Multispecies Collages for Marais Wiels

Mapping More-than-Human Worlds in Brussels

Björn Bracke [1], Koenraad Danneels [1], and Bruno Notteboom [1]

[1] KU Leuven, Faculty of Architecture (Belgium).

Abstract

This paper explores directions for a more-than-human conceptualization of urban space. We present five 'multispecies collages' for *Marais Wiels* (Wiels Marshes) in Brussels. This brownfield, inhabited by a wide range of animal species, has been the subject of various construction plans and debates over the past 20 years. In the article, we will first argue that the existing imaginaries for the site, as propelled by the designers and policymakers, fail to acknowledge its multispecies complexity. Such blindness can be linked to the analytical frameworks and representational methods used by urban design professionals. We will then explore an alternative methodology to read Marais Wiels as a space of (non)human cohabitation through a mapping and collage exercise. In doing so, we use alternative data sources and speculative drawing methods. We will show how these multispecies collages, built around five perspectives, reveal a more relational understanding of the site. We conclude by confronting existing spatial imaginaries with our re-reading of Marais Wiels and reflect on the collages as an attempt to bridge the gap between more-than-human theory and urban design practice.

Keywords

More-than-human worlds, posthuman urbanism, multispecies mapping, human-nature constellations, ecological design.

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Introduction

In this paper, we aim to conceptualize posthuman urbanism by exploring alternative imaginaries for an urban site, Marais Wiels (translation: Wiels Marshes) in Brussels. This former brewery, accidentally developed into an urban marshland, is part of a contested urban redevelopment program, which has been the subject of a polarized debate over the past 20 years. Citizens' groups and nature organizations oppose plans for new constructions such as housing, protecting the existing more-than-human activities on site. The discussion around Marais Wiels can be situated within broader academic debates that question the anthropocentric and dichotomous (nature versus culture) conceptualizations of planning the (urban) environment. This 'posthuman' or 'more-than-human' turn advocates understanding the world as 'emergent through cobecoming with multitudes of life forms and entities' (Ogden et al., 2013), emphasizing the importance of human and non-human interconnectedness.

This research agenda resonates in Brussels due to the growing debate on the safeguarding of urban animal populations in open-space wastelands, which are often threatened by real-estate development or infrastructure projects (Bergers et al., 2023). Still, spatial planning and design disciplines struggle to bridge posthuman or more-than-human approaches. Implementations tend to get stuck in a technocratic approach that aligns with the dominant 'neoliberal' processes of urban space production, as it often sidesteps underlying economic and political processes (de Block and Vicenzotti, 2018; Spencer, 2021). Moreover, the frameworks and conceptual processes in planning and design fail to engage with the imbricated nature of humans and non-humans (Houston et al., 2018). We argue that this is a problem of site perception and representation, as it remains seemingly impossible to read the situated interactions between multiple species, or as Timothy Morton puts it: 'Our perception is full of holes' (Morton 2010, p. 22).

Ideas promoted in posthuman discourse are difficult to connect to everyday design and planning practice. To bridge this implementation gap, we use a more accessible understanding of multispecies entanglements, limited to human-animal interactions, to develop a 'multispecies representation' of the project site Marais Wiels and mobilize it in a multi-stakeholder environment¹. In this paper, we will first argue that the plans for Marais Wiels, developed over the years by the Brussels Capital Region and the site owner JCX Immo, fail to acknowledge the multispecies complexity of the site. Secondly, we will develop our own mapping of Marais Wiels as a space of (non)human cohabitation through a mapping and collage exercise. These multispecies collages, built around five perspectives, experiment with the use of alternative data sources and speculative drawing methods. We will show how these drawings reveal a more relational understanding of the site, which can constitute an analytical framework and representational method for future design processes. We will conclude the paper by confronting existing spatial imaginaries with our re-reading of Marais Wiels and reflect on the methodological framework to conceptualize urban space as a more-than-human constellation, bringing diverse bodies of knowledge into conversation (van Dooren et al., 2016).

