

# CO-HABITAT

Towards animal-inclusive design strategies  
in the Brussels Capital Region



**Prospective Research project  
Innoviris . 2021-2024**

**KU Leuven**  
Faculty of Architecture  
Brussels -Ghent

**UCLouvain**  
Faculty of Architecture, Architectural  
Engineering and Urban planning

## **CO-HABITAT**

Towards an animal-inclusive design in the Brussels Capital Region.  
A cartographic and design exploration into non-human agency.

Program Prospective Research - Innoviris Brussels - call 2020  
September 2021 - august 2024 (3 years)

### **Promotors**

Prof. Bruno Notteboom (KU Leuven, promotor)  
Prof. Hans Leinfelder (KU Leuven, co-promotor)  
Prof. Daniela Perrotti (UCLouvain, promotor)  
Prof. Damien Claeys (UCLouvain, co-promotor)

### **Researchers**

Björn Bracke (KU Leuven)  
Dr. Koenraad Danneels (KU Leuven)  
Dr. Marlène Boura (UCLouvain)  
Guy Heutz (Hesselteer, ecologist)

### **Contact**

[bjorn.bracke@kuleuven.be](mailto:bjorn.bracke@kuleuven.be)



Hesselteer<sub>bvba</sub>

# PROJECT DESCRIPTION

In a rapidly urbanizing world, cities can no longer be approached as an exclusive habitat for humans. Due to an alarming decline of wildlife and biodiversity, there is an urgent need to give animals a more equal place also in the urban fabric. While in recent years ecological forms of urbanism and the design of green infrastructure in the urban environment gained traction, there is still little understanding among designers, planners and society in general, to what extent these spaces function as a habitat for animal species (the non-human perspective).

## **The project aims to process and visualize data on animal movements in Brussels and use these maps to develop alternative futures for an animal-inclusive design approach.**

The CO-HABITAT project aims to explore what role design can play to support the creation of animal habitats in the built environment and to develop tools to communicate about it in diverse arenas. The project focuses on two different scales. The first scale comprises the Brussels Capital Region and explores how dynamic cartography can help to visualize and understand the urban spatial patterns (periodicity, movements etc.) of different animal species based on the development of a data dashboard and visualisation system. The second scale focuses on two different case studies in which the (spatial) interaction between humans and animals is explored through research by design. Starting from the site characteristics and considering animals as equal urban citizens, alternative future scenarios for co-habitation are constructed through research-by-design and narrative mapping methods.

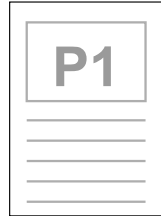
The design exploration builds on a data dashboard that will be developed to centralize different types of data on wildlife in the Brussels Capital Region. The mappings and the design of scenarios are developed in collaboration with different stakeholders (local and regional) and discussed in different 'co-habitat labs'. At the same time, the work will be grounded on an exploration of state-of-the-art landscape and design theory and the broader field of post-humanist theory in order to sharpen the questions addressed in the case research, and situate them in an international scientific context.

The research results in a CO-HABITAT atlas that envisions future pathways for co-habitation in the Brussels Capital Region and the atlas also contributes to a much needed disciplinary renewal in which more-than-human perspectives and concepts are introduced in urban planning policies and designs. By including different experts, organisations, administrations and students the project aims to contribute to a larger societal discussion on the place of animals in our urban environment.



*Image Vogelzangbeek Brussels (© Jolein Bergers)*

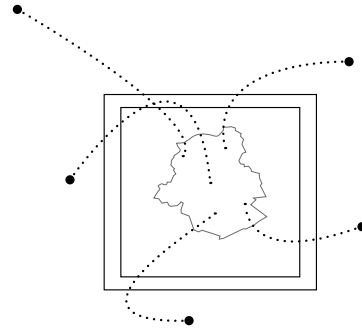
# FOUR DIFFERENT WORK PACKAGES



## WP1. THEORETICAL FRAMEWORK

*contact: dr. Koenraad Danneels*

The “Theoretical framework” WP will explore the theoretical fields and best practices on human-animal relations with a focus on more-than-human literature and post-humanism. It will frame the design exploration in WP3 in this broader theoretical framework. This work package will run in parallel to the others, and aims to put the data management and research-by-design work under a critical lens informed by post-humanism. Research questions will be reiterated as the case study unfolds and the development of future scenarios in Brussels are continuously grounded in the broader theoretical framework as well as in state-of-the-art international practices of urban ecology and animal-inclusive design from a non-human perspective.



