ONE HEALTH FOR CITIES

THE ESSENTIAL GUIDEBOOK FOR CITY MAKERS

SECTION 6:

IMPLEMENTING ONE HEALTH

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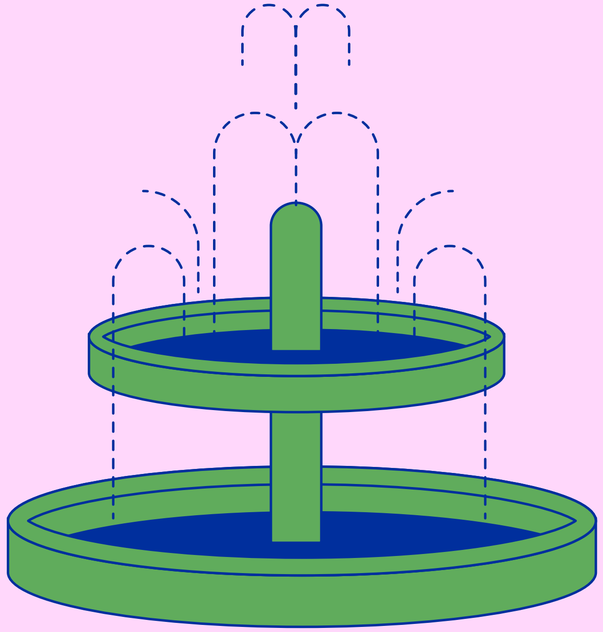


INTRODUCTION

Implementing a comprehensive One Health approach is an emerging area for cities. Given the complexity, the key is to **initiate the process rather than striving for immediate perfection**. The One Health 4 Cities initiative has adopted a flexible approach, focusing on **short-term small-scale experimentation** while developing action plans and strategies to ensure the One Health approach is sustained in the long term and integrated into future programmes.

This section presents **case studies that bring One Health principles to life**. These examples offer practical inspiration for cities aiming to launch their own initiatives to foster healthier, more resilient, and regenerative urban environments.

CASE STUDIES

URBAN PLANNING

- **City of Lyon:** Applying One Health In Public Space Redevelopment
- **Eurometropolis of Strasbourg:** The One Health Approach to Transform Schoolyards
- **City of Munich:** Animal-aided Design for Cities
- **City of Lahti:** Health in Master Planning

STAKEHOLDER AND CITIZEN ENGAGEMENT

- **City of Kuopio:** The Puijo Summit, a Motivational Event for Adopting the One Health Approach
- **City of Elefsina:** Culture as an Asset for Promoting One Health in Cities

HEALTH AND WELL-BEING

- **City of Lyon:** Risk mitigation of Lyme Disease with the One Health Approach
- **Municipality of Benissa:** A Sustainable Sports Hub
- **City of Lahti:** Promoting a Planetary Diet for People and Nature
- **Municipality of Loulé:** Active Summer for Healthy People and Ecosystems

URBAN PLANNING CASE STUDIES

CITY OF LYON: APPLYING ONE HEALTH IN PUBLIC SPACE REDEVELOPMENT

The city of Lyon aims to promote the health of people, animals, plants and ecosystems through cross-sector collaboration. This ambition has encouraged new ways of working across municipal departments, including health, biodiversity, ecological transition, and urban planning. The redevelopment of public spaces in the Sainte-Blandine neighbourhood became the city's first concrete attempt to apply One Health principles to an urban design project.

The initiative emerged in 2024, when the Health Department and the planning agency (SPL Lyon Confluence) agreed to experiment with integrating One Health into the redesign of Rue Smith and Cours Bayard—two streets selected for their heat-island challenges, limited biodiversity, and relevance to ongoing European projects. Although the project schedule was already advanced, health professionals joined architects and planners to exchange knowledge, share a One Health screening tool, and test new ways of assessing impacts on human, animal, plant, and environmental health.

This collaboration led to the creation of an innovative photo-mapping tool that visualised health-related elements in the streetscape. While promising, the tool and recommendations arrived late in the design process, limiting their influence - taking into account that the project already included strong environmental ambitions such as increased greening, rainwater management, and reduced parking.

Nonetheless, the experiment succeeded in establishing a shared working culture. It familiarised planners, designers, and public health teams with One Health concepts, revealed gaps in existing tools, and highlighted the need for earlier involvement, clearer methods, and stronger interdisciplinary support. Lyon's experience shows that building capacity and shared understanding is a first step toward integrating One Health more effectively into future planning and larger-scale urban projects.

Following this, the City of Lyon and the SPL Confluence are planning to scale this experimentation from street level to neighborhood.

