Scavengers at a carcass of wild boar (*Sus scrofa*) in winter

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Abstract: After a fresh carcass of a wild boar (*Sus scrofa*) was discovered in a northwest-Polish woodland in winter, a trapcam was installed to record the scavenging process. The carcass was monitored until it had disappeared two months later. It was scavenged by twelve species, of which red fox (*Vulpes vulpes*), common raccoon dog (*Nyctereutes procyonoides*) and common buzzard (*Buteo buteo*) were the most frequently recorded. Scavenging intensified after substantial opening of the carcass and during spells of cold weather or snow cover. In some cases individuals or species were observed together more often than expected, despite frequent antagonistic behaviour.

Keywords: scavenger, wild boar, *Sus scrofa*, camera trap, competition, Poland.

Introduction

In terms of mass, animal carcasses may be a relatively small part of the total detritus pool, but for some species or individuals they may be an important food source, at least during periods when other food resources are scarce or inaccessible. Scavenging has always been difficult to study in detail, especially when it occurs at night or in a closed landscape such as a woodland. What exactly happens at a carcass used to be studied through indirect evidence, such as reading tracks (Selva et al. 2005) and recording the disposal of a carcass over time, rather than describing the real time behaviour of scavengers (DeVault et al. 2003). The advent of trapcams has heralded a step change, allowing descriptive studies of disarticulation, scattering and removal of carcasses by vertebrate scavengers (Young et al. 2014, Probst et al. 2019). In the present study a trapcam was used to register the decomposition of a natural cadaver of a wild boar (*Sus scrofa*) in winter. The study focuses on changes in scavenging intensity and scavenging guild through the course of time and related to weather conditions as well as on intra- and interspecific interactions among scavengers.

Methods

The fresh carcass of a female wild boar in apparently normal condition was discovered on 27 December 2017. The estimated weight was 60 kg. Cause of death was unknown, and wounds that could have indicated killing by a predator or a gunshot were absent.

The carcass was found at the foot of a forested hill, bordering a small peat bog (53.8345°N, 16.2093°E, 100 m a.s.l.) near the village of Borzęcino in NW-Poland. The local woodland here is half open, consisting of mainly Scots pine (*Pinus sylvestris*), oak (pedunculated and sessile) (*Quercus robur/petraea*), beech (*Fagus sylvatica*) and some Norway spruces (*Picea abies*). The surrounding area is slightly hilly, and consists of large tracts of woodland interspaced with fields, meadows, hamlets and villages. Soils are sandy, nutrient-poor and dry, apart from peat

bogs and brook valleys. The location of the cadaver was 163 m away from the nearest arable field, 1170 m from the nearest inhabited house and 2400 m from the nearest village of 30 houses and a lumber mill.

On 27 December a Bushnell Trophy Cam was placed at 2 m from the carcass with a view width of 2.5 m at 2 m distance. It was triggered by motion and set to take one photo, followed by a 10 second pause. On 7 January 2018 memory card and batteries were replaced. The camera was removed on 25 February, when the carcass had disappeared. The camera took 4496 pictures, only two of which did not show a recognisable scavenger. On 229 photo a second species could be identified and on eight a third species, totalling 4731 time/species events.

Identification of visitors at the carcass was in most cases straightforward, except differentiation between yellow-necked mouse (*Apodemus flavicollus*) and wood mouse (*A. sylvaticus*), both of which occur in the region. In the results they are listed as *A. flavicollus*.

Each time/species event was filed as a record, with precise date and time. Daily minimum temperature (recorded by the trapcam) and snow cover were recorded in and read from the pictures.

In order to be able to analyse scavenging intensity through the course of the day and relative to sunrise and sunset, an Hourly Scavenging Index (HSI) was calculated by taking the maximum number of individuals per species recorded on a single picture during a certain hour. To calculate the scavenging intensity in the course of the study period, a Daily Scavenging Index (DSI) was calculated by summing HSI per species per calendar day.

To calculate the duration of a foraging session of an individual or a group of scavengers, start and end time of nonstop series of images with the same species were calculated. A series of the same individual was defined as nonstop when intervals between consecutive images were 15 minutes or less.

