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**Supplementary material**

## **Electronic Supplementary Material**

**Contrasting patterns of *Campylobacter* and *Salmonella* distribution  
in wild birds: a comparative analysis**

Table A1. Coefficient estimates and corresponding 95% credibility limits (CL) for ecological and life-history predictors of *Campylobacter* occurrence (zero-inflated Poisson distribution) in birds, as assessed with full Bayesian Phylogenetic Mixed Model. All values were averaged across 100 different phylogenies. Significant coefficients are marked in bold.

Predictors	Estimate	Lower 95% CL	Upper 95% CL	P
Age (nestlings vs. adults)	-0.14	-1.09	0.84	0.80
Clutch size	-0.09	-0.25	0.07	0.27
<b>Incubation period</b>	<b>-0.07</b>	<b>-0.13</b>	<b>-0.01</b>	<b>0.018</b>
<b>Residual lifespan</b>	<b>1.24</b>	<b>0.41</b>	<b>2.07</b>	<b>0.003</b>
<b>Log body mass</b>	<b>1.18</b>	<b>0.49</b>	<b>1.88</b>	<b>0.001</b>
Migratoriness (short-distance vs. resident)	-0.31	-1.05	0.44	0.42
Migratoriness (long-distance vs. resident)	-0.07	-0.88	0.72	0.87
Sociality (semi-social vs. solitary)	-0.66	-1.41	0.08	0.084
<b>Sociality (social vs. solitary)</b>	<b>-0.87</b>	<b>-1.73</b>	<b>-0.02</b>	<b>0.044</b>
Urbanization (semi-urban vs. non-urban)	-0.22	-0.90	0.45	0.53
Urbanization (urban vs. non-urban)	0.50	-0.20	1.19	0.16
Diet (vegetation vs. invertebrates)	-0.16	-1.07	0.78	0.75
Diet (omnivore vs. invertebrates)	0.64	-0.16	1.43	0.11
Diet (vertebrates vs. invertebrates)	0.31	-0.58	1.20	0.51
Habitat (ocean vs. grassland)	-0.77	-2.76	1.22	0.46
Habitat (wetland vs. grassland)	-0.11	-1.78	1.55	0.90
Habitat (shrubland vs. grassland)	-1.13	-2.79	0.51	0.18
Habitat (woodland vs. grassland)	-0.72	-2.18	0.75	0.34
Habitat (various vs. grassland)	0.36	-1.22	1.94	0.67
Season (spring vs. winter)	-0.26	-1.02	0.48	0.50
Season (summer vs. winter)	0.14	-0.61	0.88	0.72
Season (autumn vs. winter)	0.68	-0.18	1.53	0.12
<b>Season (non-specified vs. winter)</b>	<b>-0.96</b>	<b>-1.58</b>	<b>-0.34</b>	<b>0.002</b>
Region (Cont. Europe vs. Antarctic)	0.87	-0.61	2.35	0.25
Region (Mediterranean R. vs. Antarctic)	0.21	-1.26	1.67	0.80
Region (Scandinavia vs. Antarctic)	-0.36	-1.90	1.23	0.66
Region (N America vs. Antarctic)	0.09	-1.40	1.58	0.92
Region (E Asia vs. Antarctic)	-0.26	-1.75	1.22	0.74
<b>Region (Others vs. Antarctic)</b>	<b>1.76</b>	<b>0.26</b>	<b>3.28</b>	<b>0.022</b>
<b>Year</b>	<b>-0.04</b>	<b>-0.06</b>	<b>-0.01</b>	<b>0.003</b>
Sampling method (faeces vs. swabs)	-0.27	-0.84	0.31	0.36
Sampling method (intestinal content vs. swabs)	-0.20	-0.93	0.51	0.59
<b>Sample size</b>	<b>0.004</b>	<b>0.003</b>	<b>0.005</b>	<b>&lt;0.001</b>

Table A2. Coefficient estimates and corresponding 95% credibility limits (CL) for ecological and life-history predictors of *Salmonella* occurrence in birds (zero-inflated Poisson distribution), as assessed with full Bayesian Phylogenetic Mixed Model. All values were averaged across 100 different phylogenies. Significant coefficients are marked in bold.

