

Entry n°: 1
Date & time: 2021/10/01 – 9:45 & 12:45
Weaver & temperature: Clear – 11C°
Place: Ulikööļ street
Number: 2, but could be the same individual at two different moments
Observation: Was probably looking for insects under moss on top of roofs. Was pulling moss off and dropping it, with its soil, on the street. This day and followings, this kind of “moss+soil in a middle of pavement” droppings were also observed.

Entry n°: 2
Date & time: 2021/10/02 – 10:30
Weaver: Clear – 13C°
Place: Crossing of Pärna & Pikk
Number: 5 on ground, probably more in the trees
Observation: Were foraging grass, probably looking for insects. A small group of *Coloeus monedula* (5-6) was also foraging near them, without any sign of stress or aggressivity from one group or the other.

Entry n°: 3
Date & time: 2021/10/04 – 10:15
Weaver: Clear – 8C°
Place: Pedestrian walk longing Emajõgi river, from Pikk bus stop to Kaarsild bridge
Number: 15, mostly on the ground, some of them on guardrails
Observation: Were foraging grass for individuals on ground. Individuals on guardrails were looking at people passing by. A passing as close as 1,5m from them did not trigger any eviction movement; on the contrary, stopping next to them at 2-3m of distance seemed to make them nervous or at least curious.

Entry n°: 4
Date & time: 2021/10/06 – 16:45
Weaver: Clear – 11C°
Place: Unamed road, deserving Uus 53 and connecting Uus 55 to Pikk 60
Number: 1
Observation: Was sitting on a fence, looking at people passing by. Seemed very curious, did not try any escape movement during a 20 second encounter at 2m distance.

Entry n°: 5
Date & time: 2021/10/09 – 17:30
Weaver: Cloudy – 11C°
Place: Uus 55
Number: Between 15 and 25
Observation: Were standing in a tree, addressing calls and moving from the tree, to roofs of nearest buildings, to tree again, making them difficult to count. The species was already observed at this place before, but the number of individuals gathered seemed to grow quickly.

Entry n°: 6
Date & time: 2021/10/11 – 10:00
Weaver: Clear – 6C°
Place: Crossing of Pärna & Pikk
Number: 3 on the ground, at least another calling from a tree but not to be seen
Observation: Were foraging grass. The group was few meters away of three other individuals identified as *Corvus frugilegus*. The distance between them was much more important than with *Coloeus monedula*.

Entry n°: 7
Date & time: 2021/10/13 – 15:30
Weaver: Very cloudy – 7C°
Place: Raekoja plats
Number: 2
Observation: Probably a pair, were following each other when changing of spot (different roofs around the place). See rush R01, rush R07 and rush R08.

Entry n°: 8
Date & time: 2021/10/13 – 19:00
Weaver: Cloudy, almost dark - Unknown
Place: Uus 55, west direction
Number: Between 70 and 120
Observation: A large flying group, moving in circle then half circle for few minutes before disappearing in the west direction.

Entry n°: 9
Date & time: 2021/10/14 – 10:30
Weaver: Slightly cloudy – 9C°
Place: Pedestrian walk longing Emajõgi river, from Pikk bus stop to Kaarsild bridge
Number: Between 7 and 10, on ground, plus 1 on a guardrail
Observation: Were foraging grass and walking away (but not flying away) when joggers or bicycles passed by. The one on guardrail seemed curious. An encounter of almost 30 seconds, only 2m away did not trigger any escape movement or visible sign of stress.

Entry n°: 10
Date & time: 2021/10/15 – 15:48
Weaver: Slightly cloudy – 7C°
Place: Uus 55
Number: First 3, then 4, probably two pairs.
Observation: Three siting in different levels of the tree. A fourth came on an exterior branch, almost instantly joined very closely by one of the previous three, clearly a pair. (See pictures P01 to P06 and rush R01 to R06)

Entry n°: 11
Date & time: 2021/10/16 – 11:23
Weaver: Clear – 7 C°
Place: Uus 55
Number: None
Observation: Not a single individual for at least two hours, probably due to the presence of two specimens of *Corvus frugilegus*. (See rush R01 and pictures P01, P02 and P03)

Entry n°: 12
Date & time: 2021/10/16 – 16:15
Weaver: Rain, quite powerful wind – 6C°
Place: Uus 55
Number: Between 4 and 6
Observation: First came in the tree, on the upper part, at the beginning of the rain. Left by couples when the wind started to be too powerful and fly probably to the roof of the building.

Entry n°: 13
Date & time: 2021/10/18 – 14:00
Weaver: Clear – 5C°
Place: Uus 55
Number: Between 5 and 7
Observation: Were in the upper part of tree. Two groups of *Cyanistes caeruleus* and *Passer domesticus* were foraging for food nearby. Their loud chips did not show any sign of stress from the presence of corvids, and no sign of predation from the corvid was observed.

Entry n°: 14
Date & time: 2021/10/19 – 10:47 & 13:30
Weaver: Clear – 4C°
Place: Uus 55 then Unamed road, deserving Uus 53 and connecting Uus 55 to Pikk 60
Number: 3
Observation: Passing for a place to another. Disturbed by the presence of a small group of three (but maybe just a pair) of *Corvus frugilegus*. (See pictures P01 and P02).

Entry n°: 15
Date & time: 2021/10/20 – 11:23
Weaver: Rainy and windy – 4C°
Place: Uus 55
Number: 3
Observation: Tried to stay in tree, had issues due to the wind. Went back and forth between buildings and tree. It seems that they prefer the tree but consider buildings as a safer place. (See rush R01 and picture P01).
Special note: Due to my previous knowledge of corvids, I am always looking

for a pair or an even number. But since the beginning, I have mostly observed odd number. Either I am missing something in the observations, or I am missing something in their behaviour. To investigate further.

