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Russ, A., Lučeničová, T. and Klenke, R. 2017. Altered breeding biology of the European blackbird under artificial light at night. – J. Avian Biol. doi: 10.1111/jav.01210

Supplementary material

Electronic Supplementary Material JAV-01210 for

Russ, A., Lučeničová, L. and Klenke, R. 2017. *Altered breeding biology of the European blackbird under artificial light at night. – Journal of Avian Biology*

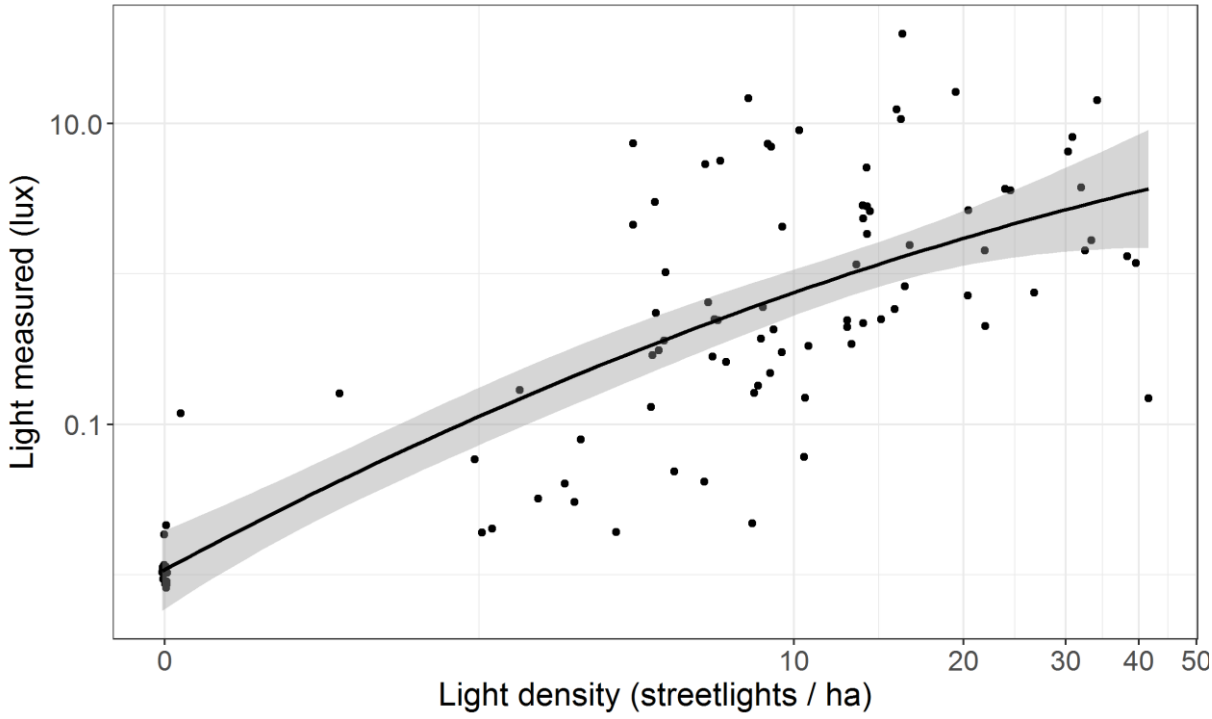

Figure A 1 Correlation between light density index and illuminance measurements at 100 random points in the study area. The grey band indicates the 95 % confidence interval. This correlation was only used to calculate illuminance values to facilitate the comparability with other studies.

Table A 1 Model selection results for the nest site selection, laying date, and clutch size. The respective best models were selected by Akaike's Information Criterion corrected for small sample sizes (AICc). ΔAICc indicates the difference in AICc-values to the respective best model. K specifies the number of parameters in the model and the Akaike weights ω_i indicate the likelihood that the chosen model is the best among the set of candidate models. Only models with a ΔAICc < 2 are considered to receive competitive support.

