

Table S1 shows the spatial location of the sampling sites

Site	Longitude (degree)	Latitude (degree)	Elevation (m)
Site-1	116.11' E	31.01' N	1341
Site-3	116.07' E	31.00' N	1090
Site-2	116.10' E	31.08' N	689

Figure S1 Study area with the Geographical location of the three sampling sites in Yaoluoping National Nature Reserve (China)

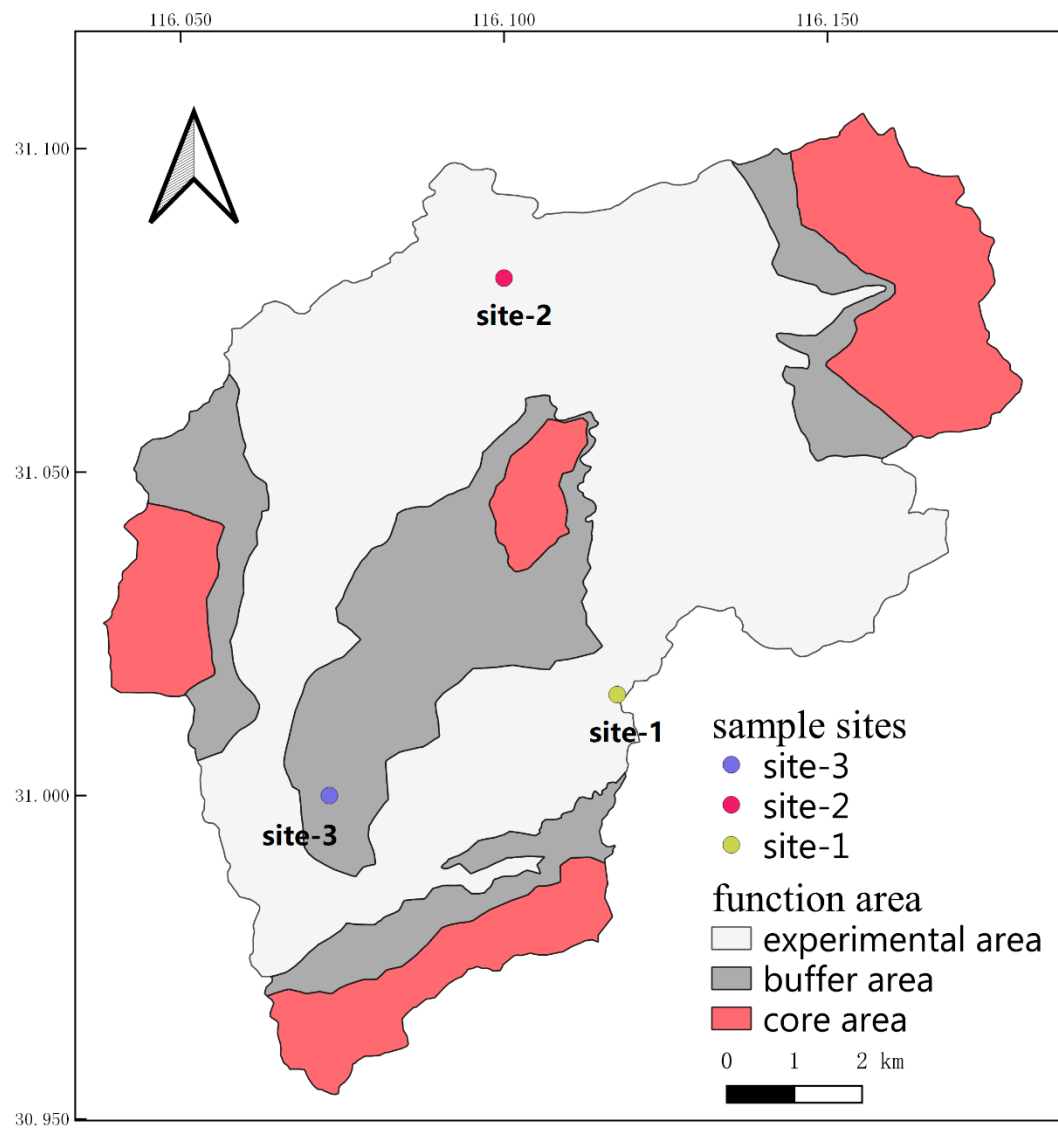


Table S2 Number of speciesA (*C. saturatus*) calls detected per hour at three monitoring stations. The total number and percentage of calls detected per hour, with respect to the total number of calls, are also shown.

