

SUPPLEMENTARY ELECTRONIC MATERIAL

ARDEOLA 67(1)

**CHEATING CHEATERS: SOCIAL MONOGAMY BUT GENETIC POLYGAMY IN A BROOD
PARASITE**

**ENGAÑANDO A LOS TRAMPOSOS: MONOGAMIA SOCIAL PERO POLIGAMIA GENÉTICA EN UN
PARÁSITO DE CRÍA**

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TABLE A1

Data from all the captured Great Spotted Cuckoos. Capture: date of capture. Locations: Number of locations obtained from the individual. Location dates: dates of the first and last relocation. Fate: reason for ending of the relocations. UD: home range size calculated as 95% utilisation distribution, in hectares. MCP: home range size calculated as 100% minimum convex polygon, in hectares

Individual ID	Year	Sex	Capture	Locations	Location dates	Fate	UD (ha)	MCP (ha)
cgl1	2009	M	26 Mar	21	14 May - 19 Jun	end of season	300.00	90.99
cgl2	2009	M	07 Apr	34	3 May - 19 Jun	end of season	420.00	186.01
cgl3	2009	M	08 Apr	0		no locations		
cgl4	2009	M	08 Apr	0		no locations		
cgl5	2009	M	08 Apr	0		no locations		
cgl6	2009	M	13 Apr	0		no locations		
cgl7	2009	F	13 Apr	22	6 May - 11 Jun	no radio signal	628.00	182.95
cgl8	2009	M	21 Apr	21	7 May - 8 Jun	no radio signal	822.75	288.54
cgl9	2009	F	21 Apr	32	7 May - 26 Jun	end of season	167.25	101.95
cgl10	2009	M	26 Apr	29	7 May - 17 Jun	end of season	372.00	166.28
cgl11	2009	F	26 Apr	26	7 May - 26 Jun	end of season	450.50	179.76
cgl12	2010	F	24 Mar	6	2 Apr - 8 Apr	no radio signal		
cgl13	2010	M	24 Mar	24	1 Apr - 4 May	no radio signal	737.00	281.93
cgl14	2010	M	27 Mar	60	1 Apr - 23 Jun	end of season	1046.75	778.65
cgl15	2010	F	28 Mar	0		predated		
cgl16	2010	M	28 Mar	28	6 Apr - 19 Jun	dead	683.00	348.97
cgl17	2010	F	06 Apr	21	7 Apr - 6 May	predated	1035.25	374.78
cgl18	2010	M	06 Apr	4	7 Apr - 12 Apr	no radio signal		
cgl19	2010	M	08 Apr	5	5 May - 10 May	predated		
cgl20	2010	F	10 Apr	51	11 Apr - 15 Jun	no radio signal	1242.50	747.00
cgl21	2010	M	10 Apr	5	11 Apr - 17 Apr	predated		
cgl22	2010	M	11 Apr	53	13 Apr - 18 Jun	no radio signal	605.00	358.44
cgl23	2010	M	11 Apr	59	12 Apr - 23 Jun	end of season	1028.00	636.67
cgl24	2010	F	11 Apr	56	13 Apr - 18 Jun	drown in well	1998.50	1225.73

TABLE A2

Known offspring of the radio-tracked individuals. Each row represents one chick genetically identified as offspring (Offspring ID) of one of the radio-tracked individuals (Radio-tracked parent). Radio-tracked mate: radio-tracked individual that was genetically identified as the other parent. Distance to parent home range: distance from the nest where the offspring was found to the border of the Radio-tracked parent's home range (0 = inside the home range). Laying date: estimated egg laying date; day 1 = 1st March.