Model parameter	K	AICc	ΔAICc	ω_i
Nest site selection				
Origin, study year, study site, offset(tram noise, car traffic noise, percentage impervious surface), origin*study year, origin*study site, study year*study site, origin*study year*study site	27	3175.7	0.00	0.82
Origin, study year, study site, offset(tram noise, car traffic noise, percentage impervious surface), origin*study year, origin*study site	19	3180.7	4.7	0.08
Origin, study year, study site, offset(tram noise, car traffic noise, percentage impervious surface), origin*study year, origin*study site, study year*study site	23	3181.1	5.37	0.06
Origin, study year, study site, offset(tram noise, car traffic noise, percentage impervious surface), origin*study year	17	3181.7	6.0	0.04
Laying date				
Lamp density, study year	7	4287.8	0.00	0.42
Tram noise, car traffic noise, lamp density, study year	9	4288.7	0.92	0.26
Car traffic noise, lamp density, study year	8	4289.4	1.65	0.18
Tram noise, car traffic noise, lamp density, percentage impervious surface, study year	10	4290.3	2.56	0.12
Tram noise, car traffic noise, lamp density, percentage impervious surface, study year, site class	12	4294.3	6.55	0.02
Tram noise, car traffic noise, lamp density, percentage impervious surface, study year, site class, site class*lamp density	14	4296.3	8.49	0.01
Tram noise, car traffic noise, lamp density, percentage impervious surface, study year, site class, study year*lamp density, site class*lamp density	16	4300.5	12.7	0.00

Model parameter	K	AICc	ΔAICc	ω_i
Clutch size				
Day of clutch initiation, day of clutch initiation², study year, study year*day of clutch initiation, study year*day of cutch initiation²	18	676.3	0.00	0.61
Day of clutch initiation, day of clutch initiation², lamp density, study year, study year*day of clutch initiation, study year*day of cutch initiation²	19	678.2	1.87	0.24
Day of clutch initiation, day of clutch initiation², lamp density, percent impervious surface, study year, study year*day of clutch initiation, study year*day of cutch initiation²	20	679.9	3.60	0.10
Day of clutch initiation, day of clutch initiation², lamp density, car traffic noise, percent impervious surface, study year, study year*day of clutch initiation, study year*day of cutch initiation²	21	682.0	5.62	0.04
Day of clutch initiation, day of clutch initiation², lamp density, car traffic noise, tram noise, percent impervious surface, study year, study year*day of clutch initiation, study year*day of cutch initiation²	22	684.0	7.64	0.01

