

Supplementary material

Aleksi Lehikoinen, Sara Fraixedas, Daniel Burgas, Heikki Eriksson, Heikki Henttonen, Hanna Laakkonen, Petteri Lehikoinen, Joonas Lehtomäki, Jenni Leppänen, Sanna Mäkeläinen, Jukka Niemimaa, Mari Pihlajaniemi, Jarkko Santaharju & Kaisa Välimäki: The impact of weather and the phase of the rodent cycle on breeding populations of waterbirds in Finnish Lapland. — *Ornis Fennica* 93: 31–46.

Supplement 1. Estimated coefficients \pm SE of the species-specific analyses where the annual change in bird numbers has been modelled in response to annual variation in both rainfall (year before; ducks only) and density dependence, and to annual variation in rodent abundance (year before in ducks; same year in waders) and density dependence. Statistically significant ($\alpha = 0.05$) coefficients and SEs are indicated with bold font.

Duck species	Rain _{t-1}	Density	Rodent _{t-1}	Density
Long-tailed Duck (<i>Clangula hyemalis</i>)	-0.391 \pm 0.169	-0.025 \pm 0.024	0.264 \pm 0.140	-0.037 \pm 0.024
Common Teal (<i>Anas crecca</i>)	-0.419 \pm 0.290	-0.037 \pm 0.094	0.295 \pm 0.193	-0.084 \pm 0.075
Greater Scaup (<i>Aythya marila</i>)	-0.092 \pm 0.162	-0.170 \pm 0.089	0.069 \pm 0.148	-0.122 \pm 0.098
Wader species	Rain _{t-1}	Density	Rodent _t	Density
Common Ringed Plover (<i>Charadrius hiaticula</i>)	–	–	0.137 \pm 0.058	-0.088 \pm 0.015
Eurasian Dotterel (<i>Charadrius morinellus</i>)	–	–	0.211 \pm 0.429	0.233 \pm 0.188
Wood Sandpiper (<i>Tringa glareola</i>)	–	–	0.338 \pm 0.264	-0.164 \pm 0.146
Ruff (<i>Calidris pugnax</i>)	–	–	0.513 \pm 0.337	-0.107 \pm 0.128
Temminck's Stint (<i>Calidris temminckii</i>)	–	–	0.435 \pm 0.190	-0.095 \pm 0.066
Dunlin (<i>Calidris alpina</i>)	–	–	0.478 \pm 0.108	-0.080 \pm 0.023
Red-necked Phalarope (<i>Phalaropus lobatus</i>)	–	–	0.250 \pm 0.066	-0.060 \pm 0.007