

Supplementary Tables S1–S3

Supplementary Table S1. Summary statistics for body size and wing variables. Means are given in the first row for each variable, SD = standard deviation, Min = minimum value, Max = maximum value. N is the number of individual bats.

Spp	<i>Rca</i>	<i>Rcfsi</i>	<i>Rcl</i>	<i>Rda</i>	<i>Rde</i>	<i>Rdec</i>	<i>Rdr</i>	<i>Rel</i>	<i>RfuE</i>	<i>RfuW</i>	<i>Rla</i>	<i>Rsi</i>	<i>Rsw</i>
N	181	157	96	81	48	20	14	20	22	25	26	81	71
Mass (g)	12.0	6.0	18.2	10.8	5.9	13.2	8.1	19.8	12.7	18.8	8.0	7.0	8.0
SD	1.7	1.0	2.2	1.8	0.8	0.6	0.5	1.1	0.9	1.5	0.7	1.1	0.6
Min	8.5	4.3	13.8	6.9	3.9	12.3	7.1	18.0	10.9	16.5	6.0	5.9	7.0
Max	17.7	11.1	24.9	15.6	8.1	14.5	9.0	21.5	14.3	22.4	9.0	15.0	9.8
Forearm length (cm)	5.0	4.2	5.4	5.0	4.3	5.1	4.6	5.8	5.2	5.9	4.5	4.5	4.4
SD	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1
Min	4.5	3.9	5.0	4.3	4.2	4.8	4.4	5.6	5.0	5.5	4.4	4.1	4.2
Max	5.4	4.8	5.9	5.5	4.5	5.4	4.7	6.3	5.5	6.2	4.7	5.4	4.6
Wing area (cm²)	159.4	120.5	199.0	166.0	128.9	185.0	143.2	207.9	165.6	255.5	143.3	133.1	124.6
SD	13.5	14.3	21.6	21.2	13.8	24.1	10.1	19.4	15.0	27.9	16.0	14.3	9.1
Min	113.3	92.2	109.3	110.5	108.5	146.6	127.4	182.1	139.8	222.6	121.0	106.3	105.5
Max	199.9	206.4	261.3	215.9	166.7	245.2	160.3	250.6	198.6	329.0	187.8	192.8	143.5
Wingspan (cm)	32.2	27.5	35.5	32.7	29.1	33.3	29.0	36.5	32.8	40.4	29.9	28.8	27.8
SD	1.4	1.9	2.5	1.9	1.9	2.9	1.8	1.5	1.8	2.8	2.0	1.9	1.6
Min	29.1	23.9	25.4	27.6	26.4	25.0	25.6	34.1	28.9	36.3	25.9	24.9	23.3
Max	35.4	36.3	43.0	38.2	35.4	37.8	32.2	39.7	35.7	47.4	35.8	37.6	31.3
Wing loading (Nm⁻²)	7.4	4.9	9.0	6.4	4.6	7.1	5.5	9.4	7.6	7.3	5.6	5.2	6.3
SD	1.1	0.8	1.3	1.0	0.7	0.9	0.5	0.9	0.8	0.9	0.8	0.7	0.7
Min	5.2	3.7	6.2	4.2	3.0	4.9	4.8	7.9	6.0	5.4	4.0	3.1	5.0
Max	11.3	9.5	13.5	10.1	5.9	8.4	6.5	10.8	8.9	8.6	6.9	8.2	7.9

