

SUPPLEMENTS

Intensity of *Haemoproteus* spp. blood infection differs between wild birds captured using different trapping methods

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Table S1. Comparison of generalized linear mixed models (GLMM), describing the effect of different predictors on the possibility of catching a bird infected with *Haemoproteus* spp. for the sample with all species of birds

Models	$\Delta_i(\text{BIC})$	<i>df</i>
Infection status ~ Type + (1 Species) + (1 Year)	0.0	4
Infection status ~ Type + Migration distance + (1 Species) + (1 Year)	7.5	5
Infection status ~ Type + DayN + Migration distance + (1 Species) + (1 Year)	11.8	6
Infection status ~ Type + (1 Species)	15.1	3
Infection status ~ Type + DayN + DayN*Type + Migration distance + (1 Species) + (1 Year)	17.4	7
Infection status ~ Type + DayN + DayN*Type + Leucocytozoon + Plasmodium + (1 Species) + (1 Year)	19.4	8
Infection status ~ Type + DayN + DayN*Type + Plasmodium + Migration distance + (1 Species) + (1 Year)	20.4	8
Infection status ~ Type + DayN + Plasmodium + Leucocytozoon + Migration distance + (1 Species) + (1 Year)	21.1	8
Infection status ~ Type + Migration distance + (1 Species)	23.8	8
Infection status ~ Type + DayN + DayN*Type + Leucocytozoon + Migration distance + (1 Species) + (1 Year)	26.9	9
Infection status ~ Type + DayN + DayN*Type + Leucocytozoon + Plasmodium + Migration distance + (1 Species) + (1 Year)	258.7	3

Notes: $\Delta_i(\text{BIC})$, the difference between the BIC for a given model and the minimum BIC; *df*, the number of degrees of freedom. In all models, the asterisk denotes the interaction between factors; parentheses indicate a random effect.

Table S2. The result of the generalized linear mixed model (GLMM) for the sample with all bird species

Predictors	Infection status		
	Odds Ratios	CI	p
(Intercept)	0.25	0.13–0.51	<0.001
Type [Passive]	2.01	1.14–3.54	0.016
Random Effects			
σ^2	3.29		
τ_{00} Species	1.45		
τ_{00} Year	0.09		
ICC	0.32		
N_{Species}	60		
N_{Year}	5		
Observations	1815		
Marginal R^2 / Conditional R^2	0.007 / 0.324		

Notes: CI — 95 % confidence interval. Random effects: σ^2 = residual variance, τ_{00} = random intercept variance, ICC = intraclass correlation coefficient; R^2 — coefficient of determination. Significant values are in bold.

Table S3. Results of the cumulative link mixed model (CLMM) for the sample with all bird species

Predictors	Parasitemia score		
	Odds Ratios	CI	p
1 2	0.08	0.04–0.17	<0.001
2 3	0.51	0.26–1.00	0.050
3 4	3.42	1.70–6.90	0.001
Type [Passive]	0.14	0.07–0.27	<0.001
Random Effects			
σ^2	3.29		
τ_{00} Species	0.62		
ICC	0.16		
N_{Species}	37		
Observations	757		
Marginal R^2 / Conditional R^2	0.040 / 0.192		

Notes: CI — 95 % confidence interval. Random effects: σ^2 = residual variance, τ_{00} = random intercept variance, ICC = intraclass correlation coefficient; R^2 — coefficient of determination. Significant values are in bold.

Table S4. Comparison of cumulative link mixed models (CLMMs), describing the effect of different predictors on parasitemia score of *Haemoproteus* spp. infection for the all-species sample

Models	$\Delta_i(\text{BIC})$	df
Score ~ Type + (1 Species)	0.0	5
Score ~ Type + (1 Species) + (1 Year)	5.3	6
Score ~ Type + Migration distance + (1 Species)	6.6	6
Score ~ Type + DayN + (1 Species) + (1 Year)	11.8	7
Score ~ Type + Migration distance + (1 Species) + (1 Year)	11.9	7
Score ~ Type + DayN + Migration distance + (1 Species) + (1 Year)	18.4	8
Score ~ Type + DayN + DayN*Type + Migration distance + (1 Species) + (1 Year)	24.9	9
Score ~ Type + DayN + Plasmodium + Leucocytozoon + Migration distance + (1 Species) + (1 Year)	28.7	10
Score ~ Type + DayN + DayN*Type + Leucocytozoon + Migration distance + (1 Species) + (1 Year)	29.8	10
Score ~ Type + DayN + DayN*Type + Leucocytozoon + Plasmodium + (1 Species) + (1 Year)	30.0	10
Score ~ Type + DayN + DayN*Type + Leucocytozoon + Plasmodium + Migration distance + (1 Species)	30.0	10
Score ~ Type + DayN + DayN*Type + Plasmodium + Migration distance + (1 Species) + (1 Year)	32.4	10
Score ~ Type + DayN + DayN*Type + Leucocytozoon + Plasmodium + Migration distance + (1 Species) + (1 Year)	35.2	11
Score ~ Type + (1 Year)	75.3	5
Score ~ Type + DayN + DayN*Type + Leucocytozoon + Plasmodium + Migration distance + (1 Year)	96.3	10

Notes: $\Delta_i(\text{BIC})$, the difference between the BIC for a given model and the minimum BIC; df, the number of degrees of freedom. In all models, the asterisk denotes the interaction between factors; parentheses indicate a random effect.