More information → here
Requalification du cours Bayard et de la rue Smith | Lyon Confluence

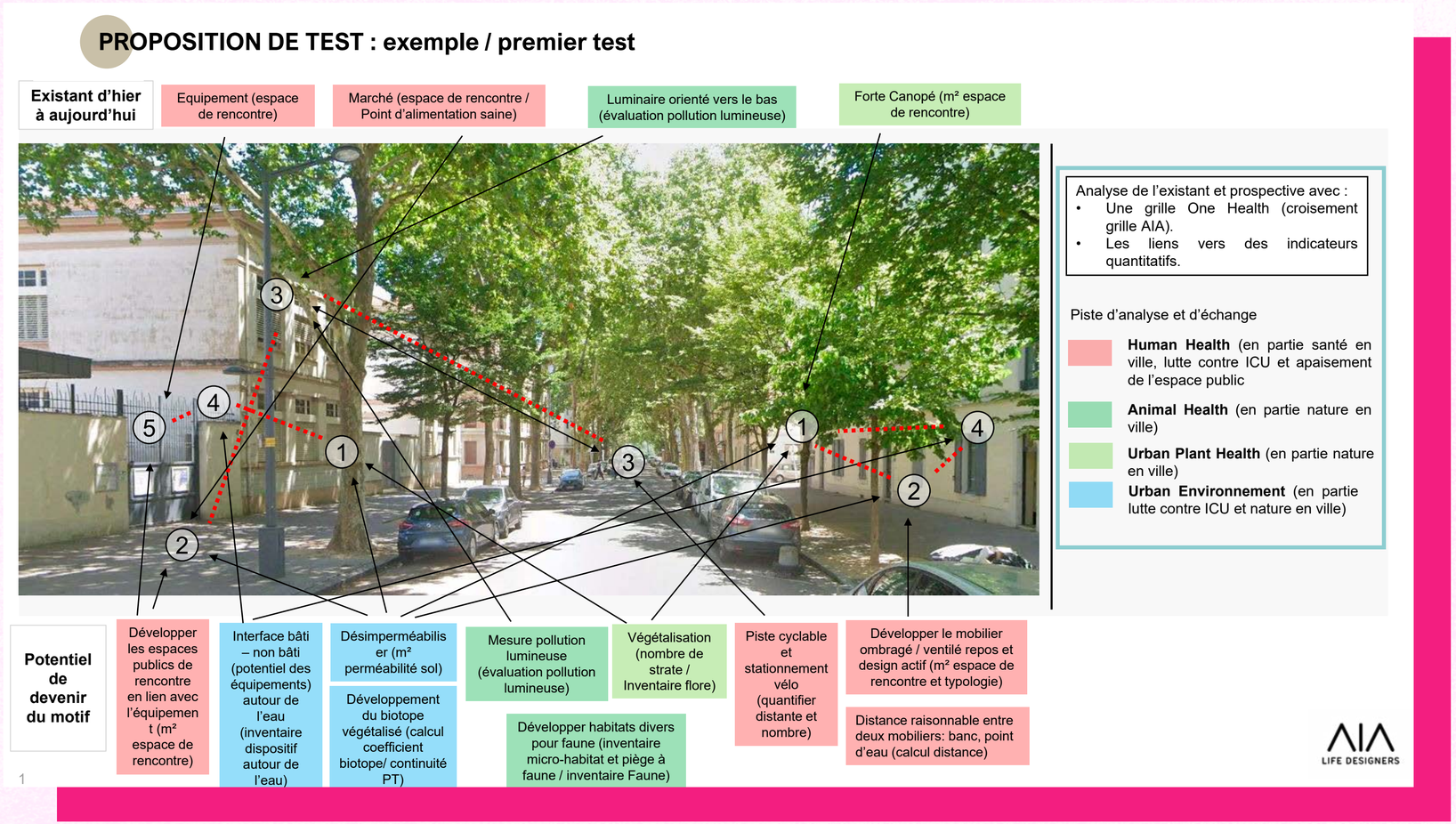


Figure 4: Test of analysing the One Health components on an urban street

EUROMETROPOLIS OF STRASBOURG: THE ONE HEALTH APPROACH TO TRANSFORM SCHOOLYARDS

Strasbourg has been transforming schoolyards since 2020 through the Cours Oasis project, turning paved, heat-intensive playgrounds into cooler, greener spaces that support climate adaptation and offer more gender-equal environments for children. The initiative already promotes physical well-being, reconnects children with nature, and increases biodiversity on school grounds. While advancing knowledge on One Health, the team of Strasbourg Eurometropolis decided to take a step further and bring an explicit focus on the relationships between children, ecosystems, and non-human living beings. Integrating One Health offers the project the opportunity to strengthen its impact and create a shared narrative that could mobilise educators, families, and designers around a common objective “caring for children by caring for their environment”.

