

Supplementary Material

Age- and sex-dependent vigilance behaviour modifies social structure of hunted wild boar populations

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Table S1. The total amount of wild boar individuals that were recorded in nature reserves and agriculture areas during the spring and autumn of 2016-2017, including the amount of unknown individuals that were not recognized by their age or sex (piglets sex was not recorded).

Males	Females	Unknown sex (adults)	Yearlings	Unknown sex (yearlings)	Piglets	Unknown age and sex
351	479	50	456	122	661	50

Table S2. (The complete set of alternative GLMs of Table 3): Model-selection statistics of the effects of the land-use factors on the vigilance of all individuals (all sexes and ages together). Models were ranked by AICc and model weight. Only significant models and the null model (Intercept only) are presented. Agriculture (Agri), Nature reserves (Nature) and Hunting pressure (Hunting pr.).

Model	Coefficient	Estimate	Std. error	<i>z</i> value	<i>P</i> -value	Δ AICc	Weight	<i>R</i> ²
Nature cover						0.00	0.954	0.96
	Intercept	0.708	0.113	6.238	<0.001*			
	Nature cover	0.001	0.002	5.803	<0.001*			
Land use						7.20	0.032	0.93
	Intercept	0.890	0.096	-2.656	<0.001*			
	Nature/Agriculture	0.795	0.151	5.265	<0.001*			
Agri cover						7.72	0.021	0.92
	Intercept	1.777	0.127	13.989	<0.001*			
	Agriculture cover	-0.003	0.006	-5.358	<0.001*			
Hunting pr.						16.48	2.5E-04	0.83
	Intercept	1.588	0.110	14.427	<0.001*			
	Hunting pressure	-0.249	0.057	-4.375	<0.001*			
Built cover						31.34	1.4E-07	0.34
	Intercept	1.420	0.106	13.367	<0.001*			
	Built cover	-0.002	0.001	-2.163	0.036*			
Intercept only						32.77	7.3E-08	0.00
	Intercept	1.260	0.073	17.200	<0.001*			

Table S3. Model-selection statistics of the effects of the land-use factors on adult females' vigilance. Models were ranked by AICc and model weight. Only significant models and the null model (Intercept only) are presented. Agriculture (Agri), Nature reserves (Nature) and Hunting pressure (Hunting pr.).

Model	Coefficient	Estimate	Std. error	z value	P-value	Δ AICc	Weight	R^2
Nature cover						0.00	0.795	0.90
	Intercept	-0.700	0.242	-2.890	0.003*			
	Nature cover	0.003	0.006	4.739	<0.001*			
Land use						3.37	0.154	0.86
	Intercept	-0.440	0.208	-2.115	0.034			
	Nature/Agriculture	1.330	0.296	4.504	<0.001*			
Hunting pr.						5.27	0.062	0.83
	Intercept	0.836	0.204	4.100	<0.001*			
	Hunting pressure	-0.509	0.118	-4.288	<0.001*			
Agri cover						15.09	4.2E-04	0.59
	Intercept	0.823	0.238	3.450	<0.001*			
	Agriculture cover	-0.003	0.001	-3.048	0.002*			
Built cover						14.96	4.5E-04	0.59
	Intercept	0.738	0.219	3.367	<0.001*			
	Built cover	-0.007	0.002	-2.894	0.038*			
Intercept only						21.71	1.5E-05	0.00
	Intercept	0.242	0.140	1.733	0.083			

Table S4. Model-selection statistics of the effects of the land-use factors on male and female yearlings' vigilance. Models were ranked by AICc and model weight. Only significant models and the null model (Intercept only) are presented. Agriculture (Agri), Nature reserves (Nature) and Hunting pressure (Hunting pr.).

