WORKPACKAGE 2 – SYMBOLICAL AND FACTUAL NUISANCES

DELIVERABLE 9 - INTERVIEWS' REPORT ANALYSIS

CONTEXT

GENERAL CONTEXT

Nuisances are a main aspect of human-animal interactions, especially in cities, seen as the human habitat by default, where animal presence is less tolerated. During our recent research on rats in Paris (Delahaye, 2021), we realised that some of the nuisances were completely overestimated and were in fact more psychological than factual (like in catering), while others were completely unknown to the wide public but really expensive to manage for professionals (automotive mostly). However, nuisances do exist and must be addressed.

INSIDE THE PROJECT

This project will partially follow the methodology set for a previous study (Delahaye, 2021) of another urban species (*Rattus norvegicus*) in another urban environment (Paris, France). This study showed that the relationship between humans and liminals can be complex, and that several layers of semiotic links can coexist, sometimes even being contradictory. A second (but parallel with D8) step is, consequently, to analyse the interviews conducted with professionals working with the studied species or in a field that can potentially be affected by them, to have a comparison point between factual nuisances and the one expected or believed by the general public.

RESEARCH QUESTION AND HYPOTHESIS

QUESTION AND SUBQUESTION

This deliverable is part of the Case study 2, aiming to study the gaps and paradoxes between factual nuisances and perception of such nuisances, probably symbolical nuisances. The main question of this Case study is: How can we address the nuisances some liminal species are causing to humans?

The preparation of the survey aims more specifically to answer the question: What information is emerging from the data gathered by the interviews?

HYPOTHESIS OF THIS STEP

The general hypothesis of this step is that most of the perceived nuisances are in fact symbolic nuisances. Factual nuisances do exist but they are not where we think they are. To improve human/animal cohabitation, a meticulous analysis of both factual and symbolic interactions is needed.

This precise step hypothesises that, based on the previous results of Workpackage 1 (see document M1), there is probably a gap between the perceived nuisances and the factual ones. Gathering more data about issues faced by professionals, field knowledge and factual costs of the nuisances is consequently an important part to understand how big this gap can be, and, further, how humans are creating representations about liminals that are more or less close to the factual reality of these species.

METHODOLOGY

METHODOLOGICAL CHOICES

The interviewees chosen were:

- Frédéric Jiguet, research director, National Natural History Museum, France Non-recorded interview but elements were included in the meeting report (see document I2)
- Veljo Runnel, research in charge of citizen science programs, National Natural History Museum,
 Estonia Sound-only recorded interview (raw material stored in external hard drive, transcription of the interview in Documents section)
- Piret Pappel (answering for her whole team), journal editor, Eesti Loodus, Estonia Written interview (see Documents section)
- Marko Mägi, research and crows monitoring specialist, National Natural History Museum, Estonia –
 Non-recorded interview

ISSUES AND PROBLEM-SOLVING

It was not possible to reach people with completely unrelated jobs that could be impacted by crows as pests. No participant in the survey left his contact to be interviewed, as it had been the case for the study in Paris (Delahaye, 2021).

After first giving his agreement to interview, no news was given by one participant (MM). As he had been interviewed for the project before, data from this previous interview were used, but it was not recorded.

POINTS OF VIGILANCE

Due to the variety of situations, especially linguistic mastering, different formats were used for the interviews.

The data of one interview (MM) are considered fragile and were put away when not matching the answers of the other participants to not create a false-positive.

RESULTS

RAW RESULTS

ABOUT NUISANCES

Nuisances are described as mild by all interviewees. One explained that they can be "annoying", another said they were "noisy", another described messy behaviour (like foraging in trash bins) and one used the word "disrupting".

Two participants (VR & FJ) pointed out the existence of some more aggressive human groups toward these species. If they seem to be a small minority, their attitude is clearly described as hostile ("let's get rid of gulls, or crows, or jackdaws, there is too much"; "Quand on dit qu'il faut réguler les corvidés! [When we say that corvids must be regulated; the word "regulate" is here used in the meaning of "killing a certain number of individuals per year"]").

Most of the nuisances described are ecological behaviours (communication noises, droppings, foraging).

The foraging behaviour tends to create two different kinds of nuisances: grass destruction and waste management issue. The first one is ever documented in France only or a subject of complaint in France only

(this could be because the main species investigated in France, *Amphimallon majale*, seems to be absent from Estonia, see Links and references section). Solutions have been found (Lequitte-Charransol & Jiguet, 2021), but urban management shows little enthusiasm about them.