The method is developed in the framework of the project 'CO-HABITAT', funded by Innoviris, that investigates ways of representing and understanding the presence of animals in the Brussels Capital Region, in order to inform urban planning and design from a non-human perspective. Although animals are the primary focus of this study, their lifeworlds, consisting of other non-human factors (plants, soil, etc.), are also taken into account, since their presence is situated in specific urban habitats.

Existing Imaginaries for Marais Wiels

Marais Wiels originated on a vacant industrial site of the former Wielemans-Ceuppens brewery. The brewery was built in 1879 on a swampy site in the Senne valley. Since its closure in 1988, the Brussels Capital Region (BCR), the municipality of Forest, and owners of the site had been discussing its future development. In 2005, a building permit was granted to the project developer JCX to build a contemporary art museum, 'Wiels', a cultural centre, 'Brass', and a new office district. During the construction works for the new business district in 2007, the foundations pierced an underground aquifer, causing the entire area to flood. This event, together with the 2008 financial crisis, halted the entire project, and JCX and the BCR agreed to repurpose the brownfield into a residential zone. In the meantime, the large body of water was increasingly populated and frequented by various plant and animal species, transforming the banks into diverse biotopes and habitats. When the developer submitted new building permits in 2013 and 2016, the projects were rejected due to significant protests by residents and action groups. As a result, the region decided to buy the site in 2020 and committed to preserving a significant part of the existing marshland as a public park, and reducing the built program to 80 housing units, a public park, and a new bicycle highway.





FIGURE 1 Aerial and site photographs of the former Wielemans-Ceuppens brewery after the site was flooded (sources: Google Earth and author, 2024).

Since 2015, the various municipal and regional authorities had taken the initiative to develop a balanced urban scheme and program for Marais Wiels. The framework for this development was elaborated in the 'Urban renewal contract CRU 4 Avenue de Roi' (Karbon, 2017), the 'Masterplan Forest-sur-Senne' (ORG Urbanism, 2020), and the design for the 'Parc infrastructurel de l'avant Senne' (VVV architecture urbanism, 2022). Despite efforts to preserve increasing portions of the marshland, local residents and organisations still resisted the plans produced by the municipality and region. In these plans, designers and policymakers represented Marais Wiels as a brownfield and wasteland, largely ignoring the animals present or deeming them unimportant. We argue in this paper that this imaginative process could be linked to the analytical phase of a design project, which formed the foundation for subsequent design proposals.

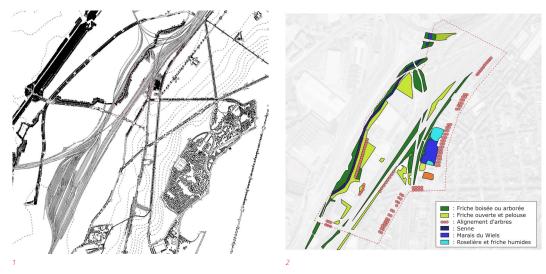


FIGURE 2 Analytical maps from the Masterplan Forest-sur-Senne. The left drawing (1) shows a territorial reading of Marais Wiels and the larger landscape entities (railways, water, topography, and vegetation); the right drawing (2) shows the different ecological habitats of the area (authors: Bureau Bas Smets (left) and Aries (right); (ORG Urbanism, 2020).

The maps in Figure 2 show a territorial reading of Marais Wiels within the larger landscape structures (left) and a zoning plan of ecological habitats (right). These examples demonstrate the tradition in landscape and urban design of using aerial projections in spatial analysis. The first involves the combination of geomorphological information layers to reveal and conceptualize territorial urban figures. The second map represents positivist research methods (survey, GIS) typically used in environmental sciences. James Corner has problematized such Cartesian geometry, algebraic measurement, and purely technical projection drawings that are prevalent in contemporary representations of space and are not situated in place (Corner, 1992). Although this is only part of the extensive analytical work done by the design teams, the subsequent plans still seem to overlook the variety of animal and plant species present, the ways in which they inhabit Marais Wiels, and their interactions with human activities. This is exemplary of a wider, structural absence of more-than-human agencies in design processes in various places in Brussels, leading to similarly tense debates. To mobilize the complexity and human-animal interactions of Marais Wiels in planning and design arenas, we will explore an alternative conception of the site through multispecies collages.