Model	Coefficient	Estimate	Std. error	z value	P-value	Δ AICc	Weight	R^2
Agri cover						0.00	0.998	0.92
	Intercept	2.510	0.283	8.845	<0.001*			
	Agriculture cover	-0.008	0.001	-5.110	<0.001*			
Land use						19.21	6.7E-05	0.57
	Intercept	0.945	0.186	5.077	<0.001*			
	Nature/Agriculture	0.866	0.288	3.005	0.002*			
Nature cover						19.31	6.4E-05	0.57
	Intercept	0.818	0.218	3.747	<0.001*			
	Nature cover	0.002	0.005	2.954	0.003*			
Built cover						22.64	1.2E-05	0.41
	Intercept	1.676	0.195	8.586	<0.001*			
	Built cover	-0.004	0.001	-2.504	0.012*			
Hunting pr.						23.55	7.6E-06	0.36
	Intercept	1.671	0.207	8.050	<0.001*			
	Hunting pressure	-0.231	0.104	-2.223	0.026*			
Intercept only						25.48	2.9E-06	0.00
	Intercept	1.362	0.140	9.727	<0.001*			

Table S5. Model-selection statistics of the effects of the land-use factors on male yearlings' vigilance. Models were ranked by AICc and model weight. Only significant models and the null model (Intercept only) are presented. Agriculture (Agri), Nature reserves (Nature) and Hunting pressure (Hunting pr.).

Model	Coefficient	Estimate	Std. error	<i>z</i> value	<i>P</i> -value	Δ AICc	Weight	<i>R</i> ²
Agri cover						0	0.974	0.83
	Intercept	2.397	0.420	5.705	<0.001*			
	Agriculture cover	-0.009	0.002	-4.065	<0.001*			
Land use						7.57	0.024	0.67
	Intercept	0.405	0.263	1.539	0.123			
	Nature/Agriculture	1.504	0.461	3.259	0.001*			
Nature cover						9.61	0.011	0.60
	Intercept	0.245	0.313	0.783	0.433			
	Nature cover	0.005	0.008	2.965	0.003*			
Hunting pr.						11.95	2.5E-03	0.50
	Intercept	1.671	0.342	4.887	<0.001*			
	Hunting pressure	-0.440	0.164	-2.674	0.007*			
Built cover						12.15	2.2E-03	0.49
	Intercept	1.611	0.311	5.179	<0.001*			
	Built cover	-0.007	0.002	-2.626	0.008*			
Intercept only						16.48	2.5E-04	0.00
	Intercept	1.034	0.205	5.024	<0.001*			

Table S6. Summary table with the number of occurrences of each social group recorded in each site in nature reserves and agricultural areas during the two-year camera census efforts in the spring and autumn of 2016–2017. Nature reserves (Nature).

Site	Land use	Family group	Group of subadults	Mixed group	Solitary adult female	Solitary adult male	Solitary subadult
1	Nature	15	10	3	3	8	4
2	Nature	4	2	3	0	2	5
3	Agriculture	7	2	4	6	4	2
4	Agriculture	3	13	2	1	5	7
5	Nature	12	7	2	5	1	8
6	Agriculture	3	3	4	0	7	2
7	Agriculture	2	3	2	2	4	5
8	Agriculture	6	2	1	1	3	2
9	Agriculture	3	2	3	2	9	2
10	Nature	6	10	6	4	11	7
11	Nature	8	2	2	2	3	3

Table S7. (The complete set of alternative GLMs of Table 4): Model-selection statistics of the effects of the land-use factors on the ratio of adult males to family groups in autumn. Models were ranked by AICc and model weight. Only significant models and the null model (Intercept only) are presented. Agriculture (Agri), Nature reserves (Nature) and Hunting pressure (Hunting pr.).

Model	Coefficient	Estimate	Std. error	<i>z</i> value	<i>P</i> -value	Δ AICc	Weight	<i>R</i> ²
Built areas						0.00	0.989	0.80
	Intercept	-2.217	0.681	-3.254	0.001			
	Built areas	0.003	0.002	3.386	<0.001*			
Land use						11.25	3.6E-03	0.39
	Intercept	0.693	0.500	1.386	0.165			
	Nature/Agri	-1.386	0.621	-2.230	0.025*			
Agri cover						11.39	3.3E-03	0.39
	Intercept	-0.993	0.467	-2.123	0.033*			
	Agriculture cover	0.005	0.002	2.105	0.035*			
Hunting pr.						12.10	2.3E-03	0.34
	Intercept	-0.637	0.362	-1.758	0.078			
	Hunting pressure	0.502	0.246	2.038	0.041*			
Intercept only						13.48	1.2E-03	0.00
	Intercept	-0.196	0.281	-0.699	0.485			