

Supplementary Material

High trophic niche overlap between a native and invasive mink does not drive trophic displacement of the native mink during an invasion process

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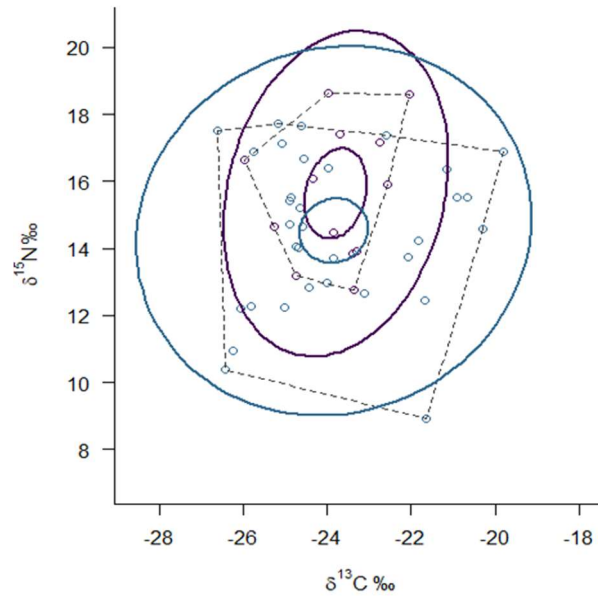


Figure S1. Stable isotope Bayesian ellipses (solid lines) represent the trophic niche overlap between the sexes for the American mink based on standard ellipses corrected for small sample sizes (SEAc), with a 95% confidence interval for the means of each species. SEAc represents the core niche area of each group, while the convex hulls represent the overall niche diversity and encompass all data points. Each circle represents an individual mink. Males and females are represented in blue and purple, respectively.

Table S1. Ratios of stable isotopes of carbon and nitrogen (mean $\pm$ standard deviation) of potential prey of the American and European mink in the two analysed regions.

Sample			n	δ ¹⁵ N (mean ± SD)	δ ¹³ C (mean ± SD)
Species	Common name	Family			
Catalonia					
Crustaceans					
<i>Procambarus clarkii</i>	American crayfish	Cambaridae	3	13.4 ± 0.6	-24.9 ± 3.6
Fish					
<i>Barbus meridionalis</i>	Western Mediterranean barbel	Cyprinidae	1	16.6	-29.3
<i>Cyprinus carpio</i>	Common carp	Cyprinidae	1	14.1	-24.1
<i>Gobio gobio</i>	Gudgeon	Cyprinidae	5	16.4 ± 0.3	-24.4 ± 0.9
<i>Parachondrostoma miegii</i>	Ebro nase	Cyprinidae	1	15.6	-24.1
<i>Phoxinus phoxinus</i>	Eurasian minnow	Cyprinidae	6	16.4 ± 1.5	-25.0 ± 0.6
<i>Squalius laietanus</i>	Ebro chub	Cyprinidae	1	14.9	-29.4
Birds					
<i>Aegithalos caudatus</i>	Long-tailed tit	Aegithalidae	10	10.9 ± 0.7	-24.8 ± 0.8
<i>Cyanistes caeruleus</i>	Eurasian blue tit	Paridae	2	6.7 ± 5.9	-22.3 ± 1.8
<i>Erithacus rubecula</i>	European robin	Muscicapidae	3	5.1 ± 2.8	-24.0 ± 0.9
<i>Fringilla coelebs</i>	Common chaffinch	Fringillidae	1	8.51	-16.56
<i>Regulus regulus</i>	Goldcrest	Sylviidae	1	4.73	-25.70
<i>Sylvia melanocephala</i>	Sardinian warbler	Sylviidae	1	10.21	-22.93
<i>Troglodytes troglodytes</i>	Eurasian wren	Troglodytidae	1	7.07	-26.27
Mammals					
<i>Apodemus sylvaticus</i>	Long-tailed field mouse	Muridae	5	6.1 ± 1.3	-24.8 ± 0.6
<i>Mus spretus</i>	Algerian mouse	Muridae	5	5.2 ± 1.9	-24.2 ± 1.7

