

Supplementary material

Martin Matejka*, Kristína Abrahámovičová, Hana Tomanovičová, Martin Gera, Zlatica Országhová & Lucia Rubáčová 2025: Winter site fidelity of the Great Tit (*Parus major*) revealed by recaptures of individuals roosting in nest-boxes. — *Ornis Fennica* 102: 00–00.

M. Matejka, K. Abrahámovičová, H. Tomanovičová, Z. Országhová, L. Rubáčová, Department of Zoology, Faculty of Natural Sciences, Comenius University in Bratislava, Ilkovičova 6, 842 15 Bratislava, Slovak Republic

M. Gera, Meteorology Division, Department of Astronomy, Physics of the Earth, and Meteorology and Climatology, Faculty of Mathematics, Physics and Informatics, Comenius University in Bratislava, Mlynská dolina F1, 842 48 Bratislava, Slovak Republic

* Corresponding author's email: matejka16@uniba.sk

Table S1. Number of night check with date of first and last check performed in different seasons at the two study sites.

season	ZOO			BG		
	N	first	last	N	first	last
2017/2018	16	6.11.	26.2.	NO CHECKS		
2018/2019	22	2.10.	26.2.	21	2.10.	26.2.
2019/2020	20	9.10.	26.2.	20	9.10.	26.2.
2020/2021	6	6.10.	15.12.	7	6.10.	15.12.
2021/2022	20	5.10.	22.2.	19	5.10.	22.2.
2022/2023	17	6.10.	26.1.	20	6.10.	23.2.
2023/2024	NO CHECKS			21	3.10.	27.2.

Table S2. Predictors affecting the nest box preference by the roosting Great Tits with their test criterium and P values from the corresponding GLM. Significant values are marked in bold.

predictor	χ^2	P
site	1.25	0.26
winter	4.4	0.22
nest box type	84.97	< 2.10⁻¹⁶

Table S3. Recaptures within winter (%) of different age and sex groups in different months with the test criterium values and P-values of the independence tests (contingency table). Values in parentheses present the number of recorded birds in different months. Significant values are marked in bold.

	X.	XI.	XII.	I.	II.	χ^2	P
sex male	58.18 (55)	72.22 (54)	76.32 (38)	68.75 (32)	78.26 (23)	5.22	0.27
female	41.18 (17)	64.29 (14)	77.78 (9)	71.42 (7)	100.00 (5)	7.51	0.11
age young	47.73 (44)	61.36 (44)	57.69 (26)	56.52 (23)	61.54 (13)	2.29	0.68
old	64.29 (28)	87.5 (24)	90.48 (21)	93.75 (16)	100.00 (15)	13.35	0.0097
together	54.17 (72)	70.59 (68)	76.60 (47)	71.79 (39)	82.14 (28)	11.033	0.026

Table S4. Predictors affecting the recapture between seasons with their test criterium and P values from the corresponding GLM. Significant values are marked in bold.

predictor	χ^2	P
recapture within season	2.51	0.11
recapture rate	4.45	0.04
locality	0.18	0.67

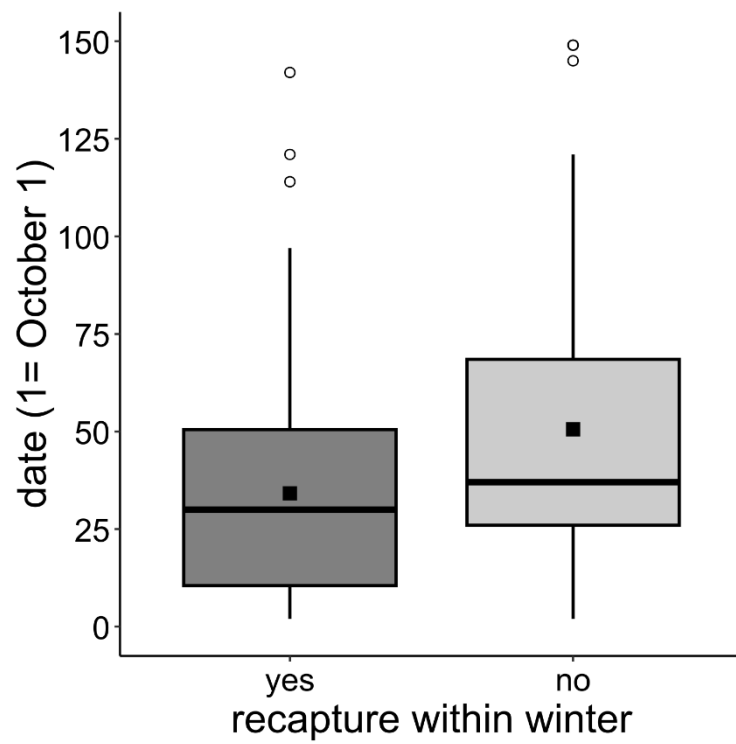


Fig. S1. Date of first capture by the birds recaptured within winter and those recaptured in season only once. Mean values are marked with black squares.

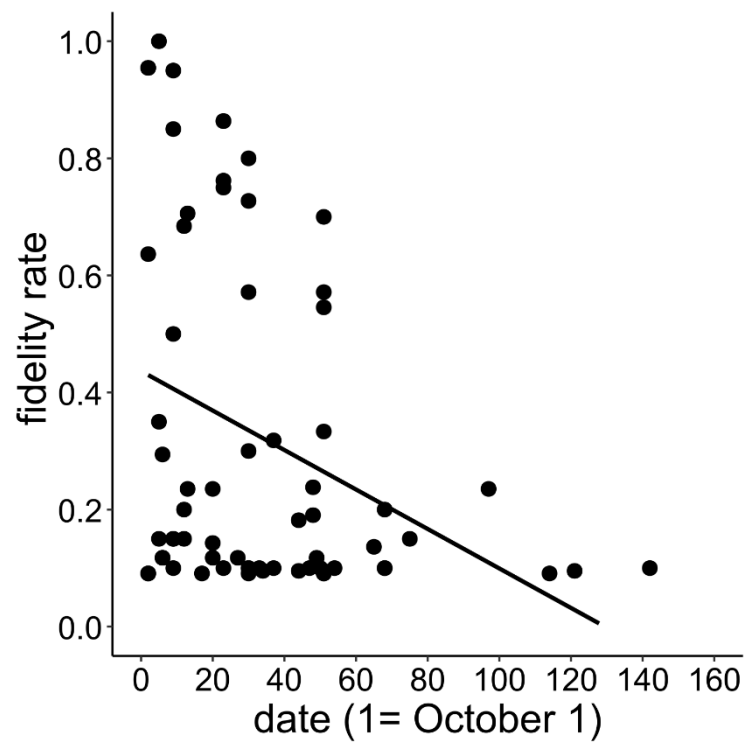


Fig. S2. Relationship between the date of the first capture and fidelity rate in the recaptured birds.