

Systematic monitoring of wolves by camera traps National Parks Bohemian and Saxon Switzerland REPORT – ongoing results III.

Schedule of the monitoring campaign: 22nd April – 29th May 2019

Number of camera trap stations: Forty-five (45) camera traps (*Spypoint Force 11-D*) installed as one camera per station in the regular grid (one camera trap per 1.25 km²).

Total number of trap days: 1367

Number of recorded mammalian species: 14

Species	No. of events	RAI	Naïve occupancy	No. of events	RAI	Naïve occupancy
<i>Cervus elaphus</i>	241	17,63	0,90	253	19,15	0,74
<i>Homo sapiens</i>	163	11,92	0,36	197	14,91	0,52
<i>Capreolus capreolus</i>	107	7,83	0,85	177	13,4	0,71
<i>Vulpes vulpes</i>	83	6,07	0,59	90	6,81	0,38
<i>Sus scrofa</i>	81	5,93	0,62	32	2,42	0,38
<i>Martes sp.</i>	29	2,12	0,41	29	2,2	0,33
<i>Lepus europaeus</i>	16	1,17	0,13	5	0,38	0,05
<i>Sciurus vulgaris</i>	10	0,73	0,15	5	0,38	0,12
<i>Meles meles</i>	9	0,66	0,10	30	2,27	0,26
<i>Rupicapra rupicapra</i>	8	0,59	0,13	5	0,38	0,1
<i>Canis lupus</i>	4	0,29	0,08	3	0,23	0,07
<i>Dama dama</i>	4	0,29	0,05	7	0,53	0,05
<i>Mustela putorius</i>	3	0,22	0,05	14	1,06	0,14
small rodents	2	0,15	0,03	0	-	-
<i>Nyctereutes procyonoides</i>	0	-	-	1	0,08	0,02

Legend:

Data in italic on the right are from the survey conducted in vegetation period in the year of 2018. Differences in RAI between seasons are marked in **bold red** for species with more than 30 events.

Event is a record of animal with a minimum of one-hour-long gap from following record (event). It is always the first picture of the animal from its photo sequence. Both, one photo or the sequence of photos of the same individual or species is considered as one event.

Relative abundance index ($RAI = \text{number of events} / \text{total number of camera trap days} * 100$)

Naïve occupancy (= number of camera trap stations that recorded the species / total number of camera trap stations)

Results comments

The table compares the results conducted in the same vegetation period in two different years, 2018 and 2019. RAI doesn't specify the number of individuals but their relative abundance compared to other animal species, to the length of the study, to the study location, and to the study season. The more number of events of the species, the more

detectable change in the specified area could occur. The relative abundance index of red deer as the most often recorded animal didn't change between the two monitored years. We can see the decrease 1.7-fold for *Capreolus capreolus*, 3.4-fold for *Meles meles*, 1.8-fold for *Dama dama*, and 4.8-fold for *Mustela putorius*. On the other hand the relative abundance index increased 2.5 for *Sus scrofa* and 3-fold for *Lepus europaeus*. Given the results of past campaigns, we find it interesting to note that people are recorded on fewer camera traps (36% vs. 52% camera traps). Compared to last year, *Nyctereutes procyonoides* was not registered.

Appendix 1.

Schematic map of camera trap stations (green points in circles)