Year	Offspring ID	Radio-tracked parent (sex)	Radio-tracked mate	Distance to parent home range	Laying date
2009	A01	cgl2 (male)	-	5400	53
	B04	cgl9 (female)	-	0	47
	B06		-	0	73
	B07		-	0	75
	B08		-	0	77
	B09		-	0	79
	B01		-	200	32
	B02		-	500	34
	B03		-	2400	36
	B05		-	700	49
	C01		cgl10 (male)	-	200
	D01	cgl11 (female)	-	3000	29
	D02		-	2700	89
	D03		-	300	
	2010	E01	cgl13 (male)	cgl17	0
E02		cgl17		0	52
E03		-		1200	54
F01		cgl14 (male)	-	900	43
F02			-	900	43
F03			-	1900	85
F04			-	1900	85
G01	cgl16 (male)	-	0	35	

G02		-	0	35
G03		-	4800	48
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E01		cgl13	0	39
F01	cgl17 (female)	-	0	50
E02		cgl13	0	52
F02		-	1200	53
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H03		-	0	55
H04	cgl22 (male)	-	0	55
H01		-	2300	39
H02		-	200	50

TABLE A3

Description of the data obtained from dyads of individuals whose home ranges overlapped by 40% or more. Dyad: individuals of the dyad. Dyad type: formed by a male and a female (MF) or by two males (MM). Spatial overlap: percentage of home ranges (95% UD) overlapped for both individuals. Temporal overlap: period of time in which both individuals were relocated in the field site. Capture: indicates whether the individuals were captured in the mist net at the exact same time (together) or at different times (separately). Same time relocations: number of relocations in which both individuals were located within a time frame of 3 minutes. Same time and space relocations: number of times in which the individuals of the dyad were relocated within a time frame of 3 minutes and at a distance of 50m or less. IAB attraction test: significant attraction ($p < 0.05$) and attraction tendencies ($p < 0.1$) between the individuals of the dyads in bold.

Year	Dyad	Dyad type	Spatial overlap (%)	Temporal overlap (days)	Capture	Same time relocations	Same time and space relocations	IAB attraction test
2009	cgl2-cgl9	MF	20.2 – 50.8	43	separately	1	0	1
2009	cgl8-cgl10	MM	38.9 – 86.1	31	separately	0	0	NA
2009	cgl8-cgl11	MF	46.2 – 84.4	31	separately	1	0	1
2009	cgl10-cgl11	MF	82.5 – 99.9	41	together	22	17	0.045
2010	cgl13-cgl17	MF	71.1 – 99.8	26	separately	10	6	0.099
2010	cgl14-cgl16	MM	55.2 – 84.6	42	separately	1	0	1
2010	cgl20-cgl22	MF	26,8 – 55.0	62	separately	1	0	1
2010	cgl23-cgl24	MF	51.4 - 100	65	together	30	21	0.033

TABLE A4

Factors affecting the home range size of the Great Spotted Cuckoo. Results of a GLMM, individual ID set as random factor. Data including only those relocations of 2010 starting on the same date as in 2009 (ie from May 3rd).

Explanatory variable	Estimate \pm SE	<i>t</i> value	df	<i>P</i> value
Number of relocations	15.072 \pm 0.953	15.818	342	< 0.001
Sex (males)	-0.657 \pm 110.75	-0.006	9	0.995
Year (2010)	179.98 \pm 108.66	1.656	9	0.132
Locations * Sex (males)	-5.168 \pm 1.233	-4.190	342	< 0.001

n = 356

TABLE A5

Factors affecting the home range size of the Great Spotted Cuckoo. Results of a GLMM, individual ID set as random factor. Data including only the maximum number of relocations per individual obtained in 2009 (ie 34 relocations).

Explanatory variable	Estimate \pm SE	<i>t</i> value	df	<i>P</i> value
Number of relocations	15.068 \pm 0.853	17.661	381	< 0.001
Sex (males)	5.389 \pm 69.72	-0.077	12	0.940
Year (2010)	154.620 \pm 66.36	2.330	12	0.038
Locations * Sex (males)	-4.305 \pm 1.096	-3.928	381	< 0.001

n = 398