One Health principles can be applied at every stage of the schoolyard transformation process. This includes selecting diverse, climate-resilient vegetation, creating microhabitats, managing water and organic matter on-site, and using natural and healthy building materials. The redesign also emphasises inclusiveness, offering multifunctional spaces that support different types of play while reducing heat and noise stress. The project is based on collaboration between a schoolyard committee and designers, being supported by a One Health integration grid for the schoolyard.

By reframing green schoolyards as shared ecosystems, the project shifts mindsets from “installing nature” to “caring for a living environment”. The approach encourages educators to use the schoolyard as a learning resource and strengthens awareness among children, families and staff. Strasbourg’s experience shows that many urban projects already contribute to One Health, and making these contributions explicit, taking into account the interactions between living beings and the ecosystem, increases ambition and impact. The tools are transferable, and implementation can easily be adapted to the available resources and the stakeholders involved.

More information in the Toolbox

Figure 5: One Health Schoolyard

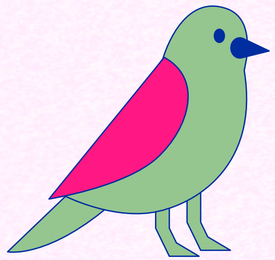
CITY OF MUNICH: ANIMAL-AIDED DESIGN FOR CITIES

In Munich’s Neuperlach neighbourhood, the city explored how wildlife can be intentionally integrated into urban planning rather than displaced by it. Through the initiative Creating NEBourhoods Together, the municipality piloted Animal-Aided Design, a planning method that considers the needs of animals from the earliest design phase of buildings and public spaces. In the initial phase of the action "Animal-Aided Design," the project team established a regional species pool for Neuperlach, encompassing around 400 animal species. Through a participatory workshop involving experts and local representatives, the target species were further refined. Key challenges included determining suitable integration spots for these species, identifying innovative measures to improve their habitats, and exploring potential habitat elements. Ultimately, the team selected 14 target species (including bats, wild bees, butterflies, and common urban birds like the house sparrow), focusing on diverse habitats.

How can urban designs and scenarios facilitate co-existence among humans, animals, and plants? To translate the analysis into habitat elements within the urban space, the city collaborated with the Technical University of Vienna. The researchers and students examined gathering spots for residents in Neuperlach, evaluating their suitability for animals. The students devised various designs, including networks, pedestrian bridges, and biodiversity modules for rooftop gardens. The design features a modular structure that accommodates different species, including nesting aids for wild bees made of sand and clay, the construction of bat habitats in building facades, and the integration of them into an urban rooftop garden planted with edible plants for the neighbourhood and other target species.

Cosy seating and lounging decks are arranged around planters filled with mostly native trees and shrubs, flowering perennials, and edible plants. Lavender not only attracts wild bees and butterflies but also creates a special atmosphere of relaxation and tranquillity for people. The structure is further enhanced by a loosely woven sunshade that provides pleasant shaded spots on hot days, as well as nesting aids for birds. The nesting platform encourages the experience of urban nature by fostering encounters and providing a welcoming space for both people and animals.

Through the "Animal-Aided Design," the project learned the importance of raising awareness among residents in Neuperlach about urban biodiversity and animal habitats. By offering a species trail and facilitating discussions, the project team engaged the community in envisioning a more animal-friendly city and supporting multispecies co-existence creatively and collaboratively. A key aspect of transforming urban spaces using Animal-Aided Design is creating opportunities for nature experiences for residents within their neighbourhoods. The Animal-Aided Design toolbox supports the implementation of wildlife-friendly planning, and it is designed for participatory and co-creative work, making it applicable to housing companies, schools, and community organisations.



More information: here

“Promoting biodiversity doesn't require waiting for major investments or the creation of expansive parks; simple initiatives can make a difference in any area.”

– Antje Kohlrusch, City of Munich

Figure 6: Mapping biodiversity

CITY OF LAHTI: HEALTH IN MASTER PLANNING

In Lahti, Finland, municipal land-use planning plays a central role in shaping how people and nature can thrive together. Because Finnish municipalities hold strong planning authority, Lahti's master plan—updated every city council term—sets the direction for all detailed planning. As the city faces declining biodiversity, challenges in meeting climate goals, and rising lifestyle-related health issues, it recognised that a more integrated approach was essential.

To build this shared understanding, Lahti designed the master plan as a broad, participatory process. Over four years, experts from environmental protection, public health, mobility, and urban development worked alongside residents, businesses, and elected officials to identify priorities and negotiate solutions. Public participation proved crucial: by the time the plan reached the City Council, it was widely understood and accepted. No appeals were filed against the approved plan, a strong indication of trust in the process and a foundation for strengthening One Health principles.