hour	species	site1	site3	site4	total	%
0	A	0	0	0	0	0.00
1	A	0	0	0	0	0.00
2	A	0	0	0	0	0.00
3	A	0	0	0	0	0.00
4	A	227	169	0	396	0.53
5	A	7822	2482	0	10304	13.92
6	A	5516	1176	0	6692	9.04
7	A	4541	1194	0	5735	7.75
8	A	3559	1384	0	4943	6.68
9	A	3139	1670	0	4809	6.50
10	A	2131	1101	0	3232	4.37
11	A	2294	982	0	3276	4.42
12	A	2151	812	0	2963	4.00
13	A	1963	1011	0	2974	4.02
14	A	2679	955	0	3634	4.91
15	A	2562	1418	0	3980	5.38
16	A	2407	1489	0	3896	5.26
17	A	2631	1742	0	4373	5.91
18	A	4124	2973	0	7097	9.59

19	A	3284	2450	0	5734	7.74
20	A	0	1	0	1	0.00
21	A	0	0	0	0	0
22	A	0	0	0	0	0
23	A	0	0	0	0	0

Table S3 Number of speciesA (*C. saturatus*) calls detected per half month at three monitoring stations. The total number and percentage of calls detected per half month, with respect to the total number of calls, are also shown.

season	species	site1	site3	site4	total	%
4_1	A	1066	1090	0	2156	2.91
4_2	A	11712	10117	0	21829	29.48
5_1	A	13046	6292	0	19338	26.12
5_2	A	13834	3726	0	17560	23.72
6_1	A	9865	1588	0	11453	15.47
6_2	A	1507	196	0	1703	2.30
7_1	A	0	0	0	0	0.00
7_2	A	0	0	0	0	0.00
8_1	A	0	0	0	0	0.00
8_2	A	0	0	0	0	0.00

Figure S2 Diel pattern of vocal activity of speciesA (*C. saturatus*) in different seasons in Yaoluoping National Nature Reserve (China). The diel pattern is expressed as the mean number of calls detected per hour at each half month.

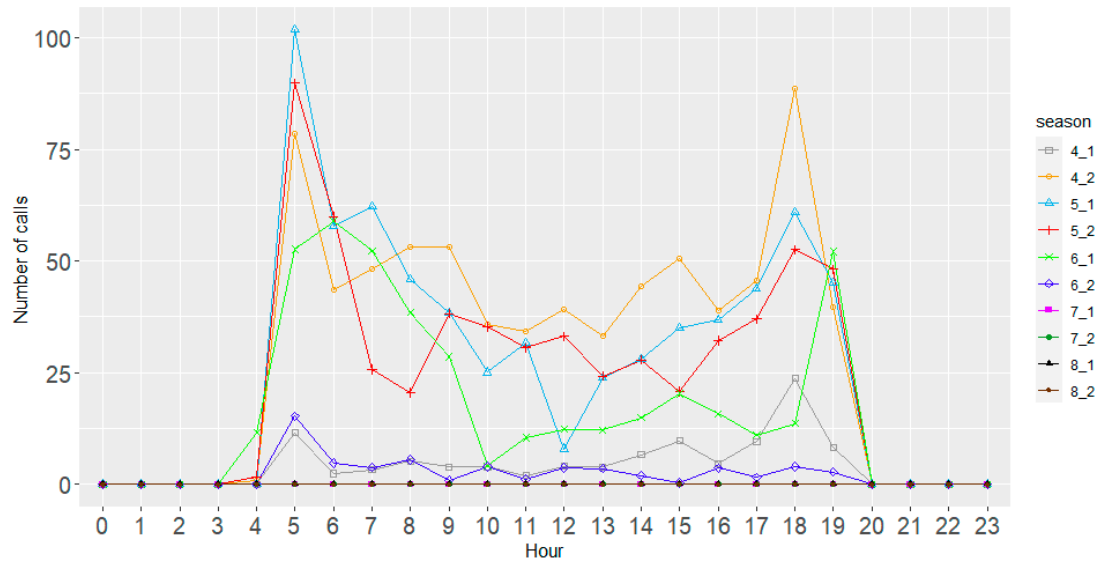


Table S4 Number of speciesE (*C. poliocephalus*) calls detected per hour at three monitoring stations. The total number and percentage of calls detected per hour, with

respect to the total number of calls, are also shown.

hour	species	site1	site3	site4	total	%
0	E	208	491	0	699	6.24
1	E	150	886	70	1106	9.87
2	E	117	647	35	799	7.13
3	E	503	1052	179	1734	15.48
4	E	2132	1674	105	3911	34.92
5	E	80	208	0	288	2.57
6	E	146	8	19	173	1.54
7	E	131	73	49	253	2.26
8	E	110	35	49	194	1.73
9	E	11	8	56	75	0.67
10	E	73	69	35	177	1.58
11	E	74	28	21	123	1.10
12	E	100	0	42	142	1.27
13	E	128	0	4	132	1.18
14	E	27	0	12	39	0.35
15	E	85	51	0	136	1.21
16	E	15	13	12	40	0.36
17	E	0	69	15	84	0.75
18	E	9	17	31	57	0.51
19	E	140	31	2	173	1.54

