (kHz) | 20.58±0.41 (18.17-22.85) | 21.00±0.35 (19.66-22.72) |
| low F of fundamental (kHz) | 20.02±0.44 (15.7-24.7) | 20.57±0.36 (19.64-22.38) |
| bandwidth (kHz) | 0.56±0.08 (0.33-0.98) | 0.42±0.15 (0.00-0.98) |
| F at maximum amplitude (kHz) | 21.20±0.25 (19.4-31.0) | 20.61±0.81 (15.95-21.96) |
| Slope (kHz/msec) | 0.003±0.00 (0.001-0.008) | 0.003±0.001 (0.00-0.008) |
| Duration between the first and second syllable (n=9) | 207.00±18.76 (134.36-321.59) |  |
| Duration between the second and third syllable (n=5) | 248.69±17.27 (213.66-299.56) |  |

*The number of syllables in a phrase varied from 2-4; There were 9 phrases total. The first two syllables was selected from each phrase and the first and second (where possible) intervals were selected from each phrase.
Summary Table for the BARK Motif. Data are presented as means±1SE with ranges in brackets.

| n=4 phrases* | Duration (msec) | 18.83±2.1 | (15.64-24.32) |
|--------------|----------------|-----------|---------------|
|              | starting F (kHz) | 16.97±3.15 | (11.7-26.1) |
|              | ending F (kHz) | 14.88±0.86 | (12.7-16.7) |
|              | high F (kHz) | 19.55±2.24 | (16.4-26.1) |
|              | low F (kHz) | 13.63±1.78 | (11.7-15.7) |
|              | bandwidth (kHz) | 4.6±2.99 | (0.00-13.4) |
|              | F at maximum amplitude (kHz) | 18.43±2.83 | (16.4-22.4) |
|              | Slope (kHz/msec) | 0.28±0.39 | (0.00-0.85) |
|              | Duration between the two syllables | 143.33±18.56 | (120.00-180.00) |

*The number of syllables varied from 1-4; There were 4 phrases total. A single syllable was selected from each phrase and a single interval selected from each phrase.