To calculate the probability of co-occurrence of two species on one photo the general product-rule was applied, in which the total number of pictures represented pool size. In this way the expected co-occurrence of species was calculated and compared to the actual number of photos showing the two species together. The significance of the difference between expected and observed number was tested using a Chi^2-test. For measuring the difference between scavenging intensity on days with and without snow cover the a two-tailed Z-test was applied, assuming HSI might be higher as well as lower on days with snow cover. The relationship between temperature and scavenging intensity was calculated by applying a regression analysis. Calculations were done in Microsoft Excel.

Results

The carcass

When found on 27 December 2017 the carcass was almost intact, apart from a small hole (3 cm) in the lower belly near the genitalia. The boar may have been dead for several days and was lying on its right side. On 9 January the abdominal cavity had been emptied through the enlarged hole and a passage to the anus, the latter proved by a yellow-necked mouse that peeped out of the anus with its brightly reflecting eye. Also on this day, parts of the contents of the thoracic cavity had been consumed. On 13 January the thoracic cavity seemed to be empty. On 16 January the flesh from the ribs at the left (upper) side was consumed. On 17 January some flesh was taken from the chest and forelegs. On 21 January the hind legs were partly eaten, from the side of the belly. On 26 January the forelegs were fully eaten (removed). On 2 February the backbone was detached from the skin and on 3 February the hind legs had been completely defleshed. On this date the carcass consisted of skeleton and strips of skin, probably with some remains of flesh. On 8 February the carcass was briefly beyond the view of

Parameter/Species		Days	Max ind.	Max DSI	Pattern DSI 27 dec - 23 feb
Snow cover		18			
Minimum temperature (min=-10, max=6°C)					
Carcass visible		45			
White-tailed eagle	*Haliaeetus albicilla*	2	1	2	
Common buzzard	*Buteo buteo*	24	3	14	
Eurasian magpie	*Pica pica*	11	2	5	
Common raven	*Corvus corax*	17	9	26	
Red fox	*Vulpes vulpes*	54	3	15	
Wolf	*Canis lupus*	1	1	1	
Domestic dog	*Canis familiaris*	7	2	2	
Common raccoon dog	*Nyctereutes procyonoides*	21	2	12	
Western polecat	*Mustela putorius*	4	1	2	
Pine marten	*Martes martes*	32	2	15	
Eurasian wild boar	*Sus scrofa*	8	5	5	
Yellow-necked mouse	*Apodemus flavicollus*	7	1	2	
All species		59	2	54	

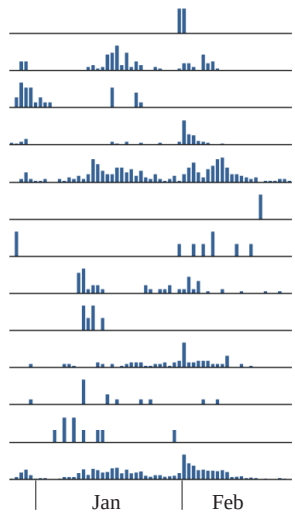


Figure 1. Temporal presence and abundance of species observed near or on the carcass, and the maximum number of individuals recorded on a single photo (max ind). Max DSI = maximum daily scavenging index (see Methods).

the camera, but reappeared for four hours on 9 February after which it remained out of sight. On 25 February, when removing the trapcam, no remains were found in the vicinity. The consumption of soft parts had taken about 45 days.

Dismantling the carcass was mostly the work of a pair of common raccoon dogs (*Nyctereutes procyonoides*); compared to their rough treatment, the changes red foxes (*Vulpes vulpes*) inflicted were delicate.

Scavenging patterns over time

Most species visiting the carcass were recorded eating, except wild boar and – probably – wolf (*Canis lupus*). Wild boars visited the carcass but were never recorded touching or feeding upon the cadaver, as evident from the unchanged configuration of the carcass and untouched snow after departure. A wolf showed up once, after the carcass had gone out of view of the camera.