20	E	0	21	0	21	0.19
21	E	3	158	54	215	1.92
22	E	17	207	13	237	2.12
23	E	120	273	0	393	3.51

Table S5 Number of speciesE (*C. poliocephalus*) calls detected per half month at three monitoring stations. The total number and percentage of calls detected per half month, with respect to the total number of calls, are also shown.

season	species	site1	site3	site4	total	%
4_1	E	0	0	0	0	0.00
4_2	E	0	0	0	0	0.00
5_1	E	0	6	0	6	0.05
5_2	E	67	10	13	90	0.80
6_1	E	2303	2477	29	4809	42.93
6_2	E	693	1332	694	2719	24.27
7_1	E	916	1210	67	2193	19.58
7_2	E	392	680	0	1072	9.57
8_1	E	8	304	0	312	2.79
8_2	E	0	0	0	0	0.00

Figure S3 Diel pattern of vocal activity of speciesE (*C. poliocephalus*) in different seasons in Yaoluoping National Nature Reserve (China). The diel pattern is expressed as the mean number of calls detected per hour at each half month.

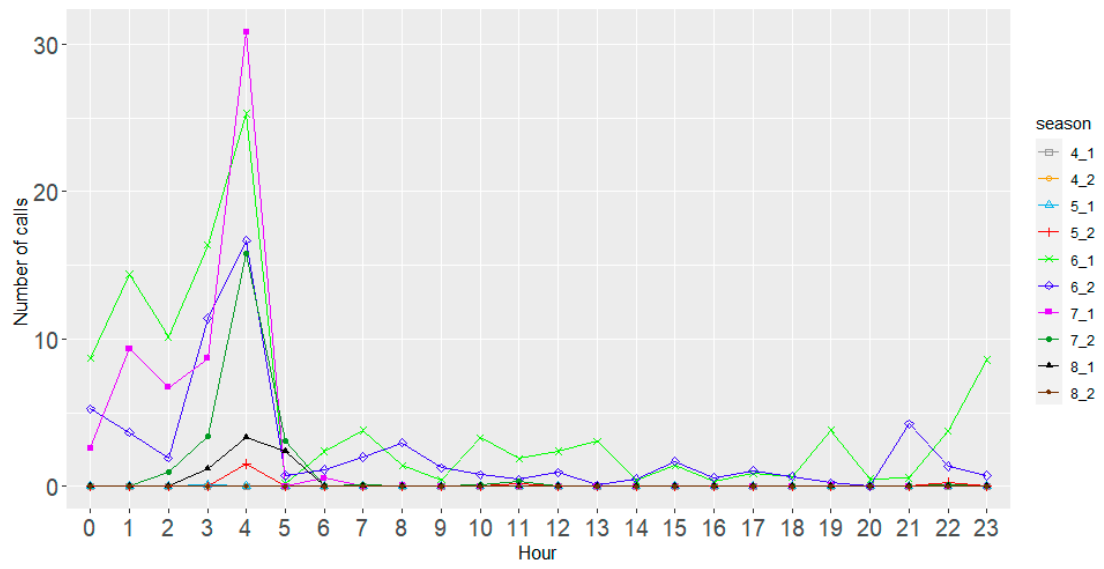


Table S6 Number of speciesH (*H.sparverioides*) calls detected per hour at three monitoring stations. The total number and percentage of calls detected per hour, with respect to the total number of calls, are also shown.

hour	species	site1	site3	site4	total	%
0	H	132	58	201	391	4.20
1	H	217	0	302	519	5.57
2	H	236	26	182	444	4.77
3	H	278	33	529	840	9.02
4	H	186	20	1076	1282	13.77
5	H	20	0	1365	1385	14.88
6	H	1	0	289	290	3.11
7	H	3	0	361	364	3.91



8	H	0	0	256	256	2.75
9	H	0	0	219	219	2.35
10	H	4	0	266	270	2.90
11	H	0	0	276	276	2.96
12	H	0	0	192	192	2.06
13	H	0	0	293	293	3.15
14	H	3	0	133	136	1.46
15	H	53	0	201	254	2.73
16	H	0	0	144	144	1.55
17	H	0	0	279	279	3.00
18	H	22	0	393	415	4.46
19	H	15	0	238	253	2.72
20	H	0	0	0	0	0.00
21	H	18	0	170	188	2.02
22	H	60	0	130	190	2.04
23	H	201	0	229	430	4.62