Entry n°: 16

Date & time: 2021/10/23 – 8:47

Weaver: Cloudy – 3C°

Place: Uus 55

Number: 2

Observation: Resting in the tree. Were not bothered by, and did not bother, a medium group (12-15) of smaller birds, still not identified.

Entry n°: 17

Date & time: 2021/10/23 – 15:37

Weaver: Very cloudy – 3C°

Place: Uus 55

Number: 3

Observation: Were sitting on the tree, seem very close to a specimen of *Corvus frugilegus*, without any sign of stress from any part (see pictures P01 to P09 and rush R01).

Entry n°: 18

Date & time: 2021/11/03

Weaver: Windy, a bit rainy

Place: Uus 55

Number:

Observation: Foraging for food, one in trash bags, trying to pick or open them, one in a garden making roll a (apple? Onion?). A specimen of *Parus major* was looking for food nearby, without any sign of stress (see rush R01).

Entry n°: 19

Date & time: 2021/11/08 – 15h46

Weaver: Clear – 1C°

Place: Uus 55

Number: 3

Observation: Difficulty to formally identify the species due to the light (see rush R01 and picture P01).

Entry n°: 20

Date & time: 2021/11/09 – 10:40

Weaver: Clear – 0C°

Place: Uus 55

Number: 2

Observation: A pair, very close, sitting next to each other. Some behaviour that could be grooming (see pictures P01 to P04 and rush R01 and R02).

Entry n°: 21

Date & time: 2021/11/15 – 11:03

Weaver: Very cloudy – -2C°

Place: Uus 55

Number: 35 in the tree, probably around 50 in total

Observation: Very agitated group, making loud, persistent and repetitive alarm calls. Apparently against a group of Charadriiformes not formally identified with precision. The whole scene lasted for maybe four minutes before the Charadriiformes finally left and the group of corvids gathered in the tree before splitting (see pictures P01 to P05 and rush R01 and R02).

Entry n°: 22

Date & time: 2021/11/17 – 10:38

Weaver: Very cloudy – 1C°

Place: Uus 55

Number: 1

Observation: Slightly hit the window, trying to take down the little birds' feeder. Rest on the balcony few seconds, maybe one minute, before being able to leave (see picture P01 and P02 and rush R01).

Entry n°: 23

Date & time: 2021/11/26 – 11:20

Weaver: Very cloudy – -2C°

Place: Uus 55

Number: 1 (*Corvus frugilegus*)

Observation: Alone in the tree, repeatedly trying to frighten or chase other birds on the roof, not to be seen so not identified (see pictures P01 to P03).

Entry n°: 24

Date & time: 2021/11/28 – 13:40

Weaver: Snowy – -3C°

Place: Uus 55

Number: 2 (*Corvus cornix* & *Coloeus monedula*)

Observation: The crow (maybe the same than the one from 17th November) finally broke a part of the feeder, but did not eat everything on the spot. The jackdaw and the crow chase each other to eat the remaining for maybe four minutes (see pictures P01 to P07 and rushes R01 to R03).

Entry n°: 25

Date & time: 2021/12/01 – 9:41

Weaver: Snowy – -9C°

Place: Uus 55

Number: 2 (*Corvus frugilegus* & *Corvus cornix*)

Observation: Peacefully cohabited in the same tree for maybe twenty minutes without any sign of stress (see pictures P01 to P03).

Entry n°: 26

Date & time: 2021/12/01 – 15:33

Weaver: Snowy - -5C°

Place: Uus 55

Number: 2

Observation: Probably a pair, harassing and chasing a raptor, apparently a buzzard, probably an *Accipiter nisus*. They harassed the bird in the tree and followed it when it flew away (too quick to take a picture).

Entry n°: 27

Date & time: 2021/12/07 – From 10:27 to 14:01

Weaver: Wind and frost – -22C°

Place: Uus 55

Number: Probably around twenty

Observation: Were first a small number (8) in the tree, spread between different branches (see pictures P01 and P02 and rushes R01 and R03), one of them was grooming itself (see pictures P03 and rush R02). 45 minutes later they started gathering (see picture P04), probably due to the cold or to the presence of one, maybe two *Corvus frugilegus* (see pictures P05 and P06). Yet, everyone remained

very calm and free of any evident sign of stress. Half an hour later, they grew in number and were even more gathered (see pictures P07 and P08). An hour later, they were almost all on the same group of branches (see pictures P10) excepted two, one on a exterior branch (see pictures P09, P11 and P12) and one on the trunk (see pictures P13 and P14)

Entry n°: 25

Date & time: 2021/12/08 – From 11:10 to 12:55

Weaver: Snowy – -14C°

Place: From Uus 55 to Emajõgi, to Reakoja plats, to Tartu Keskpark, to Ülejõe park, to Uus 55

Number: Cannot be count due to constant moving

Observation: Corvids were difficult to find at first, the only bird sound was from a *Passer domesticus* (see rush R01), first *Corvus cornix* specimens were found around Pikk 60 at 11:23 (see rush R02). Due to the partial frost of Emajõgi (R17), *Anas platyrhynchos* can be seen in the small unfrozen parts, in the middle of the river (see rushes R03, R04 and R18), sometimes joined by *Columba livia* (R04 and R18) and more rarely by *Corvus cornix* (R05). A probable pair was spotted on Fortuna 11 (R06) and another one on Narva mnt 2 (R07). Then three individuals were spotted on Reakoja plats (R08 and R09). On Reakoja plats, a group of *Passer domesticus* was spotted in the Christmas decoration installed for the Christmas village (R10 and R11). Later, a lonely individual was spotted, apparently eating something near a warm place (R12). At the exit of Tartu Keskpark, a *Coloeus monedula* hit my leg and lost its food (R13). He was visibly afraid of me, but did not want to lose it and came as close as 30 cm. I slowly stepped back, it grabbed the piece and flew away. Next there, around Riia 1, a group of *Columba livia* was foraging food on a unsnowy ground, joined by three *Corvus cornix*. There was no direct aggression, but regular and small

intimidation attempts (R14&R15). This tension can be explained by the amount of snow (R16), making finding food probably quite difficult for any bird. Around 12:30, another probable pair was spotted near Pikk 60 (R19), near an unused nest. A small group of three was spotted nearby, in the same tree than three then four *Coloeus monedula* (R20). Back to Uus 55, a small group of four was spotted in the same tree than a *Corvus frugilegus* (R21), and few *Coloeus monedula* were spotted foraging dumpsters (R22).