Predictors	Estimate	Lower 95% CL	Upper 95% CL	P
<b>Age (nestlings vs. adults)</b>	<b>1.86</b>	<b>0.71</b>	<b>2.99</b>	<b>0.001</b>
Clutch size	-0.04	-0.26	0.19	0.76
Incubation period	-0.03	-0.10	0.05	0.50
Residual lifespan	-0.02	-1.07	1.04	0.98
<b>Log body mass</b>	<b>1.08</b>	<b>0.10</b>	<b>2.10</b>	<b>0.034</b>
Migratoriness (short-distance vs. resident)	-0.52	-1.42	0.41	0.27
Migratoriness (long-distance vs. resident)	0.48	-0.54	1.51	0.37
<b>Sociality (semi-social vs. solitary)</b>	<b>1.49</b>	<b>0.48</b>	<b>2.52</b>	<b>0.004</b>
Sociality (social vs. solitary)	0.33	-0.86	1.52	0.60
<b>Urbanization (semi-urban vs. non-urban)</b>	<b>1.75</b>	<b>0.98</b>	<b>2.52</b>	<b>&lt;0.001</b>
<b>Urbanization (urban vs. non-urban)</b>	<b>1.29</b>	<b>0.33</b>	<b>2.26</b>	<b>0.008</b>
Diet (vegetation vs. invertebrates)	-0.39	-1.74	1.03	0.60
Diet (omnivore vs. invertebrates)	0.14	-1.05	1.35	0.83
Diet (vertebrates vs. invertebrates)	0.60	-0.60	1.81	0.33
Habitat (ocean vs. grassland)	0.03	-2.28	2.38	0.98
Habitat (wetland vs. grassland)	1.03	-0.93	3.03	0.31
Habitat (shrubland vs. grassland)	0.09	-1.94	2.08	0.94
Habitat (woodland vs. grassland)	-0.34	-2.03	1.36	0.71
Habitat (various vs. grassland)	-0.49	-2.27	1.32	0.61
Season (spring vs. winter)	-0.98	-2.10	0.15	0.087
Season (summer vs. winter)	0.04	-0.94	1.03	0.94
Season (autumn vs. winter)	-0.44	-1.51	0.61	0.43
Season (non-specified vs. winter)	-0.22	-0.94	0.47	0.55
Region (Cont. Europe vs. Antarctic)	1.84	-1.35	5.01	0.26
Region (Mediterranean R. vs. Antarctic)	1.88	-1.28	5.07	0.25
Region (Scandinavia vs. Antarctic)	1.21	-2.06	4.55	0.48
Region (N America vs. Antarctic)	1.95	-1.27	5.19	0.24
<b>Region (E Asia vs. Antarctic)</b>	<b>3.95</b>	<b>0.40</b>	<b>7.58</b>	<b>0.031</b>
Region (Others vs. Antarctic)	2.48	-0.60	5.61	0.12
<b>Year</b>	<b>0.04</b>	<b>0.01</b>	<b>0.06</b>	<b>0.004</b>
Sampling method (faeces vs. swabs)	-0.02	-0.67	0.61	0.94
Sampling method (intestinal content vs. swabs)	0.57	-0.30	1.46	0.21
<b>Sample size</b>	<b>0.001</b>	<b>0.001</b>	<b>0.002</b>	<b>&lt;0.001</b>

Figure A1. Number of *Campylobacter* (green colour, A) and *Salmonella* (blue colour, B) prevalence estimates compiled for wild bird species from different biogeographical regions. The number of sampled bird species is indicated by dark area, while the total number of prevalence estimates is indicated by the total (light and dark) area.

