

Appendix 10

Table A10. Principal component analysis results illustrating the contribution of acoustic features in the first four principal components to the sex variation of zip calls, sorted in decreasing order according to the total squared cosine (\cos^2) score of the first two principal components (values more than 0.8 in bold).

Acoustic features	Loadings				Cos ²		
	PC1	PC2	PC3	PC4	PC1	PC2	Total
freq.Q25	0.3208	0.1229	0.0013	-0.0172	0.8793	0.0829	0.9623
meandom	0.2951	0.1716	0.0923	0.0362	0.7440	0.1616	0.9057
freq.median	0.2957	0.1656	0.0918	0.0002	0.7470	0.1504	0.8974
meanfreq	0.2878	0.1643	0.1292	-0.0312	0.7076	0.1482	0.8558
time.Q75	0.1389	-0.3265	0.1640	0.1492	0.1648	0.5851	0.7499
duration	0.1540	-0.3111	0.1544	0.1674	0.2025	0.5311	0.7336
meanpeakf	0.2811	0.0943	0.0006	0.0235	0.6748	0.0488	0.7236
mindom	0.2500	0.1781	-0.1137	0.0928	0.5341	0.1740	0.7080
time.median	0.1355	-0.3104	0.1769	0.1168	0.1569	0.5286	0.6855
bottom.freq	0.2472	0.1527	-0.1060	0.2018	0.5219	0.1280	0.6499
freq.Q75	0.2247	0.1959	0.2301	-0.0077	0.4313	0.2106	0.6419
time.Q25	0.1415	-0.2799	0.1531	0.0609	0.1711	0.4299	0.6010
sp.ent	-0.1949	0.1713	0.2386	0.2736	0.3246	0.1611	0.4857
sfm	-0.1955	0.1672	0.1571	0.2618	0.3265	0.1535	0.4800
skew	0.1536	-0.2159	-0.1173	-0.2060	0.2014	0.2557	0.4571
time.IQR	0.0878	-0.2669	0.1197	0.1988	0.0658	0.3909	0.4567
enddom	0.1533	0.2024	0.1756	-0.0420	0.2007	0.2248	0.4254
entropy	-0.1755	0.1390	0.2642	0.3061	0.2630	0.1060	0.3689
kurt	0.1382	-0.1928	-0.1098	-0.1628	0.1632	0.2039	0.3670
dfslope	-0.0543	0.2349	0.0895	-0.2163	0.0252	0.3028	0.3280
freq.IQR	-0.1689	0.0919	0.3260	0.0152	0.2436	0.0463	0.2899
startdom	0.1793	-0.0259	-0.0024	0.1954	0.2747	0.0037	0.2784
modindx	0.0107	-0.2198	0.1229	0.1917	0.0010	0.2652	0.2661
sd	-0.1620	-0.0164	0.3171	-0.1731	0.2241	0.0015	0.2255
maxdom	0.1391	0.0952	0.2896	-0.0682	0.1653	0.0498	0.2150
bandwidth	-0.0481	-0.1214	0.2590	-0.4322	0.0197	0.0809	0.1007
top.freq	0.1004	-0.0481	0.2432	-0.3897	0.0861	0.0127	0.0988
time.ent	0.0419	-0.0921	0.1236	0.1539	0.0150	0.0466	0.0616
dfrange	-0.0280	-0.0233	0.3257	-0.1167	0.0067	0.0030	0.0097
Standard deviation	2.9226	2.3425	2.1973	1.5847			
Proportion of Variance	0.2945	0.1892	0.1665	0.0866			
Cumulative Proportion	0.2945	0.4838	0.6502	0.7368			
Eigenvalue	8.5418	5.4873	4.8280	2.5112			