During the 45 days that the carcass was visible on camera, it was visited daily by vertebrate scavengers (Figure 1). Peak attention coincided with spells of snow cover and low temperatures (not necessarily overlapping as periods with snow cover were not colder than the periods in between; Z=0.168, P=0.43), at least during the period the carcass was permanently visible, up to 8 February. A more intensive scavenging during snow cover was particularly evident in common buzzards (*Buteo buteo*). This species visited the carcass six times more often (Z=8.54, P<0.001) during 12 days with snow cover (mean DSI 6.25, sd=4.03) than during 31 snowless days (mean 1.06, sd=1.60). Similarly, red foxes also showed a significant increase of visits at the carcass during snow cover, with a mean DSI of 7.54 (sd=3.02) on days with snow cover versus 3.90 (sd=3.59) on days without (Z=-6.50, P<0.001). However, Red fox was the only

Species		Session (min) 0 10 30 60 >60	*N*	Duration (H) Max.	Total	Pause (H) 1 24 >24	*N*
White-tailed eagle	*Haliaeetus albicilla*		4	0.16	0.42		2
Common buzzard	*Buteo buteo*		68	2.82	24.04		67
Eurasian magpie	*Pica pica*		28	1.91	3.55		27
Common raven	*Corvus corax*		30	0.30	2.10		30
Red fox	*Vulpes vulpes*		190	1.90	37.83		190
Domestic dog	*Canis familiaris*		5	0.82	1.58		5
Common raccoon dog	*Nyctereutes procyonoides*		34	1.33	10.63		34
Western polecat	*Mustela putorius*		6	0.66	0.87		5
Pine marten	*Martes martes*		81	0.68	7.92		81
Yellow-necked mouse	*Apodemus flavicollus*		9	0.05	0.05		8

Figure 2. Duration of scavenging sessions of 0 (single picture), 1-10, 10-30, 30-60 en >60 minutes, longest session, total duration and pauses between scavenging sessions of 0-1, 1-24 and >24 hours between 27 December 2017 and 8 February 2018, the period during which the carcass was in view of the camera.

carcass visitor whose presence (DSI) correlated negatively with minimum temperature (r^2=0.22, F=12.16, P=0.001).

After the carcass had disappeared permanently from camera view on 9 February, only mammalian scavengers continued paying short visits for up to two weeks, after which the site apparently lost its attraction.

Individuals

Some visitors to the carcass could be distinguished individually with certainty. Of the dogs, one was brown/white and present only on 28 December when in company of a black dog; the latter returned on six days during 31 January through 15 February. The same juvenile white-tailed eagle (*Haliaeetus albicilla*) was present on two consecutive days. Of common buzzards at least four individuals were present: three in dark adult plumage, one in intermediate juvenile plumage. From 29 December onwards at least two adults were recorded, from 16 January onwards the juvenile and on 17 January a third adult was seen in company of the other buzzards (but may have been present earlier because the adults could not be differentiated). Red fox showed up as a single individual up to 19 January, but from then on a second one was frequently recorded simultaneously. On 8 February, the last day the carcass was more or less permanently in view, three red foxes showed up. Pine marten (*Martes martes*) was usually recorded singly except on 2 and 5 February when two individuals were recorded simultaneously. Raccoon dogs almost always showed up as a (the same?) pair. Ravens (*Corvus corax*) in most cases operated as a group and all other species not mentioned here as single individuals; whether individuals were the same across time remained unclear.

Duration of scavenging sessions

Almost all species visited the carcass for ten minutes or less (Figure 2). Taking into account the arbitrary decision that an interval of more than 15 minutes was regarded as a pause between scavenging sessions, unbroken spells at the carcass were longest for common buzzard, followed by Eurasian magpie (*Pica pica*) and red fox. During the period the carcass was in view of the camera, scavengers were present during 8.6% of the time.

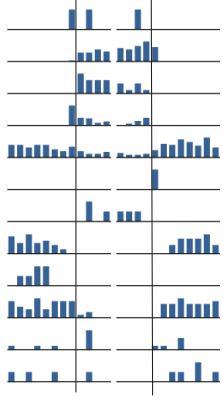
Species		Sunrise Sunset	Duration (hr)		Ultimate times (min)	
			Day	Night	Sunrise	Sunset
White-tailed eagle	*Haliaeetus albicilla*		0.27	0.15	-20	-70
Common buzzard	*Buteo buteo*		22.97	1.07	-1	40
Eurasian magpie	*Pica pica*		3.55	0.00	14	-53
Common raven	*Corvus corax*		1.73	0.38	-23	-3
Red fox	*Vulpes vulpes*		3.23	36.00	-	-
Wolf	*Canis lupus*		0.00	0.01	-	34
Domestic dog	*Canis familiaris*		1.64	0.00	79	-61
Common raccoon dog	*Nyctereutes proc.*		0.00	10.82	-67	168
Western polecat	*Mustela putorius*		0.00	0.87	-194	-
Pine marten	*Martes martes*		0.41	7.63	90	60
Eurasian wild boar	*Sus scrofa*		0.02	0.12	62	51
Yellow-necked mouse	*Apodemus flavicollus*		0.00	0.05	63	124