Table S5. List of species common to the samples of actively and passively captured birds used for GLMM

Shared bird species	Number of actively caught birds	Number of passively caught birds
<i>Acrocephalus palustris</i>	1	64
<i>Erithacus rubecula</i>	38	12
<i>Ficedula hypoleuca</i>	6	67
<i>Ficedula parva</i>	1	2
<i>Fringilla coelebs</i>	3	39
<i>Locustella naevia</i>	1	3
<i>Luscinia luscinia</i>	8	30
<i>Cyanistes caeruleus</i>	1	8
<i>Parus major</i>	1	9
<i>Phoenicurus phoenicurus</i>	11	17
<i>Phylloscopus collybita</i>	10	2
<i>Phylloscopus trochilus</i>	6	25
<i>Sylvia atricapilla</i>	18	109
<i>Sylvia communis</i>	13	98
<i>Curruca curruca</i>	13	25
<i>Troglodytes troglodytes</i>	8	6
<i>Turdus merula</i>	1	56
Total amount	140	572

Table S6. List of species common to the samples of actively and passively captured birds used for CLMM

Shared bird species	Number of actively caught birds	Number of passively caught birds
<i>Curruca curruca</i>	2	11
<i>Ficedula hypoleuca</i>	3	30
<i>Sylvia communis</i>	6	55
<i>Phylloscopus trochilus</i>	1	4
<i>Sylvia atricapilla</i>	8	79
<i>Fringilla coelebs</i>	2	18
<i>Luscinia luscinia</i>	5	18
<i>Phoenicurus phoenicurus</i>	1	1
<i>Cyanistes caeruleus</i>	1	4
<i>Erithacus rubecula</i>	4	1
Total amount	33	221

Table S7. Comparison of generalized linear mixed models (GLMM), describing the effect of different predictors on the possibility of catching a bird infected with *Haemoproteus* spp. for the shared species sample

Models	$\Delta_i(\text{BIC})$	<i>df</i>
Infection status ~ Type + (1 Species) + (1 Year)	0.0	4
Infection status ~ Type + DayN + Migration distance + (1 Species) + (1 Year)	2.3	6
Infection status ~ Type + Migration distance + (1 Species) + (1 Year)	4.2	5
Infection status ~ Type + DayN + DayN*Type + Migration distance + (1 Species) + (1 Year)	7.8	7
Infection status ~ Type + DayN + Plasmodium + Leucocytozoon + Migration distance + (1 Species) + (1 Year)	11.2	8
Infection status ~ Type + DayN + DayN*Type + Plasmodium + Migration distance + (1 Species) + (1 Year)	11.7	8
Infection status ~ Type + DayN + DayN*Type + Leucocytozoon + Plasmodium + (1 Species) + (1 Year)	11.9	8
Infection status ~ Type + DayN + DayN*Type + Leucocytozoon + Migration distance + (1 Species) + (1 Year)	12.6	8
Infection status ~ Type + DayN + DayN*Type + Leucocytozoon + Plasmodium + Migration distance + (1 Species) + (1 Year)	16.5	9
Infection status ~ Type + (1 Species)	19.8	3
Infection status ~ Type + Migration distance + (1 Species)	24.1	4
Infection status ~ Type + (1 Year)	76.5	3

Notes: $\Delta_i(\text{BIC})$, the difference between the BIC for a given model and the minimum BIC; *df*, the number of degrees of freedom. In all models, the asterisk denotes the interaction between factors; parentheses indicate a random effect.

Table S8. The result of the generalized linear mixed model (GLMM) for sample with the shared bird species

Predictors	Infection status		
	Odds Ratios	CI	<i>p</i>
(Intercept)	0.33	0.12–0.88	0.026
Type [Passive]	1.94	0.93–4.05	0.076
Random Effects			
σ^2	3.29		
τ_{00} Species	1.22		
τ_{00} Year	0.39		
ICC	0.33		
N_{Species}	17		
N_{Year}	5		
Observations	712		
Marginal R^2 / Conditional R^2	0.014 / 0.338		

Notes: CI — 95 % confidence interval. Random effects: σ^2 = residual variance, τ_{00} = random intercept variance, ICC = intraclass correlation coefficient; R^2 — coefficient of determination. Significant values are in bold.

Table S9. Comparison of cumulative link mixed models (CLMMs), describing the effect of different predictors on parasitemia score of *Haemoproteus* spp. infection for the same species sample

Models	$\Delta_i(\text{BIC})$	<i>df</i>
Score ~ Type + (1 Species)	0.0	5
Score ~ Type + Migration distance + (1 Species)	1.5	6
Score ~ Type + (1 Species) + (1 Year)	4.3	6
Score ~ Type + Migration distance + (1 Species) + (1 Year)	6.1	7
Score ~ Type + (1 Year)	7.4	5
Score ~ Type + DayN + (1 Species) + (1 Year)	9.8	7
Score ~ Type + DayN + DayN*Type + Leucocytozoon + Plasmodium + Migration distance + (1 Species)	20.7	10
Score ~ Type + DayN + Plasmodium + Leucocytozoon + Migration distance + (1 Species) + (1 Year)	20.8	10
Score ~ Type + DayN + DayN*Type + Leucocytozoon + Plasmodium + Migration distance + (1 Year)	22.1	10
Score ~ Type + DayN + DayN*Type + Leucocytozoon + Plasmodium + (1 Species) + (1 Year)	24.7	10

Note: $\Delta_i(\text{BIC})$, the difference between the BIC for a given model and the minimum BIC; *df*, the number of degrees of freedom. In all models, the asterisk denotes the interaction between factors; parentheses indicate a random effect.