Aspect ratio	6.6	6.3	6.4	6.5	6.6	6.0	5.9	6.4	6.5	6.4	6.3	6.3	6.2
SD	0.5	0.6	0.6	0.5	0.8	0.8	0.6	0.5	0.6	0.4	0.4	0.5	0.5
Min	4.9	4.8	4.9	4.9	5.1	4.0	5.1	5.5	5.4	5.7	5.4	4.7	4.8
Max	8.4	9.6	7.4	7.6	10.0	7.1	6.9	7.5	7.3	7.1	7.0	8.0	7.3
Tip area ratio	0.7	0.7	0.7	0.7	0.7	0.6	1.1	0.7	0.7	0.7	0.6	0.7	0.7
SD	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Min	0.5	0.5	0.5	0.5	0.6	0.5	0.8	0.6	0.5	0.5	0.5	0.5	0.6
Max	1.0	1.0	0.9	1.1	1.0	0.9	1.3	0.9	0.8	0.8	0.7	1.1	0.9
Tip length ratio	1.2	1.2	1.2	1.2	1.2	1.2	0.6	1.3	1.3	1.3	1.2	1.2	1.2
SD	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
Min	1.0	0.9	0.9	1.0	1.0	0.9	0.4	1.0	1.1	1.2	1.0	0.8	1.0
Max	1.5	1.5	1.4	1.3	1.4	1.5	0.8	1.5	1.6	1.5	1.4	1.7	1.4
Tip shape index	1.4	1.2	1.4	1.3	1.3	1.2	1.4	1.4	1.2	1.0	1.3	1.4	1.7
SD	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.3	0.2	0.3	0.6	0.5
Min	0.7	0.7	0.7	0.8	1.0	0.5	0.6	0.9	0.8	0.6	0.9	0.8	1.1
Max	3.8	3.9	3.6	2.8	4.5	2.4	2.4	2.3	1.9	1.2	1.8	3.5	3.8

Supplementary Table S2. Means±SD for females and males for each species and the sex ratios for size variables mass, forearm length (FA) and wingspan. The key to the abbreviations of species names is given in Figure 1.

Species	Sex	N	Mass (g)	M/F	FA (cm)	M/F	Wingspan (cm)	M/F
<i>Rca</i>	F	88	12.4±1.6	0.9	5.0±0.1	1.0	32.6±1.4	1.0
	M	93	11.6±1.7		5.0±0.1		31.9±1.3	
<i>Rcfsi</i>	F	69	6.3±1.1	0.9	4.3±0.2	1.0	27.9±2.1	1.0
	M	88	5.7±0.8		4.2±0.2		27.3±1.8	
<i>Rcl</i>	F	61	19.0±2.0	0.9	5.5±0.2	1.0	35.9±2.5	1.0
	M	35	16.8±1.8		5.4±0.1		34.8±2.6	
<i>Rda</i>	F	43	11.8±1.7	0.8	5.1±0.2	1.0	33.5±1.7	1.0
	M	38	9.7±0.9		4.9±0.2		31.9±1.8	
<i>Rde</i>	F	27	5.9±0.9	1.0	4.4±0.1	1.0	29.1±2.1	1.0
	M	21	6.0±0.8		4.3±0.1		29.2±1.7	
<i>Rdec</i>	F	9	13.4±0.7	1.0	5.1±0.1	1.0	34.7±1.4	0.9
	M	11	13.1±0.6		5.0±0.1		32.1±3.3	
<i>Rdr</i>	F	8	8.2±0.5	1.0	4.7±0.1	1.0	28.5±1.6	1.0
	M	6	7.9±0.6		4.5±0.1		29.7±1.9	
<i>Rel</i>	F	10	19.9±1.3	1.0	5.9±0.2	1.0	36.3±1.7	1.0
	M	10	19.6±0.9		5.8±0.1		36.6±1.2	
<i>RfuE</i>	F	13	12.9±0.8	1.0	5.2±0.1	1.0	33.0±1.7	1.0
	M	9	12.4±1.0		5.1±0.1		32.6±2.0	
<i>RfuW</i>	F	14	19.4±1.0	0.9	6.0±0.1	1.0	40.0±2.5	1.0
	M	11	18.0±1.6		5.8±0.2		40.9±3.3	
<i>Rla</i>	F	17	7.9±0.7	1.0	4.5±0.1	1.0	29.6±1.3	1.0
	M	9	8.2±0.7		4.5±0.1		30.5±2.9	
<i>Rsi</i>	F	39	7.1±0.7	1.0	4.5±0.1	1.0	28.9±1.8	1.0
	M	42	7.0±1.4		4.5±0.2		28.8±2.0	
<i>Rsw</i>	F	39	8.2±0.7	1.0	4.4±0.1	1.0	28.1±1.5	1.0
	M	32	7.8±0.6		4.3±0.1		27.6±1.6	

Supplementary Table S3. Summary statistics for echolocation variables. Means are given in the first row for each variable, SD = Standard deviation, Min = minimum value, max = maximum value. N is the number of individual bats. Species and variable abbreviations are the same as in Figure 2 and Table 2.