Table S7 Number of speciesH (*H.sparverioides*) calls detected per half month at three monitoring stations. The total number and percentage of calls detected per half month, with respect to the total number of calls, are also shown.

season	species	site1	site3	site4	total	%
4_1	H	0	0	0	0	0.00
4_2	H	62	84	385	531	5.70
5_1	H	66	0	2795	2861	30.73

5_2	H	1130	0	3798	4928	52.93
6_1	H	183	53	510	746	8.01
6_2	H	0	0	174	174	1.87
7_1	H	4	0	62	66	0.71
7_2	H	3	0	0	3	0.03
8_1	H	0	0	0	0	0.00
8_2	H	1	0	0	1	0.01

Figure S4 Diel pattern of vocal activity of speciesH (*H.sparverioides*) in different seasons in Yaoluoping National Nature Reserve (China). The diel pattern is expressed as the mean number of calls detected per hour at each half month.

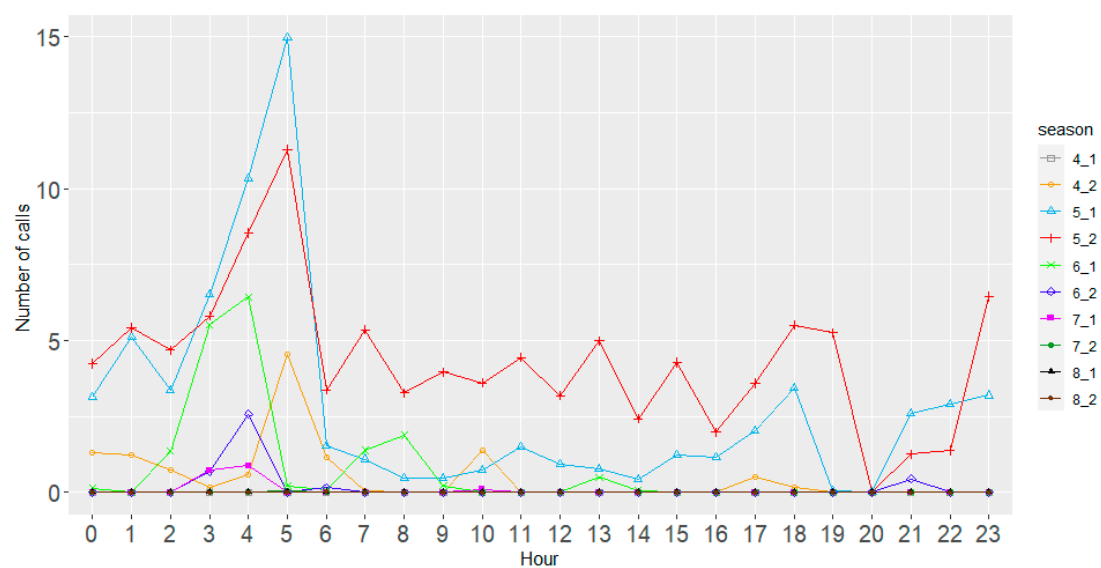


Table S8 Number of speciesI (*E. scolopaceus*) calls detected per hour at three monitoring stations. The total number and percentage of calls detected per hour, with respect to the total number of calls, are also shown.

hour	species	site1	site3	site4	total	%
0	I	37	19	29	85	0.27
1	I	0	16	33	49	0.16
2	I	12	33	53	98	0.31
3	I	27	60	118	205	0.65
4	I	18	1258	1466	2742	8.73
5	I	0	1329	2770	4099	13.05
6	I	0	1379	1889	3268	10.40
7	I	2	830	1670	2502	7.96
8	I	0	624	1916	2540	8.09
9	I	25	249	1552	1826	5.81
10	I	0	186	873	1059	3.37
11	I	0	19	1040	1059	3.37
12	I	0	185	700	885	2.82
13	I	0	198	620	818	2.60
14	I	0	99	911	1010	3.22
15	I	0	284	1254	1538	4.90
16	I	0	323	1349	1672	5.32
17	I	0	328	1232	1560	4.97
18	I	2	824	1520	2346	7.47
19	I	8	756	1216	1980	6.30
20	I	1	0	18	19	0.06

21	I	11	0	0	11	0.04
22	I	0	32	10	42	0.13
23	I	0	0	0	0	0.00

Table S9 Number of speciesI (*E. scolopaceus*) calls detected per half month at three monitoring stations. The total number and percentage of calls detected per half month, with respect to the total number of calls, are also shown.

