

**2000 Model**

Species	Parameter	Prior	Posterior mean	Posterior SD
Red deer	Unstructured random effect	-	-	-
	Range of the spatial field (m)	$\rho_0 = 50000, P(\rho) = 0.05$	54720.85	0.15
	Standard deviation of the spatial field	$\sigma_0 = 0.5, P(\sigma) = 0.1$	1.08	0.15
	Intercept	$\beta_0 \sim N(-4, 4)$	-3.28	0.67
	Slopes of the fixed effects	$\beta_i \sim N(0.0, 1.51)$	SM2b	SM2b
Sika deer	Unstructured random effect	-		
	Range of the spatial field (m)	$\rho_0 = 85000, P(\rho) = 0.05$	81633.91	0.15
	Standard deviation of the spatial field	$\sigma_0 = 0.1, P(\sigma) = 0.1$	1.04	0.08
	Intercept	$\beta_0 \sim N(-4, 2)$	-2.99	0.83
	Slopes of the fixed effects	$\beta_i \sim N(0.0, 2)$	SM2b	SM2b
Fallow deer	Unstructured random effect	-		
	Range of the spatial field (m)	$\rho_0 = 75000, P(\rho) = 0.05$	63576.55	0.13
	Standard deviation of the spatial field	$\sigma_0 = 2, P(\sigma) = 0.1$	1.06	0.08
	Intercept	$\beta_0 \sim N(-4, 3)$	-3.38	1.01
	Slopes for the fixed effects	$\beta_i \sim N(0.0, 3)$	SM2b	SM2b

**2006 Model**

Species	Parameter	Prior	Posterior mean	Posterior SD
Red deer	Unstructured random effect	-	-	-
	Range of the spatial field (m)	$\rho_0 = 50000, P(\rho) = 0.05$	54720.85	0.15
	Standard deviation of the spatial field	$\sigma_0 = 0.5, P(\sigma) = 0.1$	0.94	0.09
	Intercept	$\beta_0 \sim N(-4, 4)$	-2	0.15
	Slopes of the fixed effects	$\beta_i \sim N(0.0, 1.51)$	SM2b	SM2b
Sika deer	Unstructured random effect	-		
	Range of the spatial field (m)	$\rho_0 = 85000, P(\rho) = 0.05$	78433.00	0.17
	Standard deviation of the spatial field	$\sigma_0 = 0.1, P(\sigma) = 0.1$	0.93	0.08
	Intercept	$\beta_0 \sim N(-4, 2)$	-1.47	0.75
	Slopes of the fixed effects	$\beta_i \sim N(0.0, 2)$	SM2b	SM2b
Fallow deer	Unstructured random effect	-		
	Range of the spatial field (m)	$\rho_0 = 75000, P(\rho) = 0.05$	76879.92	0.13
	Standard deviation of the spatial field	$\sigma_0 = 2, P(\sigma) = 0.1$	1.09	0.13
	Intercept	$\beta_0 \sim N(-4, 3)$	-1.8	1.09
	Slopes for the fixed effects	$\beta_i \sim N(0.0, 3)$	SM2b	SM2b

**2012 Model**

Species	Parameter	Prior	Posterior mean	Posterior SD
Red deer	Unstructured random effect	-	-	-
	Range of the spatial field (m)	$\rho_0 = 50000, P(\rho) = 0.05$	59874.14	0.14
	Standard deviation of the spatial field	$\sigma_0 = 0.5, P(\sigma) = 0.1$	1.15	0.08
	Intercept	$\beta_0 \sim N(-4, 4)$	-1.91	0.66
	Slopes of the fixed effects	$\beta_i \sim N(0.0, 1.51)$	SM2b	SM2b
Sika deer	Unstructured random effect	-		
	Range of the spatial field (m)	$\rho_0 = 85000, P(\rho) = 0.05$	79221.26	0.15
	Standard deviation of the spatial field	$\sigma_0 = 0.1, P(\sigma) = 0.1$	0.81	0.09
	Intercept	$\beta_0 \sim N(-4, 2)$	-0.35	0.71
	Slopes of the fixed effects	$\beta_i \sim N(0.0, 2)$	SM2b	SM2b
Fallow deer	Unstructured random effect	-		
	Range of the spatial field (m)	$\rho_0 = 75000, P(\rho) = 0.05$	77652.58	0.08
	Standard deviation of the spatial field	$\sigma_0 = 2, P(\sigma) = 0.1$	1.01	0.13
	Intercept	$\beta_0 \sim N(-4, 3)$	-1.66	1.02
	Slopes for the fixed effects	$\beta_i \sim N(0.0, 3)$	SM2b	SM2b