A Multispecies Atlas for Marais Wiels

The existing imaginaries and their underlying analytical drawings unveil a dualistic paradigm (Corner, 1997). On the one hand, there is a rational, analytical, and objective discourse driving contemporary planning and design efforts. On the other hand, there is an absence of the emotional, intuitive, and affective experiences as propelled by more-than-human theory. We therefore propose to use multispecies collages that aim to question current ethics of site inquiry by designers and attempt to cultivate new modes of attentiveness to situated practices (van Dooren et al., 2016). In doing so, we distance ourselves from prevalent analytical models or classification systems in the field of urban ecology (biological valuation, species inventory, ecosystem services, etc.) that risk reproducing human-nature binaries. We seek here to use concepts and related mapping techniques that evoke a more relational understanding of animals, humans, and site elements. In these collages, we aim to change the cultural narrative of Marais Wiels by representing non-human life not only as a backdrop for human histories (Tsing et al., 2020; Tsing, 2015), but as one of

the central activities in Marais Wiels. We have deliberately chosen to use animals (vertebrates and macro-invertebrates) as the entry point for our exercise, although posthuman theory broadly argues for the inclusion of all life forms, such as plants, fungi, and bacteria. By doing so, we leverage the available data and knowledge on urban wildlife to reveal insights into other other-than-human interactions.

One of the central challenges of the exercise is to translate more-than-human theories into valid scientific methods of inquiry that would be relevant for urban design practice. With these collages, we aim to bring qualitative and quantitative methodologies for situating multispecies knowledges together. More-thanhuman research is grounded in interpretive and critical social science, typically preferring qualitative design, narrative studies, fieldwork, and participatory action research (PAR) (Jacques du Toit, 2014). Many scholars have elaborated on alternative modes of inquiry, such as storytelling (Tsing, 2015), animal tracking (Morizot, 2018), collages (Tsing et al., 2020), or hand drawing (Corner, 1992). These methods contrast with typical analytical methods from planning and design practices today, as they lean heavily on quantitative methods, such as surveys, models, mappings, etc. In the multispecies collages, we explore how we can bridge these two traditions and can also link this to ongoing debates on mapping and representation in ecological urbanism. This results in a mixed-method mapping approach based on research, site visits, and interactions with human stakeholders over a period of about two years (February 2022-February 2024). Interim results of the atlas were discussed during interviews with human stakeholders or respondents, several of whom have good knowledge of local wildlife and thus represent these animals. We will return to some of these insights in the conclusions. Table 1 gives an overview of the different research methods and data sources used to construct the multispecies collages.

Research design	Source of data	Description and overview respondents (R)
walk-along interviews with stakeholders (3)	notes	on site meetings with stakeholders Marais Wiels, Natagora, researchers
desktop research	notes and maps	screening of policy documents, geodata
(social) media analysis	notes and collages	screening of Instragram footage linked to Marais Wiels, screening facebook page, online articles, Archi Urban documentary
in-depth interviews (3)	interview transcriptions	structured interviews and discussions on intermediate results of the multispecies atlas: municipality of Forest (R1 and R2), Brussels Environment (R3) and VVV architects (R4 and R5)
focus group	focus group transcription, notes, feedback on atlas	workshop with local site actors based on intermediate results on the multispecies atlas: artists (R6 and R7), citizen group Marais Wiels Moeras (R8), researchers working on the site (R9, R10, R11) and nature organisation (R12).
site visits and field work (5)	site observations and notes	participation in local activities, site visits with expert and ecologist Guy Heutz (R13), individual site visits
observation data analysis	animal observations	observations collected on the citizen science platform waarnemingen.be

TABLE 1 Overview of different research methods and sources of data.