season	species	site1	site3	site4	total	%
4_1	I	0	0	0	0	0.00
4_2	I	0	0	0	0	0.00
5_1	I	11	339	2094	2444	7.78
5_2	I	8	1896	5979	7883	25.09
6_1	I	61	4220	7234	11515	36.66
6_2	I	1	941	2365	3307	10.53
7_1	I	62	1076	2552	3690	11.75
7_2	I	0	459	1568	2027	6.45
8_1	I	0	100	438	538	1.71
8_2	I	0	0	9	9	0.03

Figure S5 Diel pattern of vocal activity of speciesI (*E. scolopaceus*) in different seasons in Yaoluoping National Nature Reserve (China). The diel pattern is expressed as the mean number of calls detected per hour at each half month.

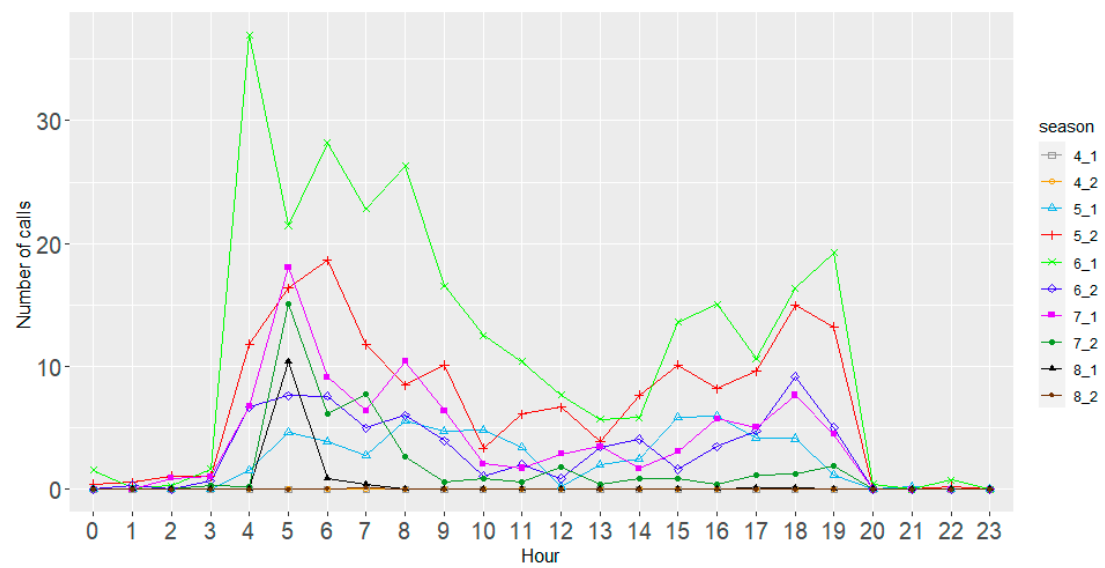


Table S10 Number of speciesJ (*C. canorus*) calls detected per hour at three monitoring stations. The total number and percentage of calls detected per hour, with respect to the total number of calls, are also shown.

hour	species	site1	site3	site4	total	%
0	J	0	0	0	0	0.00
1	J	0	0	0	0	0.00
2	J	77	0	0	77	0.80
3	J	124	0	0	124	1.28
4	J	81	6	0	87	0.90
5	J	15	1716	17	1748	18.09
6	J	101	1053	0	1154	11.94

7	J	21	662	0	683	7.07
8	J	37	887	0	924	9.56
9	J	0	606	0	606	6.27
10	J	0	237	54	291	3.01
11	J	8	335	68	411	4.25
12	J	111	273	26	410	4.24
13	J	13	578	7	598	6.19
14	J	0	450	32	482	4.99
15	J	227	443	0	670	6.94
16	J	10	327	30	367	3.80
17	J	6	131	27	164	1.70
18	J	63	293	0	356	3.68
19	J	154	311	44	509	5.27
20	J	0	0	0	0	0.00
21	J	0	0	0	0	0.00
22	J	0	0	0	0	0.00
23	J	0	0	0	0	0.00

Table S11 Number of speciesJ (*C. canorus*) calls detected per half month at three monitoring stations. The total number and percentage of calls detected per half month, with respect to the total number of calls, are also shown.

season	species	site1	site3	site4	total	%
4_1	J	0	0	0	0	0.00
4_2	J	0	0	0	0	0.00



5_1	J	0	58	0	58	0.60
5_2	J	0	2754	144	2898	30.00
6_1	J	853	3163	123	4139	42.84
6_2	J	192	1167	7	1366	14.14
7_1	J	3	858	31	892	9.23
7_2	J	0	308	0	308	3.19
8_1	J	0	0	0	0	0.00
8_2	J	0	0	0	0	0.00

Figure S6 Diel pattern of vocal activity of speciesJ (*C. canorus*) in different seasons in Yaoluoping National Nature Reserve (China). The diel pattern is expressed as the mean number of calls detected per hour at each half month.