About the waste management issue, it is well described both in France and in Estonia. Most of the time, it is more the human behaviour that has been pointed out than the crows' one ("the quilt lies on human-made environment that is too tempting for intelligent birds").

The nuisances due to aggression are described everywhere as extremely rare. FJ described methods that allow stopping the aggression (almost all the time, a nest/youngling defence behaviour), MM explained it is a matter of "personality" (meaning that some very specific birds can attack, but it is not at all a common behaviour). No one reported any case of severe injury.

ABOUT BIODIVERSITY

All participants stated that crows are part of biodiversity, especially in an urban context. If some predatory behaviour has been observed toward other species, it does not seem to be a biodiversity hazard.

VR insisted more specifically on the difficulty it can be to monitor the biodiversity of common species, since they are less attractive to the general audience. He advocated that communicating about biodiversity by putting in light alternatively common and rare species is important so people can have an accurate representation of what biodiversity is.

ABOUT BENEFITS

Besides benefits directly linked to biodiversity, most of the benefits found by humans in the presence of crows are found in aesthetic ("corvids [can] be a pleasure to watch and/or [they are] beautiful birds"), intellectual ("They are fun to watch and they show their intelligence.") or emotional (through the development of empathy, see more about this aspect in the About popularization and citizen science section) pleasure.

ABOUT COHABITATION

Participants did not see any major cohabitation issues ("I do not see any big problems in Tartu"). Nuisances are usually tolerated and crows can benefit from advocates in human groups, especially when other inhabitants are complaining online (VR: but then again there is another group that will say "why are you complaining? They are part of the city life, or nature, and we have to live together. Also, there is no point to fight because they're coming back, you cannot kill them all or chase them away, so at some point, you will have to deal with them anyway.").

If cohabitation seems to be at least neutral in Estonia, the situation in Paris can be a bit tenser, probably because the vast number of inhabitants and tourists are (directly or indirectly) feeding a way more massive group than in Tartu (FJ and his team evaluated the number of pairs between 600 and 700 in Paris, producing each year around 600 younglings that gather then in flocks, see document I2). But, quite strangely, as the crows of the Museum are wearing rings, they seem to be more easily tolerated by inhabitants who think that they must be tamed/raised in captivity/released for an unknown urban management purpose.

ABOUT SCIENCE AND RESEARCH

Most of the participants (3 out of 4) agreed on the fact that research about corvids is insufficient.

In Estonia, an explanation could be the small size of the country and the small number of researchers available (VR: "I think Estonia is just too small, even if a researcher is researching corvids, it happens so rarely that... I can't remember..."). Researches, when they occur, are mostly on the aspect of pest control (like the study MM realized for Tartu City Government, see in Links and references section). The cohabitation aspect is a blind spot.

In France, FJ lamented that, if research does prove itself to be an efficient way to find relevant and non-lethal solutions against nuisances (by the catch-and-release protocol against aggressions, see document I2, or by the grass management against damages in gardens, see Lequitte-Charransol & Jiguet, 2021), it is still underfunded, and an important part of the population (especially through the hunting lobby) is still preferring radical and lethal solutions, for convenience or ideology.

ABOUT POPULARIZATION AND CITIZEN SCIENCE

All participants pointed out the importance of popularization, citizen science or both.

For two of them (PP and VR), communicating and involving the general audience is their job, and they strongly believe in their importance in general audience sensitization and interspecies cohabitation.

The other two (MM and FJ), mostly involved in the research aspect, are trying to be present on social media to explain behaviours and advocate for the species.

In France, FJ and his team are planning the release of a comic book focused on a bird enthusiast that shows how citizens can participate in research and how collecting data about the species can be both an emotional and aesthetic pleasure and a way to help science in the making.

INTERPRETATION

BIODIVERSITY & CITIZEN SCIENCE

If crows are not perceived as a threat to biodiversity, they are also difficult to be seen as part of it by inhabitants, mostly because they are "too common" and consequently not very attractive for citizen science programs.

Yet, important data are gathered through inhabitants (VR give the example of the eElukirrus database, FJ of the website for Paris crow monitoring, both in the Links and references section). Citizen science programs are pointed out as precious by researchers for the studying of these species.

BENEFITS, NUISANCES AND COHABITATION

The benefits perceived by humans is close to the one predicted by the biophilia hypothesis (Wilson, 1994) in which humans take intellectual, aesthetic and emotional pleasure in observing and living with other living species. In the special case of corvids, this pleasure seems amplified by a form of fascination and tenderness regarding their intelligence (PP: "birds [are offered] an easy opportunity to find [...] entertaining things to discover and have fun with (trash, gardening tools, childrens toys)").