Entry n°: 26

Date & time: 2021/12/10 – 11:47

Weaver: Snowy – -10C°

Place: Uus 55

Number: 2

Observation: A probable pair, calmy resting in the tree for at least half an hour (see pictures P01 and P02).

Entry n°: 27

Date & time: 2021/12/10 – 15:20

Weaver: Snowy – -7C°

Place: Uus 55

Number: Between 120 and 150

Observation: They gathered on by one in the tree (See pictures P01 to P03 and rush R01). They all left exactly at the same time, at 15:26.

Entry n°: 28

Date & time: 2022/01/10 – 16:24

Weaver: Cloudy – 7C°

Place: Jardin des Plantes, MNHN, Paris

Number: Between 75 and 120

Observation: It is important to note that crows of the museum's flock are often marked (See picture P04) and are coexisting with a species that is not existing in Estonia, rose-ringed parakeet (*Psittacula krameria*) (See picture P03 and rush R01). An outside exhibition is currently proposed in the Jardin des Plantes, with massive and numerous sculptures implemented in a part of the usual feeding area of the museum's flock, but the crows (*Corvus corone*) did not

seem bother by them (See pictures P01, P02, P05 to P07 and see videos R08 and R09). In other areas, the increased number of visitors did not seem to frighten crows, that still walk close to humans, on the ground (See rushes R02 to R07).

Entry n°: 29

Date & time: 2022/01/11 – 15:45

Weaver: Sunny – 10C°

Place: Champs de Mars, Paris

Number: 2

Observation: The flock (estimated at more than a thousand of individuals) has disappeared. Some important works of construction and depollution could be the cause (See pictures P01, P02 and P08). An important number of seagulls seem to now occupy the ecological niche (see pictures P06 to P08 and rush R03). An unique pair of *C. corone* seems to remain (see pictures P05 and rushes R01, R02 and R04). These individuals still feed very close to humans (See picture P03), sometimes on the ground next to sidewalk (see pictures P12 and P13 and rushes R05 and R06), with often one of them watching from a more or less high position (see pictures P04 and P09). This apparently stress-free attitude makes the hypothesis of volunteer extermination or chasing of the rest of the flock very improbable. The damage on the grass indicates that the pair seems to live here permanently, and was not just passing by (see pictures P10 and P11).

Entry n°: 30

Date & time: 2022/01/12 – 15 :17

Weaver: Cloudy – 8C°

Place: Champs de Mars, Paris

Number: 2

Observation: Still no sign of the flock, but the (probably) same pair is still there. No other individual was observed. The pair is often observed functioning with a "watch" system, with one feeding on the ground as another is watching (see picture P01 and rush R01). When both are on ground, they again seem stress-free around humans, and

even around their dogs (see pictures P02 and P03).

Entry n°: 31

Date & time: 2022/01/13 – 11:00

Weaver: Slightly cloudy – 8C°

Place: Jardin des Plantes, MNHN, Paris

Number: 3

Observation: A small group of three, on the roof of the palaeontology gallery (see rush R01). In a nearby tree, more *Psittacula krameria* were spotted (see pictures P01 and P02).

Entry n°: 32

Date & time: 2022/01/13 – Afternoon

Weaver: Clear – 10C°

Place: Jardin des Plantes, MNHN, Paris

Number: Between 50 and 100

Observation: In the area where the sculptures were implanted, most of the crows are in the trees (see pictures P03 and P18 and rush R14). Inside the undergrowth area, lonely subjects were found eating on wood storage or roof of storage shelter (see picture P04 and rushes R02 and R03). In the least visited areas of the botanical garden, other species can also be found like common moorhen (*Gallinula chloropus*) (see picture P05). It is important to note that a increasing number of the museum flock is marked, following an ornithology program (see picture P06). Consequently, some individuals can almost always be found in the aviary trap (see rush R06). It is interesting to note that trapped individuals seem a source of curiosity, puzzlement and maybe anxiety from free individuals that multiple interactions with the aviary (see rushes R06 to R08) and sometimes even with a precise individual inside, perhaps a trapped partner (see rush R04). Most of the time, crows seem very comfortable in presence of humans and forage grass near them (see picture P14 and rush R05) or walk by their side (see pictures P07 to P10) without any sign of stress. During the observation, a little girl with her family insisted to give bread to a pair of ducks, immediately attracting crows

(see pictures P11 to P13 and P15 and rushes R09 to R12). Similar situation happened with a garden employee, who was waited by a small group (maybe because he is used to feed them) and throw them something to eat (see pictures P16 and P17 and rush R13). In general, crows here seem to consider humans as food providers, and indeed many of them do so, either intentionally or by trying to feed another species (see rush R15). An individual was observed dealing with a large piece of bread, cutting it in two, and trying to find a quiet place to eat the first piece, way too large for its beak. But when another individual arrived in the tree just above, the first one ran back to gather the second piece, both way too large for its beak, and fly away, probably to find a quiet place to cut everything in smaller pieces (see rush R16).

Entry n°: 33

Date & time: 2022/01/26 – 11:05

Weaver: Snowy – -8C°

Place: Uus 55

Number: 6

Observation: Small group of individuals trying to feed on dumpsters, as it is a day of the week where they are quite full and sometimes cannot close properly (see pictures P01 and P04). Some fights occurred around one spot that seems easier to access (see pictures P02 and P03).

