

## Supplementary Materials

### **Evaluating the use of ecological subsidies by Arctic foxes without direct coastal access; insights from stable isotopes**

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**Table S1** Stable isotope data (mean  $\pm$  sd of  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$ ) for potential prey species, including the data sources.

Species	Group	n	$\delta^{13}\text{C}$ (‰)	$\delta^{15}\text{N}$ (‰)	Source
<i>Lemmus lemmus</i> (L., 1758)	Terrest non-migratory	78	-27.8 $\pm$ 0.7	1.6 $\pm$ 0.7	Ehrich et al. 2015
<i>Microtus oeconomus</i> (Pallas, 1796)	Terrest non-migratory	40	-27.5 $\pm$ 0.6	2.8 $\pm$ 1.3	Ehrich et al. 2015
<i>Myodes rufocanus</i> (Sundevall, 1846)	Terrest non-migratory	66	-26.5 $\pm$ 0.6	1.0 $\pm$ 1.0	Ehrich et al. 2015
<i>Lepus timidus</i> (L., 1758)	Terrest non-migratory	6	-26.6 $\pm$ 0.3	3.6 $\pm$ 0.2	Ehrich et al. 2015
<i>Rangifer tarandus</i> (L., 1758)	Terrest non-migratory	13	-25.2 $\pm$ 1.1	2.3 $\pm$ 1.4	Ehrich et al. 2015
<i>Lagopus lagopus</i> (L., 1758)	Terrest non-migratory	16	-25.6 $\pm$ 0.7	1.2 $\pm$ 0.7	Ehrich et al. 2015
<i>Lagopus muta</i> (Montin, 1781)	Terrest non-migratory	6	-25.1 $\pm$ 0.9	1.1 $\pm$ 1.2	Ehrich et al. 2015
<i>Anthus pratensis</i> (L., 1758)	Terrest migratory	8	-25.4 $\pm$ 1.7	4.9 $\pm$ 0.6	Ehrich et al. 2015
<i>Oenanthe oenanthe</i> (L., 1758)	Terrest migratory	1	-24.3	5.8	Ehrich et al. 2015
<i>Calidris alpina</i> (L., 1758)	Marine	55	-14.2 $\pm$ 0.9	13.8 $\pm$ 1.1	Bocher et al. 2014
<i>Tringa totanus</i> (L., 1758)	Marine	21	-17.2 $\pm$ 0.9	11.6 $\pm$ 2.1	Bocher et al. 2014
<i>Limosa lapponica</i> (L., 1758)	Marine	15	-13.5 $\pm$ 0.7	14.1 $\pm$ 0.9	Bocher et al. 2014
<i>Numenius arquata</i> (L., 1758)	Marine	13	-13.6 $\pm$ 1.3	14.4 $\pm$ 0.7	Bocher et al. 2014

**Table S2** Abundance of small rodents in Vindelfjällen and Hudson Bay estimated from snap trapping (Vindelfjällen), live trapping (Hudson Bay) and direct observations of lemmings as well as lemming nests (Vindelfjällen). Snap trapping data comes from Eckert and Hörnfeldt (2022) and are presented as the average trapping index (animals per 100 trap nights) for spring (May-June) and fall (August-September) trapping sessions. Direct observations of lemmings and lemming winter nests are presented as animals or nests observed per 100km transects, and comes from our own censuses made during July and August. The live trapping data from Hudson Bay are presented as densities (animals per ha) estimated from mark-recapture, and are presented in Roth (2002).

	Trapping			Lemming observations			Abundance
	<i>M. glareolus</i>	<i>M. rufocanus</i>	<i>M. agrestis</i>	lemming*	alive	nests	
<b>Vindelfjällen</b>							
1995	3.91	0.91	0.72	0.31	1.05	17.44	low
1996	3.42	0.91	0.88	0.94	2.06	52.71	high
1997	3.21	0.7	0.41	0.25	0.41	17.66	low
1998	1.90	0.46	0.22	0.01	0.14	33.88	low
1999	No data	No data	No data	No data	0.01	10.71	low
2000	No data	No data	No data	No data	0.19	6.48	low
2001	6.22	2.53	3.98	1.12	12.62	57.59	high
<b>Hudson Bay</b>							
1994				12.55			high
1995				0.93			low
1996				0.46			low
1997				2.78			low

\* *L. lemmus* in Vindelfjällen and *D. richardsoni* (Merriam, 1900) in Hudson Bay.

## References

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