

Supplementary material

Appendix 1

Table A1. The number (*percentage*) of first-year and older birds captured each year. Significance values are shown for overall comparisons and pair-wise comparisons (Fisher exact test) between years, for tagged birds and all the captured birds. Significant values are presented in bold.

	Captured	First year	Older	Unknown age	Pair-wise comparison	Tagged	Total
2012	Tagged	24	10				
	Total	47	26				
2013	Tagged	11	22	3	2012-2013	P = 0.003	P = 0.004
	Total	26	41	3	2013-2014	P = 0.10	P = 0.56
2014	Tagged	24	20				
	Total	45	56	4			
Overall						P = 0.009	P = 0.005

Table A2. The number of birds (*percentage*) observed raising chicks to at least seven days old in the subsequent breeding seasons in relation to the experimental treatment.

Treatment	Observed	Not observed	Total
2012			
Handled outdoors	12 (86%)	2 (14%)	14
Brought indoors	16 (64%)	9 (36%)	25
Brought <i>indoors</i> and tagged	25 (74%)	9 (26%)	34
2013			
Handled outdoors	14 (64%)	8 (36%)	22
Brought indoors	4 (33%)	8 (67%)	12
Handled <i>outdoors</i> and tagged	12 (33%)	24 (67%)	36
2014			
Handled outdoors	24 (53%)	21 (47%)	45
Brought indoors	10 (63%)	6 (37%)	16
Handled <i>outdoors</i> and tagged	27 (61%)	17 (39%)	44

Table A3. The number of birds (*percentage*) observed during nest box checks in the subsequent breeding seasons or thereafter in relation to the experimental treatment.

Treatment	Observed	Not observed	Total
2012			
Handled outdoors	12 (86%)	2 (14%)	14
Brought indoors	18 (72%)	7 (28%)	25
Brought <i>indoors</i> and tagged	26 (76%)	8 (24%)	34
2013			
Handled outdoors	15 (68%)	7 (32%)	22
Brought indoors	5 (42%)	7 (58%)	12
Handled <i>outdoors</i> and tagged	20 (56%)	16 (44%)	36
2014			
Handled outdoors	34 (76%)	11 (24%)	45
Brought indoors	11 (69%)	5 (31%)	16
Handled <i>outdoors</i> and tagged	33 (75%)	11 (25%)	44

Table A4. Environmental variables for transmitter attachment days during chick provisioning (source: KNMI Deelen (NL) weather station).

Year	Average Temperature (°C)	Sun hours	Rainfall (mm)
2012			
Mean	13.18	4.93	0.00
SD	1.40	5.18	0.00
N	11	11	11
2013			
Mean	14.04	11.43	0.00
SD	2.69	2.35	0.00
N	7	7	7
2014			
Mean	10.15	5.05	7.68
SD	1.1	3.51	10.99
N	4	4	4

Table A5. The number of pairs deserting or not deserting (*percentage*) after the parents were only caught or caught and tagged. All nests with tagged parents and at least 92% of the nests with untagged birds were the first breeding attempts of the season for these birds.

Treatment	No desertion	Desertion	Total
2012			
Parents caught	107 (86%)	17 (14%)	124
Parents caught and tagged	5 (45%)	6 (55%)	11
2013			
Parents caught	55 (95%)	3 (5%)	58
Parents caught and tagged	7 (100%)	0 (0%)	7
2014			
Parents caught	67 (83%)	14 (17%)	81
Parents caught and tagged	1 (25%)	3 (75%)	4

Table A6. The number of unique parents (*percentage*) observed during nest box checks in the subsequent breeding seasons or thereafter in relation to being only caught or being caught and tagged.

Treatment	Observed	Not observed	Total
2012			
Parents caught	101 (46%)	117 (54%)	218
Parents caught and tagged	11 (50%)	11 (50%)	22
2013			
Parents caught	70 (62%)	43 (38%)	113
Parents caught and tagged	8 (57%)	6 (43%)	14
2014			
Parents caught	76 (52%)	71 (48%)	147
Parents caught and tagged	5 (63%)	3 (37%)	8



Figure A1. A wild great tit carrying an Encounternet transmitter. The inset picture shows the radio transmitters just before they were attached to the birds.

Methods A1

To investigate the potential influence of small sample sizes on our significant findings (see Results), we additionally conducted bootstrap analyses (without replacement). Since small sample sizes have the potential to create spurious results, we drew the number of tagged pairs from the total number of observed pairs, 10000 times. This way, we could examine whether or not merely drawing small samples, independent of the tagging procedure, would be relatively unlikely (less than 5% of the time) to result in our observed percentage of desertion by tagged pairs. The percentage of nests deserted by tagged pairs in 2012 (55%) fell outside the 99% confidence interval for untagged pairs (99% CI = 0-45% desertion, drawing 11 out of 135 pairs). Likewise, the percentage of nests deserted by tagged pairs in 2014 (75%) fell outside the 95% confidence interval for untagged pairs (95% CI = 0-50% desertion, drawing four out of 85 nests). If sample size was indeed the main driver of our revealed tag effects during nestling provisioning, we would have expected the percentage of tagged pairs that deserted to fall within the 95% bootstrapped confidence intervals. These analyses thus suggest that our findings were unlikely to be primarily attributable to small sample sizes.