Figure 3. Activity (cumulative Hourly Scavenging Intensity) of species relative to sunrise and sunset, total time present during day (between sunrise and sunset) and night and latest times (minutes relative to sunrise or sunset). Due to the increasing daylight period between 27 December and 23 February, hours at the extreme ends of the periods around sunrise and sunset are removed from the data as shown in the pattern. The break in the middle of the graphs refers to 12:00.

Diurnal and nocturnal rhythm

In general, mammals restricted their scavenging activities largely or exclusively to the night (except free ranging and probably owned dog), avian scavengers to the daylight hours (Figure 3). Within each class, small differences were noted. Among the mammals, red foxes were observed at the carcass throughout day and night, but night time visits were about three times more common. Dogs were exclusively recorded during daylight. Raccoon dogs and Western polecats (*Mustela putorius*) were largely nocturnal, visiting the carcass not even close to sunrise or sunset. A polecat paid visits on four days between 11 and 15 January, consistently between 3 and 6 hours before sunrise, suggesting the same individual which followed a strict routine. Pine martens visited the carcass almost exclusively at night, with a few exceptions just after sunrise.

Among birds, white-tailed eagle fed in the evening and in the early morning the next day (Figure 3), suggesting it roosted in close vicinity of the carcass. Common buzzards never arrived very early, and only once before sunrise, but used the carcass increasingly throughout the day till long after sunset, in almost complete darkness. Foraging after sunset was recorded on ten days, almost invariably following prolonged foraging in the afternoon. Magpies and ravens more often visited the carcass in the morning than in the evening. Ravens were present before sunrise on seven days.

Interactions

All species which regularly visited the carcass were sometimes observed in the presence of congeners, even usually solitary ones like common buzzard, pine marten and red fox (Table 1). Common buzzards invariably showed antagonistic behaviour, resulting in one individual feeding whilst the rest waited around. Red foxes initially (on 19 and 23 January and 3 February) seemed not to tolerate each other, taking aggressive postures when more than one individual was present. In the morning of 7 February, at 5:53, two were actually fighting, after which one retreated to a dis-

Table 1. Co-occurring of individuals and species at the carcass, expressed as the percentage of images on which the species was in the presence of its own or other species (*N* = number of pictures showing the species).

Species		Ha	Bb	Pp	Cc	Vv	Cl	Cf	Np	Mp	Mm	Ss	Af	*N*	% social
White-tailed eagle	*H. albicilla*	-	-	-	75.0	-	-	-	-	-	-	-	-	16	75.0
Common buzzard	*B. buteo*	-	10.1	5.2	3.3	-	-	-	-	-	-	-	-	1166	18.6
Eurasian magpie	*P. pica*	-	55.0	0.9	3.6	-	-	-	-	-	-	-	-	111	59.5
Common raven	*C. corax*	3.5	39.0	3.5	43.4	3.5	-	-	-	-	-	-	-	113	92.9
Red fox	*V. vulpes*	-	-	-	0.2	2.3	-	-	0.1	-	-	-	-	2385	2.6
Wolf	*C. lupus*	-	-	-	-	-	-	-	-	-	-	-	-	2	0.0
Domestic dog	*C. familiaris*	-	-	-	-	-	-	23.7	-	-	-	-	-	97	23.7
C. raccoon dog	*N. procyonoides*	-	-	-	-	0.5	-	-	82.2	-	-	-	-	387	82.7
Western polecat	*M. putorius*	-	-	-	-	-	-	-	-	-	-	-	-	18	0.0
Pine marten	*M. martes*	-	-	-	-	-	-	-	-	-	2.8	-	-	398	2.8
Eurasian wild boar	*S. scrofa*	-	-	-	-	-	-	-	-	-	-	40.0	-	30	40.0
Y.-necked mouse	*A. flavicollus*	-	-	-	-	-	-	-	-	-	-	-	0.0	10	0.0

tance of about 10 m where it reposed. Almost an hour later two foxes (the same?) worked on the carcass without apparent antagonistic behaviour. On 8 February even three foxes fed simultaneously on the last remains of the carcass. In raven, wild boar and raccoon dog no intraspecific antagonistic behaviour was recorded.