The collages draw, among others, on the work of Kate Orff in Petrochemical America as an inspiring example of collaborative atlas-making as a form of activism to highlight environmental injustices and empower communities through visual representation and advocacy (Misrach and Orff, 2012). The book revives the atlas as a genre that ranges from representation to speculation, integrating photography, cartography, anatomical renderings, and visualizations that are both traditional (e.g., timelines, graphs) and inventive (palimpsests of maps, statistics, and logos) (Houser 2021). In a similar vein, the collages for Marais Wiels combine different forms of representation to mobilize a variety of data sources and to unravel the interdependent relationships that exist on the site, and include them in discussions about the future of the site with multiple stakeholders. We use the (deep) section as a recurring theme to show dynamics and relations between organisms and abiotic elements of the site (Carlisle and Pevzner, 2012; Reed and Lister, 2020).

This results in five collages, each with a different lens through which to look at human-animal cohabitation at Marais Wiels. The five themes include: resource, conflict, cultivation, care, and residence. The selection of the five themes was an iterative process of visualizing, grouping, and discussing site-specific knowledge with respondents and the research team, and rooting this work in existing theoretical frameworks in urban design and posthumanism. To categorize the themes, we sought methods to integrate various data layers and narratives using suitable representation techniques. While traditional thematic spatial readings are often based on form or scientific classifications, we claim that reading Marais Wiels through five more-than-human themes works better to explore the multispecies activities and realities on site.

Resource

Using a 'deep section' as a basis, the first collage, resource, depicts the interdependencies and trophic levels of organisms in Marais Wiels. It explains how the project area serves as a granary for many animals and thus supports a food web that extends much wider than the project area. Central to the site's productivity is the topsoil layer, where primary producers and decomposers (indicated in yellow) play an essential role in the ecosystem. The drawings attempt to emulate these characteristics by building on 'metabolic' and 'food web' approaches within urban design. The incorporation of food webs in urban projects has been popularized in recent years by landscape architects and urban designers (Felson and Ellison 2021). Several design-based representations of idealized processes of ecological succession and metabolic dependencies have been developed by James Corner Field Operations for Freshkills Park, by Scape Studio for the 'Living Breakwaters' (Orff, 2016), and by Agence TER for the exhibition 'Sols Vivants' (Agence Ter, 2021).

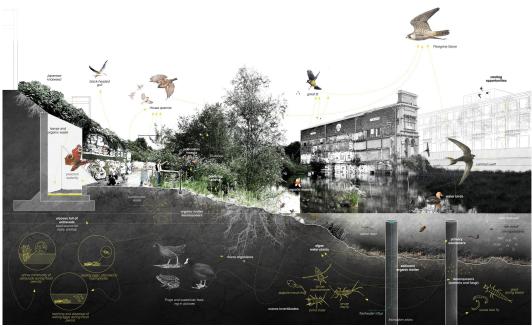


FIGURE 3 Representation of Marais Wiels as a space of resource (source: authors).

Unlike other places in the city, where the animal food chain is mainly linked to human waste or feeding behavior, Marais Wiels plays an essential role in activating more complex systems of biochemical decomposition and production. The impact on populations in the neighborhood is visible in animal observation data, which show a significant increase in house sparrow observations coinciding with the spontaneous vegetative development of Marais Wiels. This also applies to common swifts, numerous due to nesting opportunities in the many typical Belle Époque mansion houses in the municipalities of Sint-Gilles and Forest, who eagerly come to feed on the abundant aquatic insects. The presence of small resident birds, as well as pigeons and other species, makes Marais Wiels a popular hunting ground for peregrine falcons. All these animals rely on the abundance of insects and microorganisms. The artist collective active on-site (R6, R7) has documented macro-invertebrates and made numerous site observations. They discovered the important role of the 'alcoves'—old concrete crates against the railroad's retaining wall—where a unique life cycle of aquatic macrophytes has established, resulting in a substantial food reserve of ostracods, eagerly consumed by waterbirds and frogs (Rosa et al., 2023).