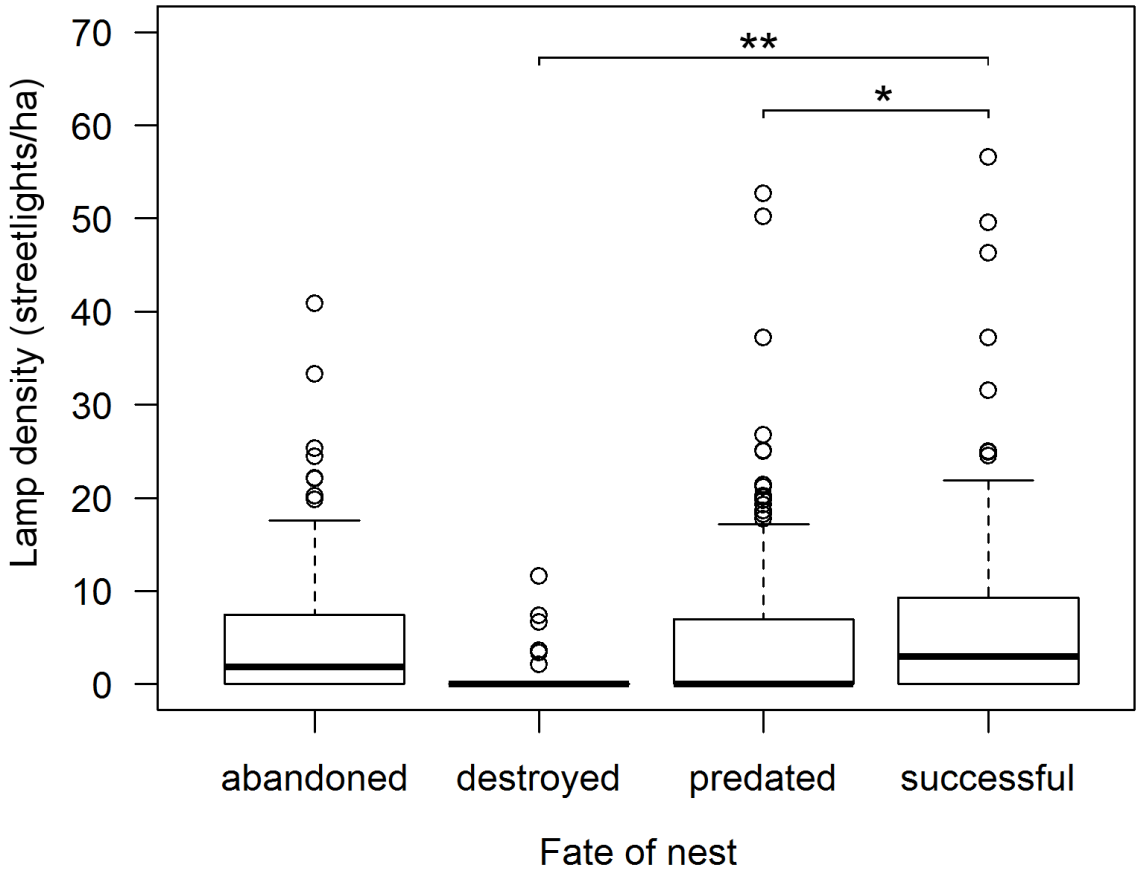

Figure A 2 Lamp density of nests with known fate. Asterisks indicated significant differences at the * $p < 0.05$ and ** $p < 0.01$ level.

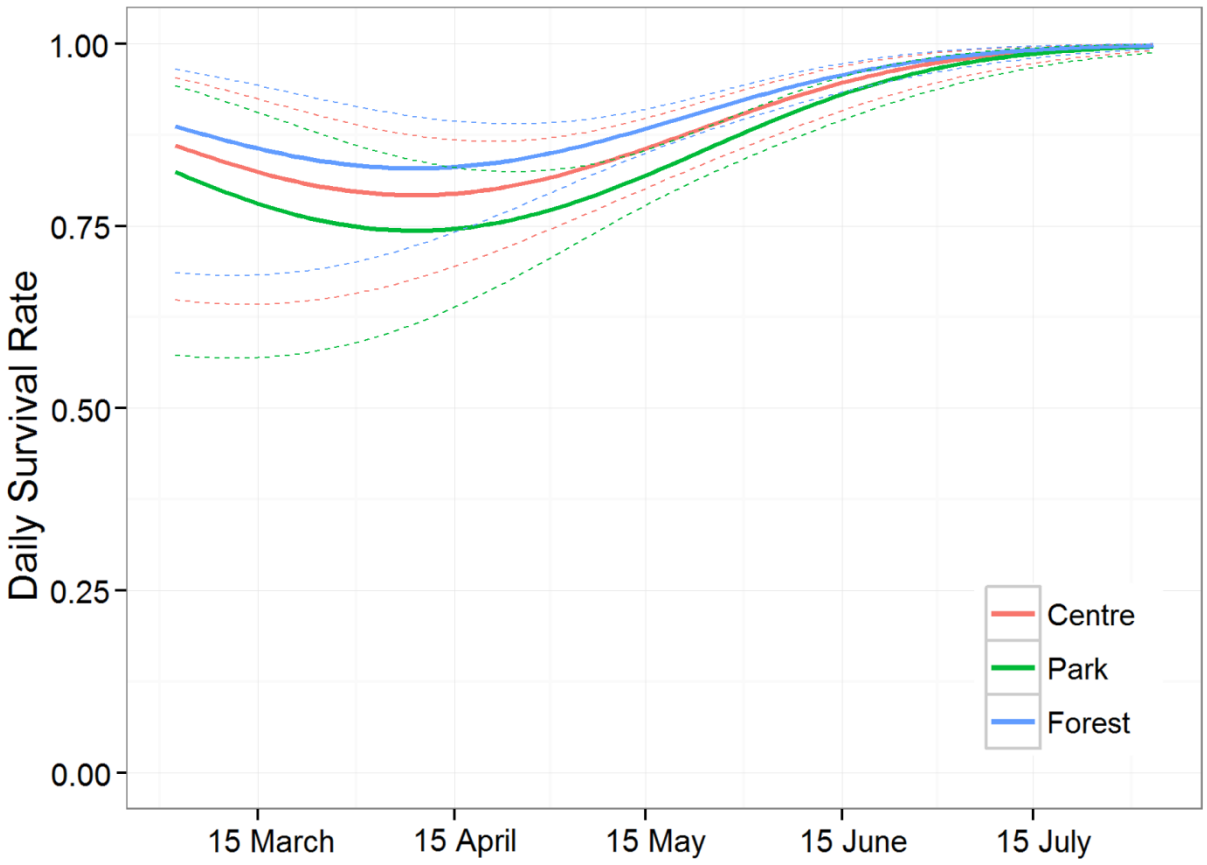

Figure A 3 Estimated daily survival rates of blackbird nests at the different site classes over the breeding season. Dashed lines indicated upper and lower 95 % confidence intervals.