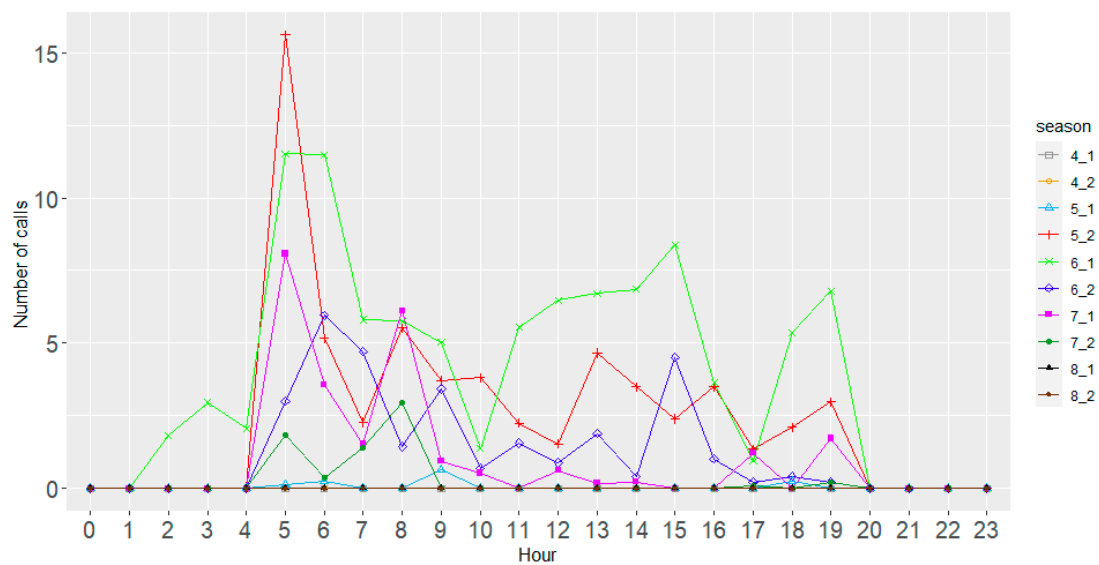




Table S12 Number of speciesK (*C. coromandus*) calls detected per hour at three monitoring stations. The total number and percentage of calls detected per hour, with respect to the total number of calls, are also shown.

hour	species	site1	site3	site4	total	%
0	K	46	40	411	497	11.33
1	K	3	144	643	790	18.00
2	K	140	141	540	821	18.71
3	K	7	125	330	462	10.53
4	K	1	11	4	16	0.36
5	K	0	0	0	0	0.00
6	K	0	19	13	32	0.73
7	K	0	0	52	52	1.19
8	K	0	0	0	0	0.00
9	K	0	48	0	48	1.09
10	K	0	8	0	8	0.18
11	K	23	0	0	23	0.52
12	K	0	0	13	13	0.30
13	K	0	22	27	49	1.12
14	K	0	2	135	137	3.12
15	K	0	0	0	0	0.00
16	K	0	5	0	5	0.11
17	K	0	47	0	47	1.07
18	K	0	3	54	57	1.30

19	K	0	13	66	79	1.80
20	K	0	0	0	0	0.00
21	K	108	134	45	287	6.54
22	K	31	103	111	245	5.58
23	K	224	144	352	720	16.41

Table S13 Number of speciesK (*C. coromandus*) calls detected per half month at three monitoring stations. The total number and percentage of calls detected per half month, with respect to the total number of calls, are also shown.

season	species	site1	site3	site4	total	%
4_1	K	0	0	0	0	0.00
4_2	K	0	0	0	0	0.00
5_1	K	8	12	6	26	0.59
5_2	K	326	30	12	368	8.39
6_1	K	249	943	1067	2259	51.48
6_2	K	0	19	426	445	10.14
7_1	K	0	0	1285	1285	29.28
7_2	K	0	2	0	2	0.05
8_1	K	0	3	0	3	0.07
8_2	K	0	0	0	0	0.00

Figure S7 Diel pattern of vocal activity of speciesK (*C. coromandus*) in different seasons in Yaoluoping National Nature Reserve (China). The diel pattern is expressed as the mean number of calls detected per hour at each half month.