Entry n°: 34

Date & time: 2022/02/21 – 10:30

Weaver: Cloudy – 2C°

Place: Uus 55

Number: 6

Observation: Small group of individuals feeding on grass as snow has melted in some areas. Also seen drinking in melting snow ponds (see rush R01).

Entry n°: 35

Date & time: 2022/02/28 – 16:35

Weaver: Clear – 2C°

Place: Uus 55

Number: Around 30

Observation: Probably two groups (one of *C. cornix*, one of *C. frugilegus*) resting together in the same tree without any sign of stress or aggression (see pictures P01 to P04).

Entry n°: 36

Date & time: 2022/03/01 – 10:55

Weaver: Cloudy – 3C°

Place: Uus 55

Number: 1

Observation: Drinking in a pond of freshly melted snow (see pictures P01 & P02)

Entry n°: 37

Date & time: 2022/03/06 – 17:25

Weaver: Clear – 4C°

Place: Uus 55

Number: Around 350 (see picture P01)

Observation: A large flock gathering in a tree (see video R01) before leaving all at once (see video R02).

Entry n°: 38

Date & time: 2022/03/14 – 14:15

Weaver: Clear – 8C°

Place: Emajõgi, in front of Pikk bus stop

Number: 2

Observation: Two individuals of *C. cornix*, foraging for food near a group of ducks. At some point, either a crow came too close or tried to steal something, and was chased by a male duck (no image could have been taken).

Entry n°: 39

Date & time: 2022/03/29 – Afternoon

Weaver: Cloudy, windy, a bit snowy – 4C°

Place: From Tartu University to Pikk bus station, to Delta center, to Botanical garden entrance, to Reakoja plats.

Number: Probably around twenty *C.*

frugilegus and around 6 *C. cornix*

Observation: We were on field work with students in order to localize probable areas of nesting. First encounter with a *C. cornix*, who was trying to empty a trashcan (see video R02). On the way from University to Pikk bus station, isolate nests were found (see pictures P02 and P03), one

seemed inhabited (see picture P04).

Individuals *C. cornix* were observed in the area, most of the time observing from a high spot (see pictures P05 to P07). In the courtyard beside Pikk bus station, we found a nesting area of *C. frugilegus* (see videos R03, R05 and R07). Some of them were exploring on the ground (see videos R04 and R08), while we were observed by some individuals on lamp, closer to us (see video R06). Two individuals were spotted gathering branches to repair or finish to construct a nest, with a possible cooperative behaviour (see video R09). On the way to Delta center, we first encountered three specimens of *C. cornix*, exploring on the ground (see video R10). We then found an important number of nests, apparently not occupied, close to the Delta center (see videos R12 to R14). An other large group of empty nests was found in front of the Botanical garden entrance (see videos R11 and R15). Another one, still empty, was found on our way to Reakoja plats (see pictures P08 to P11 and videos R16 and R17). Nesting area of *C. cornix* remained unknown.

Entry n°: 40

Date & time: 2022/04/11 – 11:30

Weaver: Clear – 8C°

Place: Uus 55

Number: 1

Observation: Resting in the tree, apparently enjoying the sun (see pictures P01 and P02).

Entry n°: 41

Date & time: 2022/04/12 – Morning

Weaver: Clear – 9C°

Place: From Tartu University to Delta center, to Botanical garden entrance, to Pikk bus station, to Tartu University.

Number: Probably around 15 *C. frugilegus* and 6 *C. cornix*

Observation: We were on field work with students in order to investigate the nests we found during the previous field work. On the way between Reakoja plats and Delta building, we found a *C. cornix* gathering

material (see video R01) to build a new nest (see video R02). On the same way, another individual was defying a duck from a small fish and flew away with it (no pictures could be taken). The other unoccupied nesting areas were still empty, hypothesis was made by a student that corvids flew away during the construction of the building, two years ago. On the way between Botanical garden and Reakoja plats, we was another pair of *C. cornix*, harassing pigeons (perhaps *Columba oenas*) (no pictures could be taken). On the way from Reakoja plats to Pikk bus station, another individual was spotted (see pictures P01 to P03). Ducks were resting nearby, but at respectable distance (see pictures P04 and P05). In the previous observed nesting area, *C. frugilegus* were active around their nests (see pictures P06 to P17 and video R03). On the way back to University, we spotted an apparently lonely *C. cornix*, walking along the river to feed (see video R04).

Entry n°: 42

Date & time: 2022/04/29 – 10:30

Weaver: Cloudy and a bit windy – 8C°

Place: Botanical Garden of Tartu

Number: At least 2

Observation: Individuals have been observed gathering probable nesting material and foraging for food. Due to the presence of several families and passers-by, several encounters could not be recorded. Individuals have been observed in the European Plants sector, in the Alpinarium (see video R01), in the pond of Estonian Natural Species, in the Cotyledons Sector and on the Kiosk Island (see video R02).

Entry n°: 43

Date & time: 2022/05/06 – 18:30

Weaver: Cloudy – 12C°

Place: Uus 55

Number: 1

Observation: Resting in the tree (see pictures P01 and P02). The area has been mostly deserted by *C. cornix* for the

nesting season, but one (two?) individual are frequently seen in the tree and fly from a nearby window. Possibility of a nest.

Entry n°: 44

Date & time: 2022/05/14 – 12:00

Weaver: Clear – 8C°

Place: Uus 55

Number: 2

Observation: Resting in the tree (see video R01), possible the pair having a nest near the nearby window.

Entry n°: 45

Date & time: 2022/05/18 – 11:00

Weaver: Sunny – 14C°

Place: From Pikk bus station to Raekoja plats to Delta center to Raadi cemetery.

Number: Probably around 20 *C. cornix* and around 8 *C. frugilegus*.