The nuisances are factually mild, and the more severe cases seem overly exaggerated or even fictional (FJ quoted a blog article describing a crow attacking fiercely a baby in his crib in a park, an event of which no trace of existence could be found). Regarding the ones for which solutions could be found (aggressions, grass damages), the issues are persisting only due to a reluctance of stakeholders to adopt the given solutions. Regarding the one for which a solution could not be found (noise), it appears that the proposed solutions (noise repellents) were in fact a bigger nuisance than the original behaviour.

Cohabitation in this situation seems much less delicate and complicated than it was with the situation of rats in Paris (Delahaye, 2021). Despite a heavy symbolical history, crows appear to be a much more consensual species than rats and mice. Most of the remaining cohabitation issues could apparently be solved in two ways:

- Adopting the solutions found to reduce material nuisances (proper waste and grass management, catch-and-release methods to stop aggressive behaviour).

- Proposing sensitization focused on new narration, scientific knowledge sharing and empathy to help inhabitants develop a more tolerant attitude and appeared point of view.

SCIENCE, RESEARCH AND POPULARIZATION

All participants insisted on the importance of citizen science to create a bond between inhabitants and the species, through a mix of knowledge, narration, and empathy. All three aspects seem not splitable.

As small groups of humans are also showing a more hostile behaviour, it appeared more and more important to combine different aspects:

- Scientific aspects to expose facts and fight false ideas and beliefs about these species (like aggressiveness toward humans or pets)
- Narration aspects to give people explanations that make sense to them and that allow them to
 understand the species as part of a system and not as a simple and isolated nuisance that you could
 make fade away by lethal methods (like how most of the messy issues are, in fact, waste management
 issues from the human part that are then exploited by crows, but which could be solved by a better
 management, beneficial also for inhabitants)
- Emotional aspects to develop empathy and help people to adopt a more tolerant and appeased behaviour toward the species (like understanding aggressive behaviour as a protective behaviour and a sign of attachment toward their younglings).

MILESTONE 2 - PROGRESS REPORT

IMPACT OF RESULTS

These results are important to provide first-hand data regarding the way to interpret previous results gathered in Workpackage 1.

ISSUES, PROBLEMS OR LACKING

These results are unfortunately not as solid as wished, due to the fact that the number of answers and the diversity of professions was lower than expected.

NEXT STEPS

The results of this step will be analysed jointly with the results of the survey (Deliverable D10) to produce a global analysis of the people's perception (Deliverable D11).

GENERAL PROJECT - CURRENT STATE OF PLAY

IMPACT OF RESULTS

These results are the first part of first-hand data used to consolidate Workpackage 1 and interpret correctly the results that will emerge from Workpackage 3.

PROPOSITIONS FOR OTHER ASPECTS OF THE PROJECT

ACADEMIC ASPECTS

The results are a partial response to some lacking or fragile points in previous papers and conferences, but they are not sufficient yet to be published on their own.

POPULARIZATION ASPECTS

The results of this step are interesting for popularization aspects, since all the interviewees have a link with citizen science and popularization (via the citizen science programs for Veljo Runnel, the comic book for Frédéric Jiguet or the journal for Piret Pappel). The inclusion of these results in the general recommendations (see document EX2) should lead to better integration of popularization in cohabitation issues study and solving.

NEXT STEPS

The cross-analysis of these results will be part of the final report of the Workpackage 2 (see document M2).

ANNEXES

LINKS AND REFERENCES

REFERENCES

Delahaye, P. (2021). Rats, Mice and Humans. *Linguistic Frontiers*, 4(1), 44–52. https://doi.org/10.2478/lf-2021-0004

Lequitte-Charransol, P., & Jiguet, F. (2021). Restricted mowing reduces grass uprooting by urban crows. *European Journal of Wildlife Research*, *67*(3), 59. https://doi.org/10.1007/s10344-021-01504-3

Wilson, E. O. (1994). Biophilia: The human bond with other species. Harvard Univ. Press.

LINKS

Database results for Amphimallon majale in Estonia: https://elurikkus.ee/bie-hub/species/33446#overview

Estonian database: https://elurikkus.ee/regions/Linnad/Tartu%2520linn

Paris database: www.corneilles-paris.fr

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DOCUMENTS

Transcription of the interview of Veljo Runnel (docx version – 03/11/2022)

Transcription of the interview of Piret Pappel (docx version – 16/11/2022)