Care

The notion of care and care ethics is closely related to 'posthumanist' or 'more-than-human' approaches, which 'draw their tradition from anti-essentialist takes on morality and ethics' (Jon, 2020). María Puig de la Bellacasa has extensively explored this topic in her book Matters of Care, based on an in-depth reading of Donna Haraway's work (Puig de la Bellacasa, 2017). She writes that 'insofar as we remain committed to ongoing curiosity with the specifics of "how" it could be done, care is a good trope to exhibit the singularity of a non-normative politics, and ethics, of knowledge' (Puig de la Bellacasa, 2017).

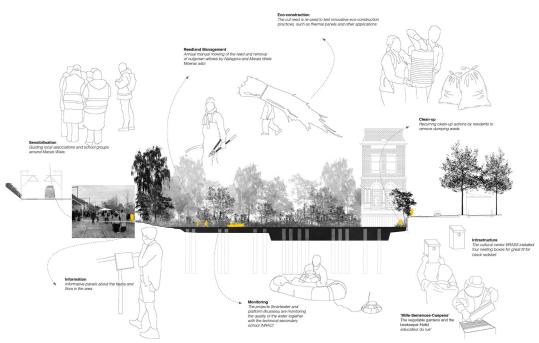


FIGURE 4 Representation of Marais Wiels as a space of care (source: authors).

We can read Marais Wiels as a place where caring relationships appropriate space, as revealed through our engagement with resident groups. Our collage illustrates a range of care-related practices, gathered from site visits, interviews, and (social) media analysis. The residents' group Marais Wiels Moeras asbl demonstrates strong commitment to caring for the marshes: clean-up actions, reed-cutting, informational panels, and guided tours reflect a desire to manage and care for the site, supporting existing animal behaviors while enabling human accessibility. Other involved actors include the communal youth center La Maison des Jeunes, the vegetable garden initiative Mille Semences-Ceuppens, and the beekeeper and 'street educator' Hafid, who uses fascination for nature and the site to connect with local youth and citizens (Lucie Tesnière, 2021).

Although gardening or beekeeping primarily benefits humans, it also fosters a perspective that links the well-being or successful growth of plants and animals to contextual elements (soil, climate) or other organisms (pollinators, parasites, etc.). Additionally, the collage includes research initiatives such as Smartwater, an experimental platform, and Brusseau, a citizen-science project on water, which establish important links between citizens and the research community. The technical secondary school INRACI developed a robot to support Smartwater's monitoring activities. Similarly, two local carpenters reuse cut reed for eco-construction projects and research.

The collage portrays care in various forms: protecting, managing, and documenting the place, while also installing nesting boxes, growing vegetables, keeping bees, and more. It also shows how care practices function as catalysts for other dynamics (food production, local economy, social cohesion, etc.).

Conflict

The management of human-wildlife conflicts (HWC) in (peri-)urban areas is a growing focus of scholarly investigation in conservation biology and agricultural research (Basak et al., 2023; König et al., 2020). Posthuman theory offers a richer, ethically informed discourse on human-wildlife conflict that moves beyond simplistic notions of tolerance or intolerance. As this collage shows, these conflicts stem either from human-centered risk perceptions or unadapted human behavior. Research on conflict mitigation in urban contexts has emphasized education, human behavior, domestic animal management, and awareness of zoonotic pathogen transmission risks (Puri et al., 2024).

