

Supplemental materials

First insight into the spatial and foraging ecology of the critically endangered Balkan lynx (*Lynx lynx balcanicus*, Buresh 1941)

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Table S1. Trapping effort. Number of activations represents the total number the traps were triggered, including lynx captures, by-catches, missed opportunities for lynx captures, as well as false triggers due to weather or trigger malfunction. M01 and M02 were captured with foot-snares 8 months after their initial capture.

Year	Box-traps			Foot-snares		
	No. of traps	No. of trapping days	No. of activations	Lynx captures	No. of trapping days	Lynx captures
2010	6	270	8	M01	1	M01
2011	7	415	11	/	2	/
2012	7	294	9	M02, M03	3	M02
2013	3	51	4	/	0	/
2014	4	263	8	/	0	/
2015	3	160	3	M03	0	/
2016	6	231	7	M04 (x2)	1	/
2017	7	308	8	/	1	F01
2018	6	295	9	F01	2	/
2019	9	559	30	M05	1	M06

Table S2. Age and biometric measurements of the radio-collared lynx. Age was estimated comparing the colour and tooth wear according to Marti & Ryser-Degiorgis (2018).

	(years old)estimated age at first capture	weight (kg)	body length (cm)	neck size (cm)	aperture (cm)distance anus-genital	tarsus (cm)	(cm)upper canines distance	(cm) lower canines distance	tail length (cm)	ear (cm)	ear tuft (cm)
M01	3-4	25	105	/	6.50	28	/	2.90	21	8.3	4
M02	2-4	18	98	33	6.50	/	3.00	2.80	18	9	4.50
M03	5-6	19	100	31	5.50	25	3.40	2.80	19	9	5
M04	3y7m*	24	103	32	7.50	23	3.30	2.90	19	8	4
M05	8+	27	98	36	5.50	24	3.20	2.90	/	9	5
M06	2-3	20	103	31.5	7.0	24	3.20	2.80	17	11	4.5
F01	3-5	19	98	30	3.50	23.50	3	2.80	16.50	9	4

*Exact date of M04 is given since he was captured on a camera-trap with his mother as a juvenile.

Table S3. Captures and the summary of the fixes of five GPS-collared Balkan lynx. Expected fixes column represents the total amount of GPS fix attempts from the deployment to the day when the GPS battery got exhausted. The “% of Success” column represents the relation between the Successful and Expected fixes.

Lynx	Capture	Recapture	Last GPS fix	Surveyed period (days)	Expected fixes	Successful fixes	% of success
M01	14.03.2010	23.10.2010	26.01.2011	302	1120	887	79.2
M02	05.03.2012	06.11.2012	29.11.2012	259	1071	682	63.7
M03	31.10.2012	19.03.2015	18.07.2015	173	673	593	88.1
M04	04.02.2016	/	11.07.2016	158	906	744	82.1
M05	09.02.2019	/	30.12.2019	324	1297	1230	94.8
M06	27.02.2019	/	26.02.2020	364	1453	1337	92.0
F01	18.02.2017	21.02.2018	27.11.2018	641	2458	2263	92.1
Total				2221	8978	7736	84.6*

* Average success

Table S4. Number of documented prey species for each radio-collared lynx.

Prey species	M01	M02	M03	M04	M05	M06	F01
Roe deer	15	16	13	15	9	17	22
Chamois	6	/	/	/	/	5	/
Brown hare	4	2	3	/	9	/	9
Stone marten	/	4	/	/	/	/	/
Red fox	/	3	/	/	/	1	/

Table S5. Corine Land Cover (CLC) description of the habitat types with corresponding code and the grouped habitat types selected for the Resource Selection Index.

CLC2018 Code	CLC2018 Description	Grouped habitat types
243	Agriculture with significant natural vegetation	Agriculture with significant natural vegetation
231	Pastures	Grassland, heathland and moors
321	Natural grasslands	
322	Moors and heathland	
311	Broad-leaved forest	Forests
312	Coniferous forest	
313	Mixed forest	
324	Transitional woodland-shrub	Transitional woodland-shrub
112	Discontinuous urban fabric	OTHER: cropland, urban areas, sparsely vegetated land and water
121	Industrial or commercial units	
131	Mineral extraction sites	
132	Dump sites	
211	Non-irrigated arable land	
242	Complex cultivation patterns	
331	Beaches dunes sands	
333	Sparsely vegetated areas	
512	Water bodies	