

Ecography

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Supplementary material

Appendix 1: Matrix elements of *P. vulgaris* expressed as combinations of vital rates: S_s = probability of survival of seedlings, S_r = probability of transition to reproductive of seedlings (given survival), S_v = probability of seedlings growing to vegetative adults (given survival), J_s = probability of survival of juveniles, J_r = probability of transition to reproductive of juveniles (given survival), J_v = probability of juveniles growing to vegetative adults (given survival), V_s = probability of survival of vegetative adults, V_r = probability of transition to reproductive of vegetative adults (given survival), R_e = recruitment rate, R_s = probability of survival of reproductives, R_r = probability of flowering of reproductive adults (given survival)

	Seedling	Juvenile	Veget. adult	Reprod. adult
Seedling				R_e
Juvenile	$S_s*(1-S_r)*(1-S_v)$	$J_s*(1-J_r)*(1-J_v)$		
Veget. adult	$S_s*(1-S_r)*S_v$	$J_s*(1-J_r)*J_v$	$V_s*(1-V_r)$	$R_s*(1-R_r)$
Reprod. adult	S_s*S_r	J_s*J_r	V_s*V_r	R_s*R_r

Appendix 2: Summary of multiple regression models evaluating the response of lambda to the two landscape characteristics in both years studied. Models considered a type III sum of squares, which provides effect estimates of each predictor independent of any potential co-variance between predictors and hence are unaffected by collinearity (Schmid et al. 2002). The percentage of forest cover was the only predictor that showed a significant effect on lambda in both years. As judged from the sums of squares (SS) values of both predictors, the effect of forest edge length was weaker than that of forest cover in both years, although the difference in effect strength was much higher in the first year than in the second.

Year	2008-2009				2009-2010			
R ²	0.79				0.50			
Model SS	0.30				0.02			
F	22.92				5.98			
P	<0.0001				0.0158			
	β	SS	t	P	β	SS	t	P
% Forest cover	0.0098	0.1816	5.29	0.0002	0.0045	0.0383	3.43	0.0050
Forest edge length	0.0001	0.0044	0.82	0.4270	0.0002	0.0151	2.16	0.0521

LITERATURE CITED

Schmid, B., Hector, A., Huston, M.A., Inchausti, P., Nijs, I., Leadley, P.W. and Tilman, D. 2002. The design and analysis of biodiversity experiments. In "Biodiversity and ecosystem functioning. Synthesis and perspectives". Loreau, M., Naeem, S., Inchausti, P. (Eds.). Oxford University Press, Oxford.