The conflict collage combines multiple layers of information. First, it addresses well-known urban conflicts between animals and humans. It includes migration patterns of amphibians (toads, frogs, salamanders), which have limited safe, forested hibernation areas around the pond. During migration periods (spring and autumn), conflicts with road traffic or dogs may occur. Observations indicate that some salamanders seek suitable sites farther from the water. Human activities also threaten waterbirds during breeding seasons, as uncontrolled proximity can trigger aggressive behavior. For example, several incidents involving Egyptian geese have been documented in Belgium (Jarit Taelman 2023). Social media photos from Marais Wiels similarly show defensive behavior by Egyptian geese in response to human approach.

In January 2024, a dead swan was found in Marais Wiels, presumably due to a fight with the resident male swan. Other conflicts involve species considered 'nuisances' by human residents. The municipality reports that rat presence is a pressing concern: 'Many residents complain about the rats—they are everywhere. The moment you touch something on-site, they emerge from the ground' (R1). Mosquitoes are also perceived as threats to comfort, hygiene, and health. In 2021, following resident complaints and advice from Bruxelles Environnement, fish were introduced to reduce mosquito populations (R4, R5).

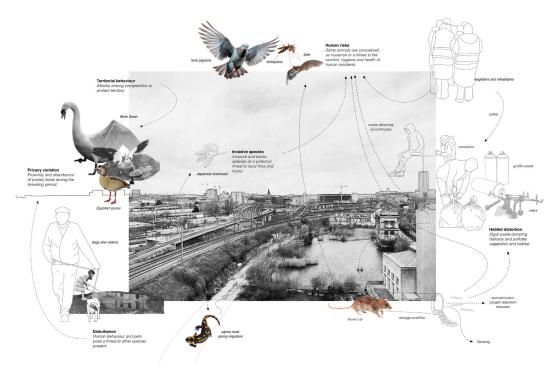


FIGURE 5 Representation of Marais Wiels as a space of conflict (source: authors).

However, experts (R13) note that Marais Wiels' ecosystem now hosts sufficient predators to prevent significant mosquito proliferation. Waste and pollution were also cited as major threats to habitat quality. Bruxelles Environnement, the agency managing the site, removes approximately ten cubic meters of waste monthly: 'This isn't small-scale fly-tipping but organized, structural dumping of industrial and construction waste' (R3). Additionally, Forest's undersized sewer system leads to frequent wastewater overflows into the marshes (Aries Consultants, 2020).

Finally, the municipality notes that vandals frequently discard e-scooters and bicycles into the water, disturbing vegetation and endangering animals. The site is perceived as unsafe by some; users of Brass and Wiels describe it as 'a place of tensions, with activities seen as problematic: the building's rear has become a no-go zone, occupied by individuals in precarious situations or engaging in deviant uses, creating insecurity (assaults, burglaries, vandalism, etc.)' (Carlier, 2020).

Residence

The collage on residence delves into the diverse ways in which Marais Wiels serves as a place of shelter and safety for both humans and nonhumans. The term residence could, in this context, be understood as habitat, which in ecology refers to the area and resources utilized by specific species or an assemblage of animals and plants within their abiotic environment (European Environment Agency, 2023). Habitat has emerged as a pivotal term in ecology and the development of biodiversity policy since the 1980s, permeating fields such as landscape ecology, landscape architecture, and land-use planning (Dramstad et al., 1996). However, to move beyond a mere ecological discussion and transcend the confines of traditional ecological discourse, the term residence allowed for a different discussion with respondents. Marais Wiels hosts a remarkable diversity of life, including a unique array of dragonflies, insects, beetles, and moths yet to be fully discovered.

This collage illustrates how Marais Wiels accommodates safe spaces for various animals. The plan view situates the project area in the Senne Valley, while a cross-section elucidates the various habitat conditions between dry and wet areas. The collage unveils a rich tapestry of life cycles in Marais Wiels. For instance, the alpine newt finds refuge in the higher wooded verges during winter; the waterfowl and other waterbirds build their nests within the reed beds; pigeons inhabit the vacant building 'Metropole'; and the black-headed gulls spend their nights on the marsh in large groups. Its location in the Senne Valley makes Marais Wiels also very suited as a temporary residence for migratory birds—the common sandpiper is a welcome guest in spring and autumn.