Observation: The group of *frugilegus* is still nesting in the previous area (see video R02) and another nest (probably *cornix*?) is occupied across the street (see video R01). Near the river, a group of 3 seagulls was observed harassing a *cornix* (see video R03). In the area between Raekoja plats and Delta center, a probable pair was observed (see picture P01) but the nest nearby seems unoccupied (see picture P02). In Raadi cemetery, different individuals were observed, but nest was not found (see videos R04 to R13). They are coexisting with small birds, mainly because these smallest species are making nests inside trees, protected from predation (see video R03).

Entry n°: 46

Date & time: 2022/06/01 – 12:00

Weaver: Cloudy, sunny and windy – 14C°

Place: Botanical Garden

Number: Between 2 and 4

Observation: The botanical garden has installed warning signs due to the possibility of crow's attack near the nests (see videos R01 and R02). Few adults can be observed, mostly inside the trees (not one observation on the ground, see video R05), more cautious and noisier than usual

(see videos R03 and R04). A pair was also spotted on the way to the botanical garden, in front of Pikk bus station (see picture P01).

Special note: The employees of Botanical Garden did not know who was in charge to put the warning signs, and therefore who was monitoring the crows, but one of them named Marko Mägi as potential supervisor for this task.

Entry n°: 47

Date & time: 2022/06/11 - Afternoon

Weaver: Sunny – 27C°

Place: Raadi park koos dendropargiga and Raadi cemetery

Number: Between 20 and 40, of the three different species.

Observation: The first observation was at Raadi park, with hope to find the nesting area of *C. monedula*, which was still unknown, but only *C. cornix* could be observed here (see videos R01 to R03). In Raadi cemetery, different individuals from *C. cornix* (see videos R05 to R07), *C. frugilegus* (see videos R09, R10, R12, R13 and R15) and *C. monedula* (see video R08) species were observed, sometimes having noisy and quite aggressive interactions (see videos R11, R14). Some of these interactions were not recorded due to their very close proximity with ongoing funerals, according to the ethical declaration of the project.

Special note: Previous visit did not show such aggressive behaviour, but at least 6 fighter jets had passed over the area this afternoon, and it is possible that the species were abnormally stressed.

Entry n°: 48

Date & time: 2022/07/12 – 15:30

Weaver: Sunny – 36C°

Place: Champ de Mars, Paris

Number: 3

Observation: The unique pair remaining in the Champ de Mars was found again, but no other sign of the rest of the flock. The pair was very mobile and only in the trees (they did not stay in the ground, mostly

due to the high number of tourists, policemen and militaries walking in the area at this time). They have been in interaction with another individual, that seemed to call for them and remains beak open for most of the waiting time (see videos R01 and R02), probably a grown-up youngling.

Special note: Observations were massively shortened up due to the density of crowd, usual during days surrounding the French National Day – 14th July – and to the fact that using the camera next to militaries and policemen made them nervous.

Entry n°: 49

Date & time: 2022/07/15 -

Weaver: Sunny – 38C°

Place: Jardin des Plantes, Paris

Number: Between one and two hundreds

Observation: The crows are very bold and are not afraid to come close to humans in a range of few centimetres sometimes (see videos R03, R12 and R15). Most of their food seems to be compounded of wastes than humans left behind or throw away (see videos R01 and R14), but they are also fed on purpose by tourists, and are begging for that on purpose (see videos R13 and R15). They can also be seen foraging the ground (see video R02) or chasing insects (see video R05). They are comfortable enough with human presence to rest directly on the ground in the shade (see videos R04 and R06). Paris was experiencing an heat wave at this time, and they are clearly using the water system installed for avoiding the death of most fragile plants to refresh themselves (see videos R07 to R10 and R16). Even with the important number of individuals presents, fights are rare (but they due happen, see video R11), and they are coexisting with other birds like pigeons peacefully most of the time (see video R14).

Special note : All the metadata in the video files are two hours earlier than the real hour, due to the fact that the camera a) is

not changing time between summer and winter b) is not changing of time zone.

Entry n°: 50
Date & time: 2022/08/09 – 17:30
Weaver: Cloudy – 19C°
Place: Uus 55
Number: 20, from three different species
Observation: All of them were resting in the tree, sometimes very close to each other, even between different species (see video R01). It is the first time in month that they are so numerous in this tree.

Entry n°: 51
Date & time: 2022/08/10 – 12:00
Weaver: Sunny – 22C°
Place: From Uus 55 to Delta Center to Reakoja plats to Kvartal center to Uus 55
Number: 2 *C. cornix* + at least one non-identified individual
Observation: One individual was spotted near Pikk bus station (*C. cornix*) but was not recorded. It was near group of ducks that seemed no stressed about its presence (see pictures P01 and P02 and videos R01 and R02). One lonely individual (*cornix*) was spotted in front of Delta center (see picture P03 and videos R03 and R04). In the Tartu Keskpark, at least one individual was heard calling from a tree (see picture P04) but could not be seen and caught on camera.

Entry n°: 52
Date & time: 2022/08/17 – 12:30
Weaver: Sunny – 28C°
Place: From Uus 55 to Delta Center to Raadi Cemetery to Uus 55
Number: 2 flocks of at least 40 individuals
Observation: A first flock (*C. monedula*) was foraging grass along Emajõgi, in front of Pikk bus station, and a second one (*C. frugilegus*) was flying by when passing under the bridge of the Jõhvi-Tartu-Valga. The rest of the loop was empty of corvids, they seem to have deserted Raadi Cemetery after nesting season. Much more smaller birds could be observed (see videos R01 and R02).

Entry n°: 53
Date & time: 2022/08/25 – 12:30
Weaver: Cloudy – 21C°
Place: Uus 55
Number: 1
Observation: A *C. cornix* walking on the ground and foraging for food (see video R01). Corvids appear to be back in this district.