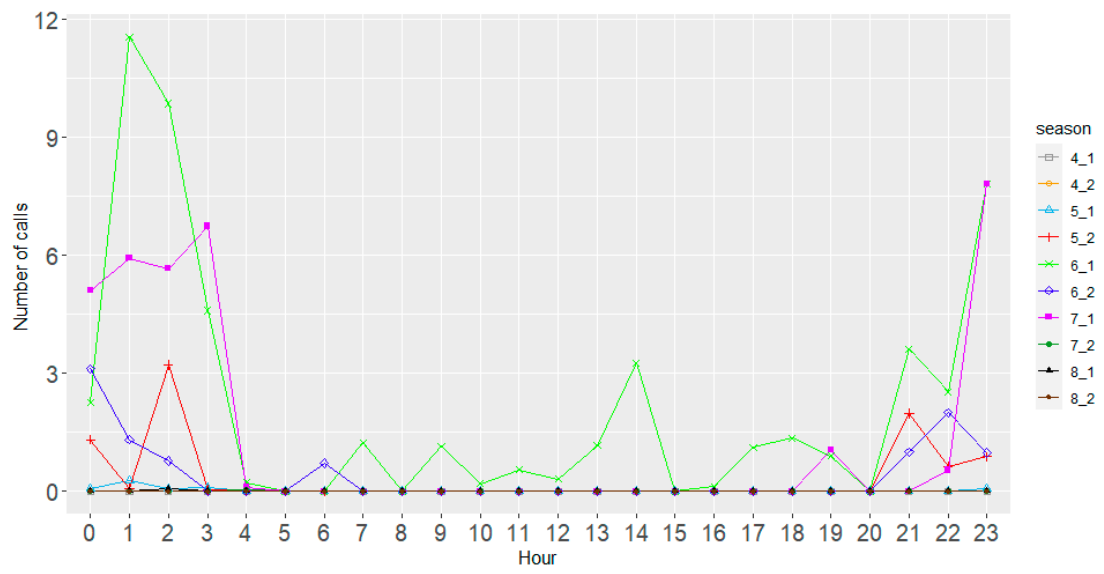


Table S14 Number of speciesL (*C. micropterus*) calls detected per hour at three monitoring stations. The total number and percentage of calls detected per hour, with respect to the total number of calls, are also shown.

hour	species	site1	site3	site4	total	%
0	L	0	0	9	9	2.08
1	L	0	0	0	0	0.00
2	L	0	1	0	1	0.23
3	L	0	0	0	0	0.00
4	L	1	0	91	92	21.25
5	L	0	4	0	4	0.92
6	L	0	0	1	1	0.23

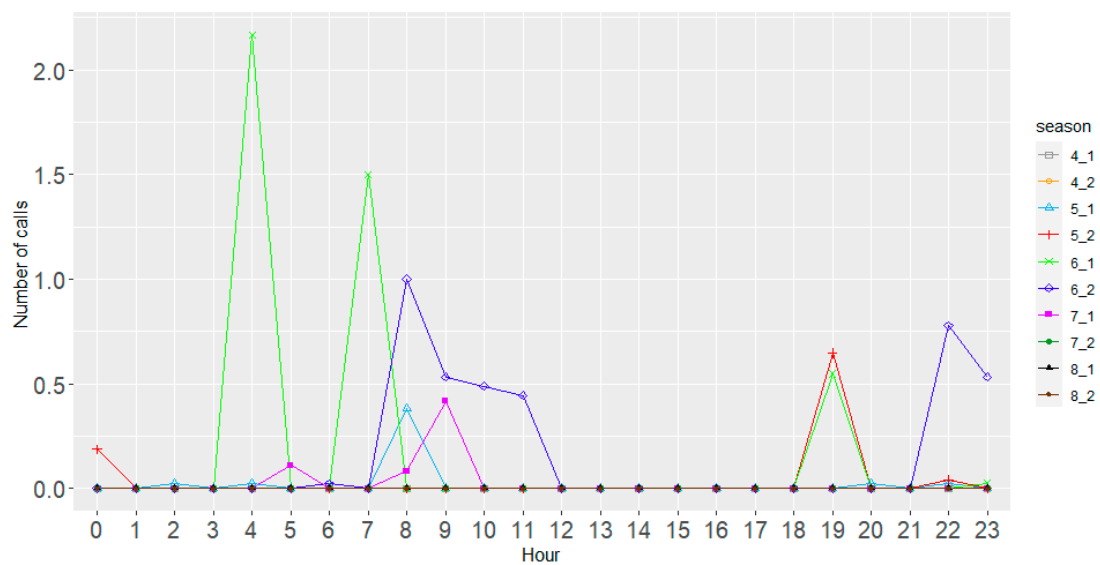
7	L	0	43	20	63	14.55
8	L	0	48	16	64	14.78
9	L	0	39	0	39	9.01
10	L	0	22	0	22	5.08
11	L	0	20	0	20	4.62
12	L	0	0	0	0	0.00
13	L	0	0	0	0	0.00
14	L	0	0	0	0	0.00
15	L	0	0	0	0	0.00
16	L	0	0	0	0	0.00
17	L	0	0	0	0	0.00
18	L	0	0	0	0	0.00
19	L	2	31	21	54	12.47
20	L	0	1	0	1	0.23
21	L	0	0	0	0	0.00
22	L	1	37	0	38	8.78
23	L	0	25	0	25	5.77