As for interspecific behaviour, white-tailed eagle and raven foraged together, but the eagle was clearly dominant. Ravens kept a distance of at least half a metre. Buzzards were seen simultaneously at the carcass in the company of one or two magpies on three days. In most cases magpies kept a distance of several metres, and once a magpie was chased from the carcass by a buzzard. Although raven activity peaked in the early morning and common buzzards mostly showed up at the end of the day, simultaneous carcass attendance was noted on six days. Even when six ravens were present, a single buzzard apparently was still able to dominate the scene whilst eating from the carcass with the ravens waiting around. Sometimes ravens pecked at the carcass from the opposite side of the carcass and less than a metre from the buzzard. In a few cases a buzzard performed a feeble attack towards one or more ravens. Magpies kept their distance from ravens.

Only once were a bird and a mammal recorded simultaneously at the carcass., i.e. on 9 February when a raven was displaced by a red fox. The raven kept a horizontal position at a distance of 5 m from the fox, as if preparing for flight.

Interspecific interactions between mammal species were rare (Table 1). In the night of 3 February a fox returned to the carcass after a pause of 36 minutes. One minute later a raccoon dog entered the scene. The (larger) fox flattened its ears and showed its teeth, but nevertheless disappeared. The raccoon dog foraged for 30 minutes, after which the fox shortly reappeared. The next image showed the raccoon dog again at the carcass, and the fox watching from 10 m distance.

Avoidance or attraction between species

The chance of co-occurrence of species, as based on the number of photos with and without other species, was calculated separately for night and day. Eurasian magpies and common ravens were more often recorded in each other's presence and in the presence of a common buzzard than expected. Common buzzards however avoided the company

Table 2. Expected and observed co-occurrence of species on the images, based on chance, expressed as % of images in the presence of the other species, relative to all images of the species, during day (sunrise to sunset) and night (sunset to sunrise). Only data of species which occurred on more than 90 pictures are presented. Percentages of observed co-occurrence may slightly differ from Table 1, because of the separation between day and night in Table 2. * and ** represent Chi^2 significance levels of $P<0.05$ and $P<0.01$ respectively for avoidance or attraction.

Species A	Species B	Co-occurrence (%)		
		Expected	Species A	Species B
Day (*N*=1528 photos)				
Common buzzard	Eurasian magpie	9.8	5.4**	58.6**
Common buzzard	Common raven	8.6	3.7**	47.3**
Common buzzard	Red fox	15.2	0.0**	0.0**
Common buzzard	Domestic dog	8.6	0.0**	0.0**
Eurasian magpie	Common raven	0.9	3.6*	4.4*
Eurasian magpie	Red fox	1.6	0.0	0.0
Eurasian magpie	Domestic dog	0.9	0.0	0.0
Common raven	Red fox	1.3	4.4	2.3
Red fox	Domestic dog	1.4	0.0	0.0
Night (*N*=3196 photos)				
Common buzzard	Red fox	5.8	0*	0**
Common buzzard	Common raccoon dog	1.0	0	0
Common buzzard	Pine marten	1.0	0	0
Red fox	Common raccoon dog	16.8	0.1**	0.5**
Red fox	Pine marten	16.8	0.0**	0.0**
Common raccoon dog	Pine marten	2.9	0**	0**

of corvids. Most other species-combinations indicate avoidance, sometimes significantly so (Table 2).

