

SUPPLEMENTAL MATERIAL

Biparental Care in a Generalist Raptor, the Chimango Caracara in Central Argentina

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Table S1. Number of hours Chimango Caracara nests were observed during the breeding season in 2016 and 2017, by reproductive period (incubation and nestling) and by time of the day: morning (0600–1059 H), midday (1100–1459 H) and afternoon (1500–2100 H). For each period and time block, shown are total hours of observation, mean number of hours per nest \pm SE, and n (number of nests).

Year	n	Reproductive Period	Morning Observation Hours	Midday Observation Hours	Afternoon Observation Hours	Total
2016	30	Incubation	22	18	22	62
			(4.40 \pm 0.25)	(4.50 \pm 0.29)	(4.40 \pm 0.40)	(4.43 \pm 0.17)
			n = 5	n = 4	n = 5	n = 14
		Nestling	22	23	27	72
			(4.40 \pm 0.40)	(4.60 \pm 0.25)	(4.50 \pm 0.34)	(4.44 \pm 0.18)
			n = 5	n = 5	n = 6	n = 16
2017	40	Incubation	30	28	28	86
			(4.29 \pm 0.18)	(4.67 \pm 0.42)	(4.67 \pm 0.33)	(4.53 \pm 0.18)
			n = 7	n = 6	n = 6	n = 19
		Nestling	25	34	36	95
			(4.17 \pm 0.17)	(4.86 \pm 0.34)	(4.50 \pm 0.19)	(4.52 \pm 0.15)
			n = 6	n = 7	n = 8	n = 21
Total	70	Both	99 n = 23	103 n = 22	113 n = 25	315 (4.50 \pm 0.09) n = 70

Table S2. Model selection results of GLMM explaining the percent of time adult Chimango Caracaras (*Milvago chimango*) spent incubating at nests in a suburban residential area in La Pampa Province, Argentina ($n = 30$ nests in 2016, 40 nests in 2017). Only the four top models are shown. Sex = male, female, TOD = Time of day (Morning, Midday, Afternoon), Clutch size = number of eggs. Nest identity and year were used as random variables in all models.

ID	Variables	k	AICc	Δ AICc	w
1	Sex + TOD	7	237.9	0	0.651
2	Sex	5	240.3	2.35	0.197
3	Sex + Clutch size	6	242.5	4.64	0.065
4	Sex + TOD + Clutch size	8	245.0	7.09	0.019
<i>Full</i>	<i>Sex*TOD + Clutch size</i>	9	256.2	9.34	0.008

Table S3. Model selection results of GLMM explaining the percent of time adult Chimango Caracaras (*Milvago chimango*) spent brooding/shading nestlings at nests in a suburban residential area in La Pampa Province, Argentina ($n = 30$ nests in 2016, 40 nests in 2017). Only the four top models are shown. Sex = male, female, TOD = Time of day (Morning, Midday, Afternoon), Brood size = number of chicks, Nestling age = number of days post-hatching. Nest identity and year were used as random variables in all models.

ID	Variables	k	AICc	Δ AICc	w
1	Sex + TOD + Nestling age	8	138.5	0	0.322
2	Sex + TOD + Brood size + Nestling age	9	141.0	2.55	0.137
3	Sex + TOD + Sex*TOD	9	143.2	4.73	0.098
4	Sex + TOD + Year	8	144.3	5.80	0.071
<i>Full</i>	<i>Sex*TOD + Brood size + Nestling Age</i>	10	151.2	8.15	0.022

Table S4. Model selection results of GLMM explaining food delivery rates by adult Chimango Caracaras (*Milvago chimango*) at nests in a suburban residential area in La Pampa Province, Argentina ($n = 30$ nests in 2016, 40 nests in 2017). Only the four top models are shown. Sex = male, female, TOD = Time of day (Morning, Midday, Afternoon), Brood size = Number of chicks, Nestling age = number of days post hatching. Nest identity and year were used as random variables in all models.

ID	Variables	k	AICc	Δ AICc	w
1	TOD + Nestling Age + Nestling Age ²	7	311.3	0	0.216
2	TOD + Year + Nestling Age + Nestling Age ²	8	313.5	2.21	0.049
3	TOD + Brood size + Nestling Age	7	313.6	2.31	0.047
4	Sex + TOD + Nestling Age + Nestling Age ²	9	313.9	2.69	0.039
<i>Full</i>	<i>Sex*TOD + Brood size + Nestling Age + Nestling Age²</i>	11	316.6	4.01	0.017

Table S5. Model selection results of GLMM explaining nest success at Chimango Caracara (*Milvago chimango*) nests in a suburban residential area in La Pampa Province, Argentina.

Analysis used nests observed only during the nestling period. Only the three top- models are shown. Brooding = total percent of time spent brooding or shading, males and females combined; Food_deliv = food delivery rate (number of food deliveries per hour during the nestling period, males and females combined); Julian = number of days after first recorded hatching in each year. Nest identity and year were used as random variables in all models.

Nests observed only during the nestling period (n = 37)		k	AICc	Δ AICc	w
1	Food_deliv	3	53.3	0.00	0.698
2	Food_deliv + Julian	4	55.7	2.41	0.209
<i>Full</i>	<i>Brooding + Food_deliv + Julian</i>	5	57.9	4.60	0.070

Table S6. Model selection results of GLMM explaining nest productivity at Chimango Caracara (*Milvago chimango*) nests in a suburban residential area in La Pampa Province, Argentina. Analysis used nests observed only during the nestling period. Only the three top models are shown. Brooding = Total percent time spent brooding or shading, males and females combined; Food_deliv = food delivery rate (number of food deliveries per hour during nestling period, males and females combined); Julian = number of days after first recorded hatching each year. Nest identity and year were used as random variables in all models.

Nests observed only during the nestling period (n = 37)		k	AICc	Δ AICc	w
1	Food_deliv	3	92.2	0.00	0.285
2	Food_deliv + Julian	4	94.6	2.39	0.096
<i>Full</i>	<i>Brooding + Food_deliv + Julian</i>	5	95.1	2.88	0.081