Entry n°: 54
Date & time: 2022/08/25 – 14:00
Weaver: Cloudy – 21C°
Place: Along Emajõgi, crossroad between Uus and Pikk
Number: Between 30 and 50
Observation: An important flock of *C. monedula* was foraging for food. Some individuals of *C. frugilegus* were present among them, without any sign of stress or aggressivity (see videos R02 to R05). People, some with dogs, some on bicycles, were passing nearby without disturbing them. No sign of competition was observed, between the two species or inside each species. A few meters away, a small group of *C. cornix* was also present (see video R06) but with no interaction with the other mixed group. Some signs of aggression intra-group were observed in this small flock, but they were very mild and no individual was really chased away.

Entry n°: 55
Date & time: 2022/08/25 – 14:20
Weaver: Cloudy – 21C°
Place: Ulejõe Park, in front of the Arch bridge
Number: 4
Observation: A small flock of *C. cornix*, walking on the ground and foraging for food. They show no sign of apparent stress around humans acting in various situations (bicycles, electric scooters, people walking their dogs, people having a photo shoot and installing a lot of image and light material while behaving very differently than the normal passer-by).

Entry n°: 56
Date & time: 2022/08/27 – 18:20
Weaver: Cloudy – 21C°
Place: Uus 55
Number: 7 or 8
Observation: A group of *C. frugilegus* resting in the tree they used to rest in during autumn and winter, before disappearing from there during nesting season (see pictures P01 to P04).

Entry n°: 57
Date & time: 2022/09/28 – 17:45
Weaver: Cloudy – 12C°
Place: Uus 55
Number: 1
Observation: Return of *C. cornix* in the tree that was abandoned during nesting season (see pictures P01 and P02).

Entry n°: 58
Date & time: 2022/09/29 – 15:30
Weaver: Cloudy – 10C°
Place: Uus 55
Number: 1
Observation: Presence of *C. frugilegus* in the area that was almost abandoned during nesting season, foraging for food in the grass (see picture P01 and video rush R01).

Entry n°: 59
Date & time: 2022/09/30 – 13:30
Weaver: Sunny with some clouds – 12C°
Place: Uus 55
Number: 1
Observation: Presence of *C. cornix* on the roof where seagulls were nesting during summer, chasing all kinds of corvids out during this period (see picture P01 and video rush R01).

Entry n°: 60
Date & time: 2022/09/30 – 14:30
Weaver: Cloudy – 11C°
Place: Uus 55
Number: 1
Observation: A solitary *C. cornix* in the tree where corvids used to meet during cold season (see picture P02 and video rush R02).

Entry n°: 61
Date & time: 2022/10/04 – 17:40
Weaver: Partially cloudy – 10C°
Place: Uus 55
Number: Between 40 and 50, of the three species
Observation: One of the first major gathering since the nesting season (see picture P01 and video rush R01).

Entry n°: 62
Date & time: 2022/10/05 – 10:30
Weaver: Very cloudy and a bit rainy – 8C°
Place: Uus 55
Number: 2
Observation: A probable pair of *C. cornix* sitting on the roof from where they are completely absent during the nesting season of the seagulls there (see pictures P01 and P02).

Entry n°: 63
Date & time: 2022/10/11 – 15:45
Weaver: Sunny – 18C°
Place: Jardin des Plantes, MNHN, Paris
Number: Between 75 and 100
Observation: France was currently experiencing an abnormal heatwave in autumn, and vegetation was more summer-like than autumn-like (see pictures P03, P04, P07 and video rush R11). Crows were also probably disturbed by autumn work by gardeners, in order to prepare the botanical garden for winter (see pictures P01 and P02). Despite these quite unusual conditions, several individuals have been seen foraging on the ground (see pictures P05 and P06 and video rushes R04, R06 and R08 to R10), walking near humans (see video rushes R01 to R03), emptying trash cans (see video rush R12) or simply resting in trees nearby (see video rush R07). Some individuals were seen in the trap used in the monitoring program (see video rush R05), and one was seen with a GPS device (see picture P08 and video rush R13).

Entry n°: 64

Date & time: 2022/10/12 – 11:15
Weaver: Sunny – 19C°
Place: Champs de Mars, Paris
Number: Between 4 to 6
Observation: The only pair observed before in the garden is apparently still there, with what appears to be from 2 to 4 younglings from the successful nesting season (see pictures P01 and P03, and video rushes R01 to R07). A small group of magpies were also observed, even if they are not, apparently, part of the usual populations of the garden (see picture P02).

Entry n°: 65
Date & time: 2022/10/18 – 11:25
Weaver: Cloudy – 12C°
Place: Champs de Mars, Paris
Number: Between 4 to 6
Observation: The small group of the garden seems healthy and bold, not afraid of humans passing nearby or even dogs (see video rushes R01 to R03, rush R02 was cut early because an inhabitant was worried about the camera).

Entry n°: 66
Date & time: 2022/10/18 – 13:30
Weaver: Cloudy – 14C°
Place: Jardin des Plantes, MNHN, Paris
Number: Around 80
Observation: Individuals previously marked appeared to be calm and able to feed on grass and trees without problem (see picture P01 and video rushes R04 to R05). A youngling has a strange pattern of feathers that could be a disease (see pictures P02 to P04). It was attacked by a couple of individuals (see video rush R06) but also seemed to get along with most other individuals (see video rushes R07 and R08). Even individuals able to feed on the ground will prefer the easy opportunity of food distributed by humans (see video rush R09), and there were new individuals in the trap (see video rush R10).

Entry n°: 67
Date & time: 2022/10/31 – 16:35

Weaver: Cloudy – 7C°
Place: Uus 55
Number: Between 45 and 50
Observation: Large gathering at sundown are becoming more and more frequent and individuals seen are more and more numerous (see video rush R01).

