Ecography

E4333

Cruz, M. J., Rebelo, R. and Crespo, E. G. 2006. Effects of an introduced crayfish, *Procambarus clarkii*, on the distribution of south-western Iberian amphibians in their breeding habitats. – Ecography 29: 329–338.

Appendix 1. Variables measured in each sampling point, units of measurement and transformations used.

Variables		Units	Class transformations	Other transformations				
Type (lentic v	rs lotic)	pond (0)/stream (1)						
Permanence		temporary (0)/permanent (1)						
Elevation		m		Log(x+1)	x*Ln(x+1)			
Maximum depth		cm	>30 cm (1); <30 cm (0)	Log(x+1)	x*Ln(x+1)			
Maximum width		m		Log(x+1)	x*Ln(x+1)			
Visibility		%	>80% (1); <80% (0)					
Current velocity		m/sec						
Shadow		% cover	$0\% (0); \ge 1\% (1)$					
Substrate vari	ables							
Margins Water body	Bedrock	% cover	$0\% (0); \ge 1\% (1)$					
	Stone (>75 mm)	% cover	$0\% (0); \ge 1\% (1)$					
	Gravel (2–75 mm)	% cover	$0\% (0); \ge 1\% (1)$					
	Sand (0.5–2 mm)	% cover	$0\% (0); \ge 1\% (1)$					
	Silt (<0.5 mm)	% cover	$0\% (0); \ge 1\% (1)$					
	Leaf litter	% cover	$0\% (0); \ge 1\% (1)$					
	Bedrock	% cover	$0\% (0); \ge 1\% (1)$					
	Stone (>75 mm)	% cover	$0\% (0); \ge 1\% (1)$					
	Gravel (2–75 mm)	% cover	$0\% (0); \ge 1\% (1)$					
	Sand (0.5–2 mm)	% cover	$0\% (0); \ge 1\% (1)$					
	Silt (<0.5 mm)	% cover	$0\% (0); \ge 1\% (1)$					
	Leaf litter	% cover	$0\% (0); \ge 1\% (1)$					
Vegetation va								
Margins	Arboreal vegetation	% cover	$0\% (0); \ge 1\% (1)$					
	Arbustive vegetation	% cover	$0\% (0); \ge 1\% (1)$					
	Herbs	% cover	$0\% (0); \ge 1\% (1)$					
	Moss	% cover	(-)					
	Bare ground	% cover	$0\% (0); \ge 1\% (1)$					
Water body	Floating vegetation	% cover	$0\% (0); \ge 1\% (1)$					
	Submersed vegetation	% cover	$0\% (0); \ge 1\% (1)$					
	Emergent vegetation	% cover	$0\% (0); \ge 1\% (1)$					
	Total aquatic vegetation	% cover	$0\% (0); \ge 1\% (1)$					
Human impa								
	Maximum	% cover	$0\% (0); \ge 1\% (1)$					
	Medium	% cover	$0\% (0); \ge 1\% (1)$					
	Minimal	% cover	$0\% (0); \ge 1\% (1)$					

Appendix 2. Coefficients (β) and p-values obtained via the Wald χ^2 test for the predator variables (crayfish and fish) obtained in the multivariate models with the habitat variables with each of the predator variables alone and together. Codes for species as in Table 1.

Species	Model with fish		Model with crayfish		Model with fish and crayfish			
	β (fish)	p	β (crayfish)	p	β (fish)	p	β (crayfish)	р
Plwa	-1.97	0.057	-2.44	0.010	-1.38	0.297	-2.16	0.030
Sasa	-3.44	0.059	-4 .71	0.010	-2.15	0.334	-4.52	0.021
Trbo	-1.46	0.072	-2.12	0.023	-0.59	0.540	-1.80	0.091
Trma	0.04	0.955	-1.33	0.086	0.99	0.266	-1.86	0.050
Alci	2.18	0.012	0.97	0.215	2.45	0.020	-0.48	0.645
Diga	-0.86	0.579	-0.27	0.825	-0.91	0.608	0.08	0.953
Pecu	-0.56	0.469	-2.62	0.006	0.73	0.483	-2.83	0.004
Peib	-1.89	0.110	-2.11	0.073	-0.72	0.644	-1.59	0.306
Bubu	0.16	0.822	-1.15	0.217	1.45	0.148	-2.12	0.050
Buca	-17.71	0.997	-0.71	0.549	-18.29	0.997	0.72	0.603
Hyar	-1.44	0.245	-1.89	0.197	-0.84	0.575	-1.32	0.448
Hyme	-0.35	0.816	-0.73	0.609	0.39	0.857	-1.00	0.630
Rape	0.84	0.166	0.33	0.594	1.04	0.185	-0.33	0.681