Unexpected residents include semiaquatic turtles, such as the pond sliders—commercial pets abandoned by their human owners. Since they are omnivores, they can survive, but they cannot reproduce in the cold Belgian climate (Jooris, 2012). But humans also find shelter in Marais Wiels, as homeless people often seek rest and safety in this area. They regularly build temporary shelters, which, however, are systematically removed by the local government. The secluded and protected nature of Marais Wiels only temporarily provides opportunities to find a residence.



FIGURE 6 Representation of Marais Wiels as a space of residence (source: authors).

Cultivation

The final collage, cultivation, reveals several practices that attempt to integrate multispecies phenomena into cultural events, expressions, rituals, language, artistic practices, local stories, etc. Matthew Gandy has emphasized the importance of 'symbolic resonances' of urban design discourse and the 'creation of site-specific fusion between art and nature' (Gandy, 2013). Philippe Descola has argued for the need for a new cosmological conception with a strong anthropological dimension, a cosmology 'open to all components of the world and also respectful of certain of their peculiarities' (Descola et al., 2013). In this collage, we

try to bridge ecology, creativity, and space and reveal patterns that could inform 'more meaningful and imaginative cultural practices than the merely ameliorative, compensatory, aesthetic, or commodity-oriented' (Corner, 1997).

The focus is on practices that could be understood as signs of a more welcoming regime that rejects discrimination between humans and animals through cultural activities. The collage captures the diverse array of initiatives and daily engagements of cultural and artistic organizations within Marais Wiels. The site has served as a fertile ground for numerous artistic productions and activities, ranging from theatre performances and festivals to workshops and exhibitions. Central to these initiatives is the natural richness and diverse animal species inhabiting the site. Notably, the little grebe, typically known for its shy character, has emerged as the symbolic mascot of the local action group. Macroinvertebrates such as dragonfly larvae, mosquito larvae, and diurnal flies are depicted on benches installed by the local artists' collective, while graffiti works frequently feature (water)birds, further intertwining art with nature. These creative endeavours and community-driven activities are fuelled by an ongoing resistance against proposed building and transformation plans, underscoring the persistent opposition to any changes that may disrupt the area's unique character.

Local narratives and imaginative conversations surrounding Marais Wiels play a significant role in shaping collective identities and fostering a sense of belonging. For instance, the community group responsible for site cleanup affectionately refers to themselves as 'les fées du marais' (the fairies of the marshland), or the installation of a pair of swans in 2022, an event that was understood as a poignant symbol of the community's commitment to preserving Marais Wiels. These examples highlight the profound connection between imagination, affective relationships, and the ongoing struggle to safeguard this urban oasis.

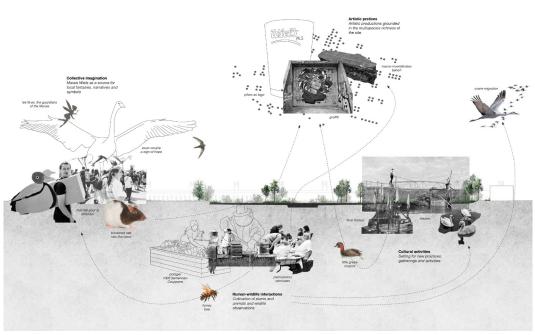


FIGURE 7 Representation of Marais Wiels as a space of cultivation (source: authors).

Epilogue

These multispecies collages represent Marais Wiels in an alternative way, emancipating nonhumans on the site beyond their ecological value and revealing different perspectives on multispecies relations. Doing so, we seek to explore an analytical method for urban design, as an alternative to common projections that have led to human-centred visions of the future for Marais Wiels. We discuss three main conclusions from this exercise.

