

Appendix 1. Estimated population sizes (with standard error and 95% confidence intervals) from the models with the best fit for *Aphantopus hyperantus*, *Coenonympha pamphilus* and *Maniola jurtina* in pastures and linear habitat elements using the Jolly-Seber method as implemented in the POPAN module (Arnason and Schwarz 1999) in Program MARK. In all cases, the model  $\Phi(t)p(t)pent(\cdot)$ , with survival ( $\Phi$ ) and capture probability ( $p$ ) varying over time but the probability of entering the population ( $pent$ ) constant over time, was the model that fitted the data best.

Species	Habitat	N	SE	95% confidence interval	
				Lower	Upper
<i>Aphantopus hyperantus</i>	Pasture	51290	3818	43807	58774
<i>Aphantopus hyperantus</i>	Linear	23702	1092	21561	25843
<i>Coenonympha pamphilus</i>	Pasture	20694	53	2059	20798
<i>Coenonympha pamphilus</i>	Linear	625	87	454	797
<i>Maniola jurtina</i>	Pasture	31890	3175	26643	37281
<i>Maniola jurtina</i>	Linear	9340	676	8016	10666