

## ELECTRONIC SUPPLEMENTARY MATERIAL 5

**From article:** Camacho C, Sanabria-Fernández A, Baños-Villalba A, Edelaar, P. 2020. Experimental evidence that matching habitat choice drives local adaptation in a wild population. *Proc. R. Soc. B.* DOI: <http://dx.doi.org/10.1098/rspb.2020.0721>

**Table S3.** Description of the set of models fitted to the data on substrate use (0 = pale pavement, 1 = dark asphalt) by grasshoppers captured for the first time (a) and those resighted after manipulation and release (b). Models are sorted by their degree of support from the data, as indicated by the difference in AICc of the most satisfactory model (i.e. smallest AICc) to alternative models.

Model number	Model structure	Description of model	$\Delta$ AICc
<b>(a) Models for first captures</b>			
Capture#1	Original colour	No sex effect	0.00
Capture#2	Original colour + Sex	Parallel effect of colour in both sexes	2.08
Capture#3	Original colour + Sex + Original colour $\times$ Sex	All effects included, and interaction between colour and sex	3.45
Capture#4	Null	Only random term	62.18
Capture#5	Sex	No colour effect	64.18
<b>(b) Models for resightings</b>			
Resight#1	Original colour + New colour	No effect of time since manipulation	0.00
Resight#2	Original colour + New colour + Time since manipulation	All effects included, no interaction	2.46
Resight#3	New colour	Neither original colour nor time since manipulation effects	3.69
Resight#4	Original colour + New colour + Time since manipulation + New colour $\times$ Time since manipulation	All effects included, and interaction between new colour and time since manipulation	4.28
Resight#5	New colour + Time since manipulation	No effect of original colour	6.04
Resight#6	Null	Only random terms	15.82
Resight#7	Original colour	Neither new colour nor time since manipulation effects	17.08
Resight#8	Time since manipulation	Neither original colour nor new colour effects	17.83
Resight#9	Original colour + Time since manipulation	No effect of new colour	19.13

AICc, Akaike Information Criterion corrected for small sample sizes. All models described above included the random term (1|Sampling date). Models for resightings (b) also included the random term (1|ID).