## WP2 . DATA MANAGEMENT

*contact: dr. Marlène Boura*

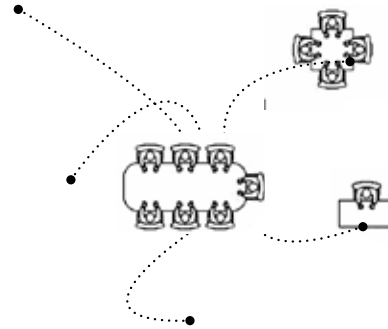
Work package 2 ‘Data management’ aims to develop a consolidated data dashboard and to centralise and optimise data on urban wildlife in Brussels for use in the design work; to implement a design-customized data-visualization system that will allow use and appropriation of the datasets by the researchers and stakeholders involved in WP3. This work package will investigate availability and quality of data and datasets related to the monitoring of urban wildlife in the Brussels Capital region. The researchers will ascertain their relevance to describe wildlife flows and spatio-temporal patterns in the design process in WP3. This will be followed by the selection and harmonization of the datasets based on their applicability in the design process. Finally, the selected and harmonised datasets will be compiled in a data dashboard and visualization system which is conceived and designed as a dynamic toolbox.



### WP3. DESIGN EXPLORATION

*contact: Björn Bracke*

The “Design exploration” WP focuses on the testing of design strategies for two case studies, resulting in the production of a CO-HABITAT atlas for the Brussels Capital Region. The exploration aims to create a series of dynamic maps elaborating on the tempo-spatial patterns of non-humans in the Brussels Capital Region and to use these maps to build future scenarios for animal-inclusive design strategies. In this way new methods of representation, capable of visualizing and communicating complex interactions in space and time between humans and non-humans are explored. Using research by design methods, future scenarios are visualised through maps, schemes, and visualisations and developed in collaboration with (local) stakeholders and ecologists. The goal of the design exploration is to bring to the surface new methods, tools or obstacles for an animal-inclusive design practice and enable debate on the topic.



### WP4. COMMUNICATION AND DISCUSSION

*contact: Björn Bracke*

The work package “Communication and discussion” will ensure the outreach of the project on the one hand and establish a communication strategy towards experts, stakeholders and target groups on the other hand. This is organised through the ‘co-habitat-labs’ and ‘case study labs’ including different stakeholders in the project. The research outcomes will also be shared and discussed through the atlas, an exhibition, scientific papers, social media communication and a student workshop.