First, the mapping exercise presented here involves a double simplification vis-à-vis the dominant discourse in posthuman thought. We have limited ourselves to (visible) animals, leaving out many other actors, and the drawings often fall back on a human perspective when talking about multispecies relations (e.g., care, risk, or cultivation). This simplified approach was effective in reducing complexity and engaging with human stakeholders. Most stakeholders found the drawings 'very relevant' (R4, R5) and acknowledged that 'many of the elements represented are not really in the scope of the project today' (R1, R2, R3, R4, R5). However, it must also be mentioned that some of the stakeholders involved in this research are close to the lifeworlds of nonhumans, for example, the naturalists and activists working on the site on a regular basis. We can argue that, while the discussion only involves humans and uses human language (terms like 'conflict' are inherently human concepts), these collages can serve as an analytical tool bridging the gap between human-centred modes of site investigation prevalent in current practices, and the representations or 'gaia-graphy' (Arènes, 2022) of more-than-human discourse, which often seem detached from the everyday reality of designers and planners. In this sense, we present it as an intermediate step to integrate multispecies ontologies in an urban design context.

Secondly, the collages illustrate the complex epistemological terrain for multispecies representations that spans grassroots ecological survey work, scientific expertise, social media, and local tacit knowledge. This knowledge base, rather than being supported by policy agendas and knowledge production at the regional level, is rooted in local and non-institutional practices. The observation data for Marais Wiels, gathered by volunteers and managed by nature organization Natagora, are more pertinent and permeated in the local initiatives compared to the ecological studies accompanying the planning initiatives. This shift of scientific knowledge capacity from the government and its regulatory agencies to local citizen groups is part of a wider trend of a breakdown of knowledge capacities of the state (Gandy, 2019). However, this ecological knowledge generated on these sites and grounded in local communities creates opportunities for a more wildlife-inclusive development of the site. Collages for Marais Wiels challenge the imperative that only scientific or expert knowledge persists to support policy decisions, as the collages tap into local, transdisciplinary, and transformative knowledge production. The collages proved to be an excellent tool for situating and contextualising scientific data and linking it to local knowledge and practices.

Thirdly, the exercise demonstrates the complexity of providing a unified method for multispecies representations. In the collages, we mobilise representation methods from different fields, such as architecture, geography, biology, sociology, botany, ethnography, urban planning, and even the arts. Key recurring representation tools are section, plan, social media photos, photo collages, illustrations, and diagrams. Arrows prove to be a useful tool to show the connection between different phenomena or life forms. The combination of media allows one to connect abstract elements of the analysis, based on the interpretation of observation more schematically, in a more situated perspective of the site, represented by photographs. Furthermore, the use of the section allows us to further situate the analysis in the specificity of the site, as it shows the specific topography, soil conditions, etc. However, while the collages follow a certain compositional logic, this exercise has not led to a ready-made methodology or template for multispecies mapping, and should be made specific for each context. Here we can argue that it is not

so much the end result of the collage that is central—we could think of other themes or representations for Marais Wiels—but more importantly the interactive process of using the collages to connect different forms of enquiry and knowledge and feed conversations with human stakeholders. It is about recognising the nonhuman actors by representing their needs and behaviour and trying to interpret them as representatively as possible in human interpretations of the city.

The multispecies collages for Marais Wiels provide an example of how more-than-human thinking could be applied in site analysis in processes of urban design and planning. These are underpinned by data and field observations and might provide an entry to introducing nonhuman stakes in a (human) multistakeholder environment. The collages challenge the existing analytical conceptions for Marais Wiels that overlooked the multispecies entanglements. The exercise leaves us with interesting lessons to change methods of site inquiry, the mobilisation of data and local knowledge, and representation techniques. We see these multispecies collages as an example to develop a more relational and multidimensional diagnosis of a site, an alternative reading that can be seen as an intermediate step to fully engage with more-than-human worlds.

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