Discussion

The scavenger guild recorded at a single carcass of a wild boar largely reflected the assemblage of facultative carrion feeders typical for Central Europe. However local densities are unknown, all recorded species are commonly found in the area. Remarkable for being absent were European badger (*Meles meles*), Eurasian jay (*Garrulus glandarius*) and hooded crow (*Corvus cornix*), the first usually entering a state of semi-hibernation in winter (and therefore less likely to visit carrion in winter), the last being scarce >1 km beyond the range of human habitation. Of the scavengers recorded, several were of minor importance in terms of carcass consumption, or were not involved in scavenging at all, notably wolf and wild boar. Although the latter is omnivorous and noted for scavenging carcasses of ungulates (Wenting et al. 2022), the species avoids scavenging on congeners (Probst et al. 2017, 2019, Häkkä 2021), as was confirmed in this study. Avoiding scavenging on congeners is probably a general strategy among many species to reduce risks associated with parasites (Gonzálvez et al. 2021).

Carcass attendance showed a distinct dichotomy between avian and mammalian users, birds being active during daytime, mammals mostly at night. The carcass was probably discovered by birds (magpies and buzzards) on sight rather than by smell. When a carcass is covered by snow, mammals are more likely to detect it by using olfactory cues (Enari & Enari 2021). Usually, the sudden appearance of a highly nutritious carcass

Wild boars gathering around the carcass, smelling, but not touching it (11 January 2018).

Juvenile white-tailed eagle and common ravens waiting (1 February 2018).

Raccoon dogs, typically foraging pair-wise, keep a red fox at distance (2 February 2018)

An uncommon situation with three red foxes foraging simultaneously (8 February 2018).

leads to intense competition between microbial decomposers and invertebrate and vertebrate scavengers. The decomposing role of microbes and arthropods is much smaller in winter, when temperatures are low, than during summer, when competition is fierce and vertebrate consumption much reduced as a result of the highly efficient decomposition of carcasses by microbial and arthropod assemblages (Gu et al. 2014, Rivers & Dahlem 2014). In the present case, much of the carcass was consumed by vertebrates, notably red fox and raccoon dog. Most scavengers in this particular setting played a minor role in the later stages of decomposition.

Although the carcass was available for at least 45 days, only 8.6% of the time it was scavenged actively. This suggests low competition among vertebrate scavengers. It is however possible that some individuals spent much more time at the carcass while 'guarding' it, beyond the view of the camera, and only approaching the carcass to feed or to defend it. This may explain why often several common buzzards were present and why magpies and ravens were much more often recorded in the presence of a common buzzard than expected. By night, red foxes may have guarded the carcass. Feeding on carrion may seem cheap, but at the same time demands a lot of energy by having to deal with competitors. Particularly the smaller species may run a high risk, because meeting a potential predator is more likely near a carcass than elsewhere. It is possible that no matter how many individuals visit a carcass, few will really profit from the "free" meal.

The carcass was discovered while still fresh by diurnal opportunists such as common buzzard, magpie, raven and red fox, resulting in a flurry of activities during the first five days when mainly soft parts were targeted (abdominal cavity). This was followed by a period of poor interest until frost kicked in and access to the carcass was further facilitated by a pair of raccoon dogs that showed up on day 14. Their disarticulation of the carcass improved access for other animals, as suggested by an increase of scavenging intensity by a diverse assemblage of carrion-eaters. Contrary to expectation, domestic dogs were not involved in this process, although present at day 2 for 15 minutes. At a much later stage, when mostly just skeletal parts, tendons and skin remained, domestic dogs were observed feeding for longer periods of time (>30 min). Carcass attendance was highest during periods of frost and snow, illustrated by the lapse of activities during a spell of high temperatures when interest of scavengers temporarily faded (Figure 1). Nutritional demand may be higher during periods of sub-zero temperatures, when also availability of prey will be restricted (less activity, frozen ground). Common buzzards were a case in point, with intensive scavenging during periods of snow cover but near-absence during snowless intervals. This is in agreement with the absence of common buzzards on wild boar carcasses in a German study in summer, whereas it was the commonest scavenger in winter (Probst et al. 2019). Other scavengers are also noted for intensified scavenging at low temperatures, as in Selva et al. (2005).