Entry n°: 68
Date & time: 2022/11/02 – 10:30 & 12:30
Weaver: Very cloudy – 6C°
Place: Uus 55
Number: 2 *C. monedula* and 1 or 2 *C. cornix*
Observation: A pair of *C. monedula* was resting in the tree (see pictures P01 and P02), next to a *C. cornix* (see pictures P03 and P04). Later, another *C. cornix* was observed only two branches lower, but it is unsure if it is the same individual or not (see picture P05).

Entry n°: 69
Date & time: 2022/11/04 – 14:30
Weaver: Very cloudy – 7C°
Place: Uus 55
Number: Between 45 and 50
Observation: Crows are gathering to rest in trees (see videos R01 and R02). Different species can be seen very close to each other, like *C. monedula* next to *C. cornix* (see picture P01) or *C. cornix* next to *C. frugilegus* (see picture P02).

Entry n°: 70
Date & time: 2022/11/06 – 13:00
Weaver: Very cloudy – 4C°
Place: Uus 55
Number: 6
Observation: A group of *C. cornix* are emptying trash bins and open trash bags, making an important mess in the waste deposit area (see pictures P01 and P02). They seem to understand how to pick up waste from under the trash bins' lid (see video R02), and an individual is spotted moisturizing a piece of food in a puddle in order to eat it more easily (see video R01).

Entry n°: 71

Date & time: 2022/11/09 – 15:00
Weaver: Very cloudy – 8C°
Place: Uus 55
Number: Between 6 and 8
Observation: Crows are passing from a tree to another, around an area that seem to be their autumn territory (see pictures P01 to P05 and video R01).

Entry n°: 72
Date & time: 2022/11/14 – 12:45
Weaver: Very cloudy – 3C°
Place: Uus 55
Number: 4
Observation: A group foraging the grass around a quite specific space, seemingly by digging one or several holes. Signs of aggressivity were observed toward one specific individual, but remind mild (see videos R01 and R02).

Entry n°: 73
Date & time: 2022/11/19 – 15:30
Weaver: Between rain and snow
Place: Uus 55
Number: 3
Observation: Three individuals on the roof, seemingly observing the first snowflakes of the season (see pictures P01 and P02).

Entry n°: 74
Date & time: 2022/11/21 – 14:00
Weaver: Snowy - -3C°
Place: Uus 55
Number: Between 12 and 15 (*C. cornix* + *C. frugilegus*)
Observation: A group mixt foraging the snow on a very specific spot. Mild signs of aggressivity were observed, but seem to be only intraspecific and not interspecific (see video R01).

Entry n°: 75
Date & time: 2022/11/22 – 7:00
Weaver: Cloudy - -2C°
Place: Uus 55
Number: Around 300
Observation: A large group (but species were difficult to identify, but probably *C.*

cornix) gathering before sunset (see pictures P01 to P03).

Entry n°: 76
Date & time: 2022/11/23 – 13:20
Weaver: Snowy - -4C°
Place: Uus 55
Number: 1 *C. monedula* + 1 *Pica pica*
Observation: First observation of a magpie, sitting on the tree next to jackdaws (see picture P01).

Entry n°: 77
Date & time: 2022/11/30 – 14:00
Weaver: Snowy – -6C°
Place: Uus 55
Number: 6
Observation: 6 individuals coming and going on the tree or the adjacent roof to rest and forage directly on the branches (see pictures P01 to P06).

Entry n°: 78
Date & time: 2022/12/17 – 11:50
Weaver: Snowy – -13C°
Place: Uus 55
Number: 3
Observation: Small murder of *C. cornix*, using the path partially cleaned of snow to try to find food (see pictures P01 to P03).

Entry n°: 79
Date & time: 2022/12/20 – 10:50
Weaver: Snowy – -8C°
Place: Uus 55
Number: 4
Observation: Foraging the trash bins for food (see picture P01), switching between foraging on the ground and resting up on the tree just above (see picture P02).

Entry n°: 80
Date & time: 2022/12/27 – 12:50
Weaver: Snowy – -3C°
Place: Pikk bus station
Number: A small dozen
Observation: A group of *C. frugilegus* is resting on the nests they build or rebuild during the previous nesting season (see pictures P01 and P02 and video rush R01).

Entry n°: 81
Date & time: 2022/12/27 – 13:05
Weaver: Snowy – -3C°
Place: Kaarsild
Number: 4
Observation: A small murder of *C. cornix* walking on the ice of the frozen Emajõgi river. The follow-up of one individual (see video rush R02) shows that they drink in the water but are also closely inspecting the edges, perhaps looking for insects or small fishes to eat.

Entry n°: 82
Date & time: 2023/01/11 – 14:30
Weaver: Snowy – -5C°
Place: Uus 55
Number: 3
Observation: A small group of *C. cornix* feeding on the small defrost parts of the hedge (see video R01).

Entry n°: 83
Date & time: 2023/01/23 – 15:15
Weaver: Cloudy and snowy – -3C°
Place: From Uus 55 to Pikk bus station
Number: Different groups, mixed with the 3 species, maybe 200 all together
Observation: Groups are resting in trees, at very short distances (see pictures P01 and P02 and videos R01 to R03). Several groups were mixed groups, with individuals from different species standing very close to each other (see pictures P03 and P04). A group of *C. monedula* was feeding on the ground, taking advantage of the partial defrost. It was joined by *C. cornix* with much trouble (see video R04). No explicit sign of aggression or stress was observed on this day.

Entry n°: 84
Date & time: 2023/02/15 – 15:00
Weaver: Clear – 3C°
Place: Uus 55
Number: 10-12
Observation: Crows of different species resting in the same trees during the day (see pictures P01 to P05). The partial

defrost seems to ease some tensions now that food is much more accessible on the ground.