Spp	Rbl	Rca	Rcfsi	Rcl	Rda	Rde	Rdec	Rdr	Rel	Rfu_E	Rfu_W	Rhi	Rla	Rmo	Rsi	Rsw
N	34	78	72	169	48	24	21	17	20	16	10	21	29	8	91	18
Duration of pulse (ms)	28.3	38.4	26.1	48.5	41.2	25.0	46.2	23.2	47.0	30.1	36.3	30.6	46.0	44.9	20.8	25.5
SD	3.9	9.5	10.0	10.5	7.8	6.7	12.8	8.9	4.5	8.5	9.1	11.8	12.7	9.8	7.7	9.3
Min	22.5	15.9	11.1	19.8	27.0	15.1	28.7	12.1	39.5	20.1	22.3	17.6	29.4	24.9	11.1	18.7
Max	38.4	61.6	52.7	59.0	67.5	39.3	81.4	44.7	54.1	42.0	49.0	69.1	70.9	52.7	43.5	56.1
Inter-onset interval (ms)	73.5	100.4	52.1	95.1	114.7	85.3	124.9	51.4	103.5	71.2	82.0	51.3	103.9	113.6	53.9	69.3
SD	21.7	45.3	31.2	28.4	47.3	71.3	63.8	31.2	21.9	27.0	28.9	18.6	35.7	47.0	29.8	28.4
Min	38.3	27.0	17.6	36.0	45.7	29.8	47.0	20.3	75.2	38.4	38.7	23.1	54.5	38.9	16.6	36.5
Max	119.1	234.8	150.4	280.4	308.6	367.3	332.3	150.9	156.1	113.9	127.0	92.5	184.2	189.5	185.3	158.0
Inter-pulse interval (ms)	45.3	62.9	26.0	46.6	73.5	60.3	78.7	28.2	56.5	41.1	45.6	20.7	57.9	68.7	33.1	43.9
SD	19.0	38.4	24.2	29.5	43.7	66.5	55.4	23.9	18.6	20.0	21.3	10.5	28.3	38.7	24.1	20.9
Min	15.1	11.1	3.1	16.2	17.8	14.8	8.9	8.2	33.0	16.8	16.4	3.7	18.5	14.1	4.5	17.5
Max	84.2	191.1	112.1	231.2	265.0	328.0	263.0	106.2	105.1	79.0	78.1	44.8	135.2	137.6	151.1	101.9
Distomax (ms)	18.0	22.8	14.0	38.8	22.8	13.6	27.8	12.8	27.5	17.0	19.1	20.2	27.2	24.4	12.0	17.0
SD	2.7	6.4	5.0	16.6	4.4	4.3	7.9	4.6	3.8	3.9	4.8	10.0	10.4	6.2	4.4	6.1
Min	11.5	8.5	5.9	10.5	13.6	8.7	15.8	6.0	19.8	11.3	10.8	8.5	12.7	13.6	5.7	10.6
Max	22.7	46.4	29.6	74.5	32.4	27.1	46.9	23.8	34.0	23.8	26.3	58.7	56.2	31.7	24.3	35.1
Duty cycle (%)	48.9	41.2	57.0	44.1	39.5	36.2	41.5	49.7	46.6	44.2	46.5	61.2	46.5	43.9	43.1	38.4
SD	9.5	13.4	15.4	12.5	10.3	10.6	13.6	10.4	6.3	7.7	8.2	11.3	10.9	12.3	11.5	8.5
Min	32.5	9.8	24.0	15.2	14.1	10.7	20.8	29.6	32.7	30.6	34.6	42.7	25.2	27.4	17.9	25.6
Max	73.0	73.0	87.5	74.5	61.0	53.7	81.2	60.7	56.8	56.2	57.6	85.3	74.6	63.9	74.7	54.7
Resting frequency (kHz)	90.5	84.8	104.1	91.2	85.2	107.0	73.8	79.8	44.0	55.1	54.7	43.8	106.7	38.1	81.0	104.8
SD	1.9	3.6	2.0	2.3	1.5	2.4	1.0	1.7	0.8	1.5	1.1	1.2	2.9	0.9	2.4	2.8
Min	86.2	75.7	99.6	79.4	82.5	102.5	71.3	77.7	42.7	53.1	53.7	42.4	100.2	36.6	76.1	101.1
Max	93.9	89.2	108.3	93.7	88.8	111.8	75.0	83.0	45.1	57.1	56.1	45.8	110.4	39.5	85.4	108.3
Duration_FMi (ms)	1.9	2.2	2.1	2.1	2.4	2.0	2.0	1.4	1.6	2.8	2.5	2.3	2.2	4.4	1.4	3.0