# PROJECT ORGANISATION

## ROAD MAP

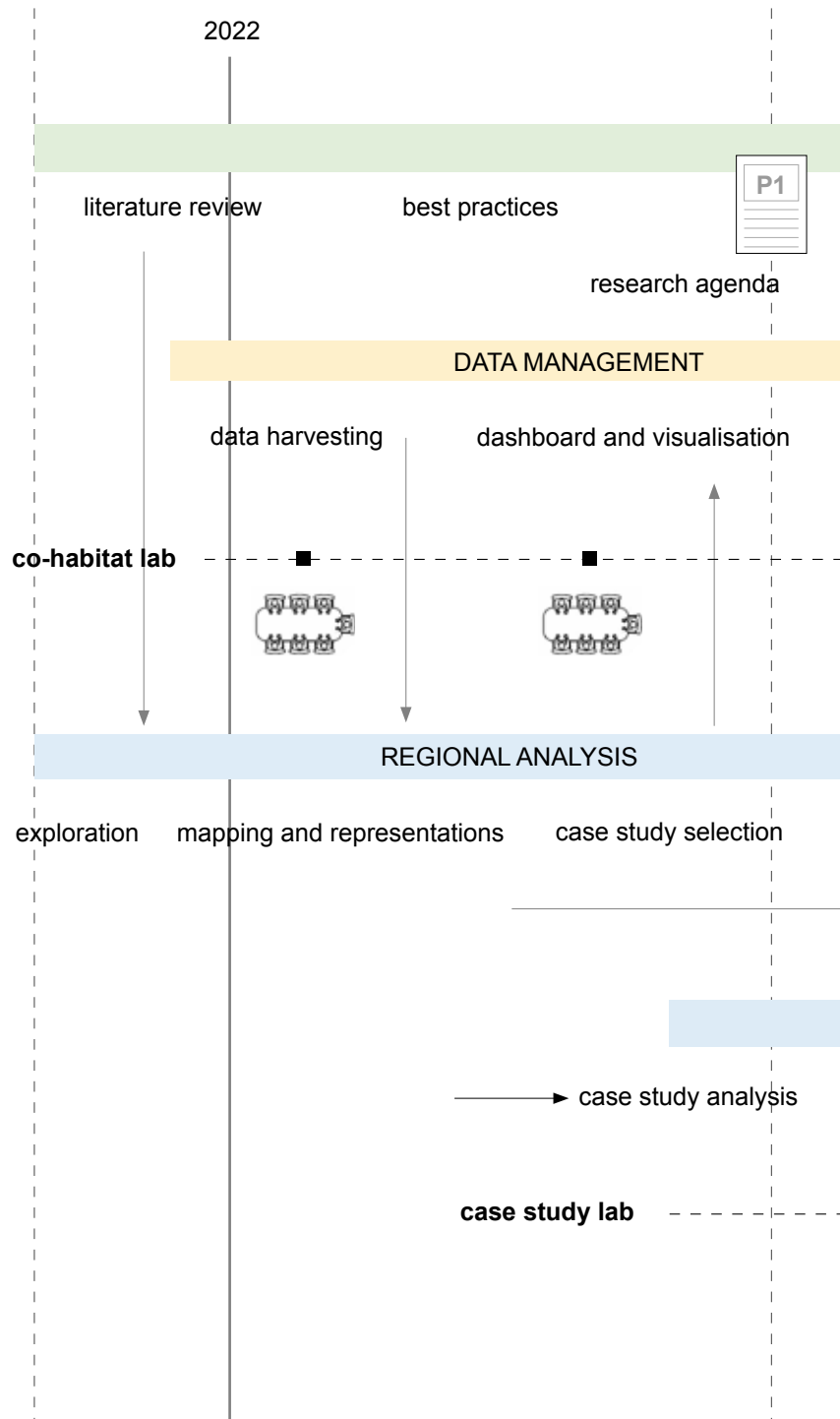
The project is organised around the four different work packages, each with specific tasks and objectives (see previous page). The road map frames the different activities and outputs per work package, the interrelationships between the work packages and the consultation moments with stakeholders on a timeline.