Entry n°: 85
Date & time: 2023/03/09 – 17:15
Weaver: Clear – -8C°
Place: From Uus 55 to Reakoja plats
Number: Around 15 in trees and on roofs + an important flock
Observation: The heavy layer of snow (see pictures P01 and P02) is preventing crows to start nesting season as early as they did last year. Nest are still empty and no bird are working on them (see picture P06). The crows are remaining calmy on trees and on roofs (see pictures P03 to P05 and video R01), sometimes inside the center of the city (see pictures P07 and P08). An important flock passed above Raekoja plast at 17:55 but could not be recorded.

Entry n°: 86
Date & time: 2023/03/11 – 15:10
Weaver: Sunny – -3C°
Place: Edges of Emajõgi, in front of Pikk bus station
Number: 6
Observation: 6 *C. cornix* bathing in a hole in the ice. This observation could not be recorded.

Entry n°: 87
Date & time: 2023/04/12 – 15:10
Weaver: Sunny – 16C°
Place: Vabaduse puistik
Number: 4
Observation: Two apparently pairs of *C. cornix*, emptying each one a different trash can, by pulling things out and shaking them, eating what was falling or throwing it and starting again with other thing if it was empty. No picture could be taken.

Entry n°: 88
Date & time: 2023/04/20 – 15:30
Weaver: Partially cloudy – 12C°
Place: Botanical garden of the French Natural History Museum
Number: Around 60

Observation: The flock is numerous and in good health (see videos R01 to R03 and R11). Some individuals were spotted with partially white feathers (see videos R04 and R06) but that does not seem to alter their health or behaviour. They feel confident enough, even in presence of humans (including small running children) to rest directly on the ground (see video R05). They are very active in the pedagogical garden, where their behaviour around the scarecrow seem to amuse inhabitants (see picture P01 and videos R07 to R10, R12 and R13). Some other foraging behaviours in the flowerbeds, in front of the gardeners, was also seen as more funny than really problematic (see video R14).

Entry n°: 89
Date & time: 2023/04/20 – 17:00
Weaver: Clear – 14C°
Place: Champs de Mars
Number: 3, maybe one or two more
Observation: Crows were clearly heard but could not be seen.

Entry n°: 90
Date & time: 2023/04/25 – 16:30
Weaver: Cloudy – 14C°
Place: Champs de Mars
Number: At least two
Observation: One individual land on the ground and started to pluck the grass (see videos R01 and R02). The individual was clearly eating something under the grass, probably larvae, and was from time to time answering the calls of another individual at least, that could not be observed.

Entry n°: 91
Date & time: 2023/05/23 – 14:30
Weaver: Sunny and cloudy – 19C°
Place: Raadi Cemetery
Number: Around 10
Observation: *C. frugilegus* (see video rushes R01 to R04) but also some *C. cornix* (not recorded) foraging ground, trees and plants. Presence of plenty of insects (see video R05).

Entry n°: 92
Date & time: 2023/05/23 – 17:30
Weaver: Mostly cloudy – 18C°
Place: Emajõgi edge, face to Lubja
Number: Between 20 and 50
Observation: An important nesting area, mostly of *C. frugilegus* (see video rushes R06 to R10), could explain their absence from the last year nesting area in Pikk.

Entry n°: 93
Date & time: 2023/07/03 – 16:45
Weaver: Sunny – 19C°
Place: Uus 55
Number: 1
Observation: Despite some clear hostility from the nearby gulls, crows are starting to take back their “autumn place” (see pictures P01 and P02 and video rush R01).

Entry n°: 94
Date & time: 2023/07/17 – 16:00
Weaver: Sunny – 22C°
Place: Uus 55
Number: Other species
Observation: The hostility of the gulls can be understood by the fact that some chicks are still present and can be see signalling from the edge of the nearby roof (see picture P01 and video rush R01).

Entry n°: 95
Date & time: 2023/07/17 – 17:15
Weaver: Sunny – 22C°
Place: Uus55
Number: Other species
Observation: More observations show that some of the chicks appear to be still very young, explaining the aggressivity of the gulls (see pictures P02 & P03 and video rush R02).

Entry n°: 96
Date & time: 2023/08/28 – 15:15
Weaver: Sunny with some clouds – 19C°
Place: Uus 55
Number: Between 6 and 7
Observation: A small group of *C. frugilegus* coming back in the main tree, a

bit unusual place for them (they are usually around Pikk). In the middle of an online meeting, observation could not be recorded.

Entry n°: 97

Date & time: 2023/08/31 – 16:20

Weaver: Cloudy – 18C°

Place: Uus 49

Number: Half a dozen

Observation: A group of *C. cornix*, foraging the ground, a bit outside of their usual preferred place. Maybe some movement is ongoing in the groups. Out without material, this observation could not be recorded.

seem to eat them. Some were on the trees, picking up acorns and breaking them open (see video rush R02 & R03), some were on the ground, investigating what the others have let fallen (see picture P02).

Entry n°: 98

Date & time: 2023/09/01 – 19:40

Weaver: Cloudy – 16C°

Place: Uus 55

Number: Between 20 and 30, of at least two species

Observation: A medium group gathering in the central tree (see picture P01), a close-up reveals (see pictures P02 and P03) that at least *C. frugilegus* and *C. monedula* are sharing closely the same space.

Entry n°: 99

Date & time: 2023/09/04 – 14:05

Weaver: Clear – 17C°

Place: Uus 55

Number: 2

Observation: A probable pair of *C. cornix* walking in the parking lot and looking for waste fallen down from garbage (see video rush R01).

Entry n°: 100

Date & time: 2023/09/04

Weaver: Clear – 18C°

Place: Around Pikk bus station

Number: At least 50 but maybe more in the surrounding trees

Observation: A large group of *C. monedula*, with some *C. frugilegus*, feeding around the walking paths along Emajõgi. Were seen on some big mushrooms (see picture P01) but do not