Table S15 Number of speciesL (*C. micropterus*) calls detected per half month at three monitoring stations. The total number and percentage of calls detected per half month, with respect to the total number of calls, are also shown.

season	species	site1	site3	site4	total	%
4_1	L	0	0	0	0	0.00
4_2	L	0	0	0	0	0.00

5_1	L	2	2	16	20	4.62
5_2	L	0	33	9	42	9.70
6_1	L	2	44	132	178	41.11
6_2	L	0	170	1	171	39.49
7_1	L	0	22	0	22	5.08
7_2	L	0	0	0	0	0.00
8_1	L	0	0	0	0	0.00
8_2	L	0	0	0	0	0.00

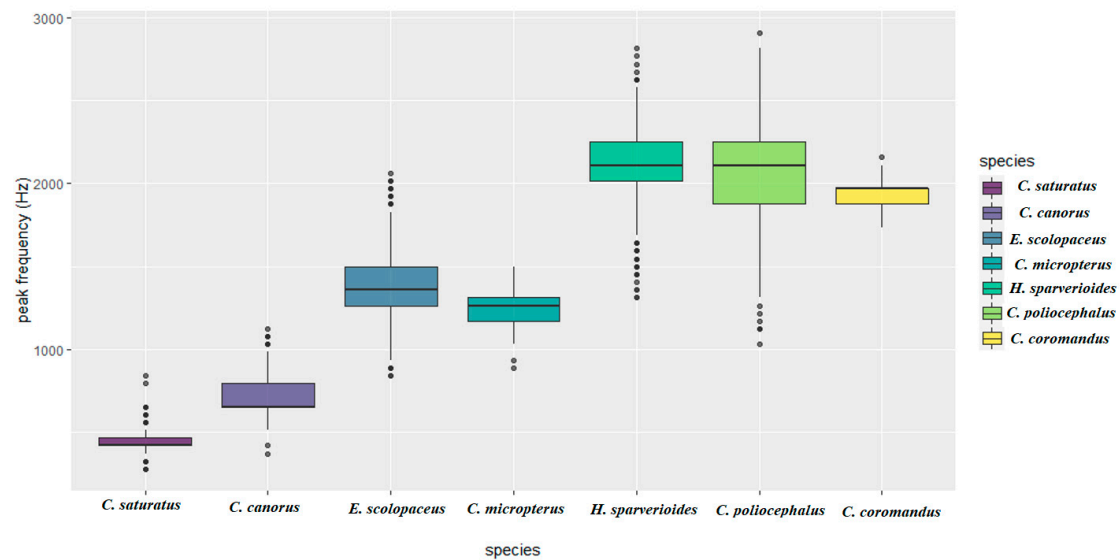
Figure S8 Diel pattern of vocal activity of speciesL (*C. micropterus*) in different seasons in Yaoluoping National Nature Reserve (China). The diel pattern is expressed as the mean number of calls detected per hour at each half month.





**Figure S9.** Median and quartile ranges (boxes) for peak frequency of calls from the seven species from eastern China.

Host species	Cuckoo species	Late April	Early May	Late May	Early June	Middle June	Late June	Early July
<i>Phylloscopus reguloides</i>	<i>C. saturatus</i>	51	25	18	35	60	3	11
<i>Urocissa erythrorhyncha</i>	<i>E. scolopaceus</i>	38	16	20	50	27	41	7
<i>Garrulax canorus</i>	<i>H. sparveriioides</i> and <i>C. coromandus</i>	31	20	32	27	29	35	20
<i>Cettia fortipes</i>	<i>C. saturates</i> and <i>C. poliocephalus</i>	42	57	44	33	45	38	31
<i>Paradoxornis webbianus</i>	<i>C. canorus</i>	50	15	33	126	64	55	23



**Table S16.** Dominant host species in Yaoluoping Nature Reserve and corresponding avian brood parasitic cuckoo species. Combination of Li's study table 4(The dominant bird species in 7 periods) and Yang's study Appendix 1(Parasitic cuckoo species and their hosts in China)[38,57].