## CO-HABITAT LAB

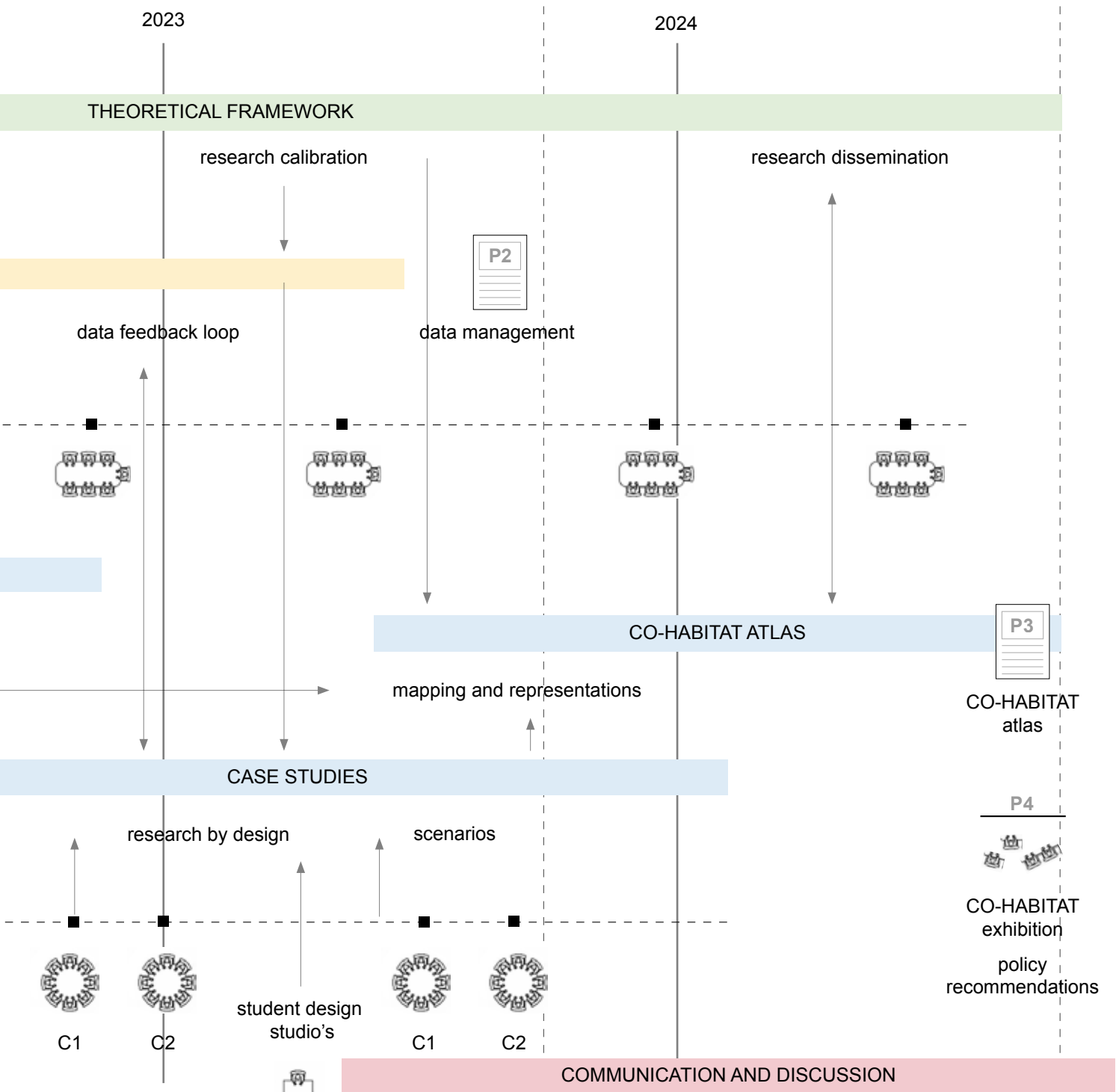
The role of the co-habitat lab is to reflect on the research progress and give expert feedback on the work in progress in relation to the description of work and the valorisation of the outcomes in practice. This lab includes a mix of public, private, civil and academic organisations, active in the field of urban ecology and urban planning. The co-habitat labs will meet at least two times per year.

## CASE STUDY LAB

The case study labs are targeted to one case study and involve the stakeholders closely related to this specific study case. It includes a mix of citizen groups, environmental organisations, local public organisations, socio-cultural organisations etc. The case study labs will have at least two face-to-face meetings per case study in which animal-inclusive design is discussed.



September 2021



Augustus 2024

## **CO-HABITAT**

Towards animal-inclusive design strategies in the Brussels Capital Region

*Innoviris - KU Leuven - UCLouvain*