SD	0.9	0.8	0.6	0.6	0.9	0.3	0.4	0.5	0.4	0.6	0.4	0.5	0.4	1.2	0.8	1.0
Min	0.7	0.9	1.0	0.8	1.1	1.4	1.6	0.9	1.1	2.1	2.0	1.1	1.4	1.8	0.6	1.6
Max	5.2	4.0	4.2	4.5	5.4	2.9	3.5	2.5	2.1	3.8	3.1	3.4	3.1	5.9	3.9	5.4
MinFreq_FMi (kHz)	81.1	81.8	94.2	80.0	78.8	99.4	64.1	71.0	36.6	47.5	47.6	39.6	90.7	32.6	73.3	96.8
SD	4.4	3.7	4.7	4.6	3.3	4.2	2.5	3.1	1.4	2.2	2.1	1.0	4.5	1.5	3.8	9.4
Min	68.3	73.5	81.5	69.4	69.0	92.5	60.3	65.1	34.1	42.0	44.8	37.9	80.8	30.6	64.0	67.9
Max	88.3	86.0	103.3	89.0	83.9	106.8	68.5	75.9	39.3	52.1	51.0	41.7	100.1	35.0	81.2	106.6
Dur_FMt (ms)	2.9	4.1	2.7	2.3	3.3	3.2	2.6	1.7	2.1	3.2	3.2	2.8	3.1	5.4	2.4	4.2
SD	0.9	3.1	0.7	1.3	1.1	0.6	0.5	0.4	0.5	0.6	0.4	0.5	0.7	1.4	1.0	0.7
Min	1.6	1.9	1.4	0.6	2.0	2.2	1.9	1.3	1.3	2.3	2.2	1.5	2.0	2.8	1.2	3.3
Max	5.2	24.2	4.8	10.6	7.0	4.3	3.8	3.1	2.9	4.6	3.7	3.7	4.8	7.4	6.1	6.3
MinFreq_FMt (kHz)	69.8	69.9	77.4	71.0	70.4	86.3	58.5	62.8	35.6	42.4	41.7	34.7	82.0	31.4	61.6	82.7
SD	3.3	4.7	4.9	5.5	4.4	3.5	4.4	3.1	2.1	2.7	2.5	2.5	3.7	1.8	3.6	5.3
Min	62.3	46.1	69.3	59.5	61.2	79.2	51.1	57.9	32.1	38.4	37.5	31.1	75.9	28.4	53.8	74.2
Max	77.0	78.1	89.3	86.1	82.4	93.2	67.3	69.4	38.9	49.2	46.1	40.5	90.4	34.0	72.0	92.0
SR_FMi (kHz/ms)	5.3	1.7	4.8	5.8	2.6	3.8	4.8	6.1	4.6	2.7	2.8	1.9	7.2	1.3	6.3	3.2
SD	2.2	1.0	1.9	1.9	1.1	1.2	1.0	0.9	0.6	0.4	0.4	0.5	2.1	0.3	2.7	3.0
Min	2.3	0.5	1.6	1.8	0.9	1.3	2.9	4.2	3.7	2.1	2.3	1.2	3.5	0.9	1.2	0.6
Max	11.7	4.5	9.6	11.2	5.4	5.9	6.7	7.6	5.6	3.7	3.7	3.6	12.0	1.8	12.7	12.5
SR_FMt (kHz/ms)	5.4	4.3	10.4	7.8	5.0	6.7	5.8	10.6	4.1	4.2	4.1	3.4	8.3	1.3	9.0	5.4
SD	2.3	1.4	3.1	3.2	2.0	1.1	1.3	2.3	1.0	1.2	0.8	1.1	1.8	0.5	3.0	1.2
Min	1.2	0.4	5.5	1.7	1.0	4.0	3.1	6.6	2.4	1.9	3.0	1.8	4.1	0.8	2.7	3.7
Max	12.3	8.7	18.1	16.7	9.5	9.4	8.2	14.3	6.1	5.9	5.6	6.8	10.9	2.4	15.5	8.2