La Rioja

Crustaceans

<i>Procambarus clarkii</i>	American crayfish	Cambaridae	7	12.4 ± 1.0	-26.0 ± 1.0
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Fish

<i>Cyprinus carpio</i>	Common carp	Cyprinidae	2	12.4 ± 0.5	-25.6 ± 0.0
<i>Gobio gobio</i>	Gudgeon	Cyprinidae	5	13.6 ± 0.9	-24.4 ± 0.4
<i>Parachondrostoma miegii</i>	Ebro nase	Cyprinidae	5	14.3 ± 0.5	-26.2 ± 0.4
<i>Phoxinus phoxinus</i>	Eurasian minnow	Cyprinidae	5	14.1 ± 0.5	-24.6 ± 0.4
<i>Salmo trutta</i>	Brown trout	Salmonidae	5	14.8 ± 0.7	-23.1 ± 1.8

Birds

<i>Cettia cetti</i>	Cetti's warbler	Scotocercidae	1	15.85	-26.37
<i>Cisticola juncidis</i>	Zitting cisticola	Cisticolidae	1	11.23	-23.42
<i>Cyanistes caeruleus</i>	Eurasian blue tit	Paridae	3	3.4 ± 0.3	-24.1 ± 1.4
<i>Emberiza schoeniclus</i>	Reed bunting	Emberizidae	1	7.82	-16.68
<i>Erithacus rubecula</i>	European robin	Muscicapidae	3	4.8 ± 0.3	-25.1 ± 0.7
<i>Miliaria calandra</i>	Corn bunting	Emberizidae	2	7.9 ± 0.1	-22.7 ± 0.0
<i>Panurus biarmicus</i>	Bearded reedling	Panuridae	4	12.2 ± 1.2	-28.6 ± 1.4
<i>Phylloscopus collybita</i>	Common chiffchaff	Phylloscopidae	3	9.3 ± 3.7	-25.0 ± 1.2
<i>Prunella modularis</i>	Dunnock	Prunellidae	1	3.65	-23.22
<i>Sylvia atricapilla</i>	Eurasian blackcap	Sylviidae	5	6.7 ± 3.8	-24.7 ± 2.0
<i>Sylvia melanocephala</i>	Sardinian warbler	Sylviidae	2	11.6 ± 0.1	-23.0 ± 0.5
<i>Turdus merula</i>	Eurasian blackbird	Turdidae	1	12.03	-23.79
<i>Turdus philomelos</i>	Song thrush	Turdidae	4	8.1 ± 2.3	-23.7 ± 1.0

Mammals

<i>Apodemus sylvaticus</i>	Long-tailed field mouse	Muridae	5	9.4 ± 1.8	-25.0 ± 1.5
<i>Crocidura russula</i>	White-toothed shrew	Soricidae	1	10.02	-24.81
<i>Mus spretus</i>	Algerian mouse	Muridae	5	9.2 ± 1.9	-24.3 ± 1.3

Table S2. Mean $\delta^{15}\text{N}$ and $\delta^{13}\text{C}$ values $\pm$ SD of hair samples from American and European mink in allopatric and sympatric populations.

	American mink				European mink			
	Females		Males		Females		Males	
	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	$\delta^{13}\text{C}$
Allopatric	15.6 ± 1.9	-23.7 ± 1.1	14.5 ± 2.3	-23.8 ± 1.9	14.8 ± 1.6	-23.6 ± 1.2	14.3 ± 1.1	-22.6 ± 1.4
Sympatric	14.1 ± 1.7	-23.1 ± 0.6	13.9 ± 1.9	-22.6 ± 1.4	13.8 ± 1.1	-23.1 ± 1.3	13.7 ± 1.7	-23.1 ± 1.7