A trapcam is a wonderful, patient and non-invasive device. However, meaningful interpretation of the images is fraught with its own methodological problems (Caravaggi et al. 2017), as exemplified by the absence of the Eurasian jay. In East Poland it was frequently recorded on large carcasses (Selva et al. 2005), in line with my own chance observations at left-overs of ungulates after hunting in NW-Poland. The jay was also absent in an extensive (122,160 images) trap cam study in the north of Germany (Probst et al. 2019), where, as in my study, the camera was triggered by motion. In a Norwegian study, where cameras were activated at fixed intervals (Gomo et al. 2020), jays were the third most common scavenger. At a carcass distance of 2 m jays probably do not easily activate a trapcam, unlike the slightly larger magpies. A methodological study of use of trapcams in the Netherlands,

showed that mammals up to polecat size were less likely to be detected visiting camera-baits at distances of 1.2-2 m, than at a distance of 35 cm (Smaal & van Manen 2022). When striving to record the entire scavenger's guild, taking pictures at fixed intervals instead of using motion-trigger may be the smarter option, not just for recording small species, but also for reducing methodological problems when analysing the data.

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Samenvatting

Aaseters bij een karkas van een wild zwijn in de winter

Op 27 december 2017 werd in een bos in Noordwest-Polen bij een bijna intact en vers

dood wild zwijn (*Sus scrofa*) met een geschat gewicht van 60 kg een wildcamera geplaatst. De camera stond op 2 m van het zwijn en werd door beweging getriggerd om één foto te maken, gevolgd door een pauze van 10 s. Op 9 februari werd het zo goed als ontvleesde karkas definitief uit beeld gesleept. Op 25 februari werd de camera weggehaald en werden in de omgeving geen resten van het zwijn teruggevonden. De camera nam 4496 foto's, waarvan slechts twee zonder determineerbare aaseter. Er werden twaalf soorten vastgesteld. Vooral een paar wasbeerhonden speelde een belangrijke rol in het openen van het karkas. In perioden met sneeuw steeg de bezoekfrequentie van met name buizerd en vos, vossen kwamen ook vaker naarmate het kouder was. De meeste bezoeken duurden korter dan tien minuten, de langste bezoeken kwamen van vos en buizerd, waarbij de laatste tot langer dan een uur onafgebroken bij het karkas kon blijven. Veel soorten hadden een expliciet bezoekritme, waarbij de vogels overdag, en de zoogdieren 's nachts langskwamen. Vossen foerageerden meest 's nachts, maar kwamen ook overdag regelmatig langs. De meeste individuen opereerden alleen, met uitzondering van de raven, die slechts in enkele gevallen alleen werden gezien, en wasbeerhonden, die vrijwel altijd met z'n tweeën (in paren) langskwamen, wat overigens gebruikelijk is bij deze soort. Wanneer de overige soorten met meerdere individuen tegelijk werden gezien, ging dit vaak gepaard met dreigen en slechts zelden werd simultaan gefoerageerd op het karkas. Ook verschillende soorten werden soms tegelijk bij het karkas gezien, maar vrijwel altijd was er dan sprake van een zekere rangorde. Zo werden eksters en raven vaak tegelijkertijd gezien met een buizerd, waarbij de laatste at, terwijl de rest toekeek. Bij de combinatie wasbeerhond – vos, die enkele malen voorkwam, keken de vossen toe van een afstand. Bij een analyse op basis van kansberekening bleken de meeste soorten elkaar te mijden, alleen eksters en raven waren vaker present in gezelschap van elkaar en van een buizerd dan verwacht. Omdat buizerds de raven en de eksters weghielden van het kadaver, bestaat het vermoeden dat buizerds (waarschijnlijk een enkel exemplaar) het karkas van een afstandje bewaakten en ingrepen zodra er eksters of raven arriveerden. Vermoedelijk namen vossen (of meer waarschijnlijk een enkele vos) deze taak 's nachts voor hun rekening. Verdediging van het karkas zou kunnen verklaren waarom er slechts gedurende 8.6% van de totale tijd aaseters bij aanwezig waren. Tenslotte werden er opvallend weinig kleine dieren bij het karkas opgemerkt. De lokaal algemene gaai bijvoorbeeld, werd in het geheel niet waargenomen. Mogelijk was dit een gevolg van de instelling van de camera, waarbij die werd getriggerd door beweging en dit bij kleinere soorten gewoonweg niet plaatsvindt. Gaaien werden bovendien wel waargenomen in een vergelijkbare Noorse studie, waarbij de camera met vaste tussenpozen een opname maakte. Het is dus belangrijk te overwegen welke instelling een camera wordt meegegeven, afhankelijk van het doel van het onderzoek.

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