The final master plan now guides all subsequent planning. It identifies key natural assets, secures ecological connections, and outlines routes for sustainable mobility. By embedding these elements at the highest planning level, Lahti has created conditions that support healthier lifestyles, safeguard biodiversity, and improve urban resilience.

The process also revealed areas for growth. While natural values were addressed broadly, discussions about individual plant or animal species tended to arise only when they were seen as constraints on development. Lahti recognises the need to consider other species more holistically to advance the One Health approach fully.

More information: here

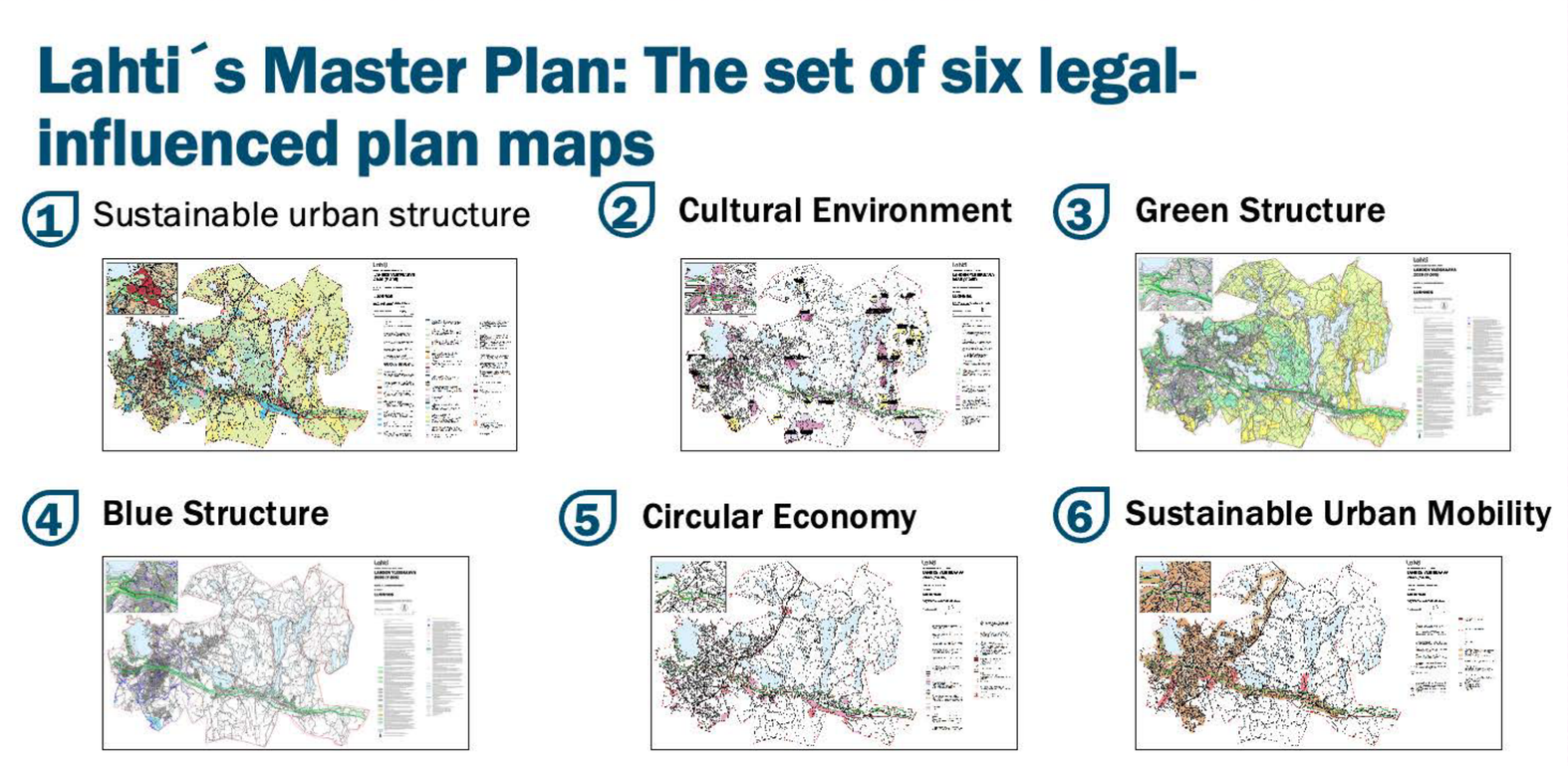


Figure 7: Lahti's Master Plan maps

STAKEHOLDER AND CITIZEN ENGAGEMENT CASE STUDIES

CITY OF KUOPIO: THE PUIJO SUMMIT, A MOTIVATIONAL EVENT FOR ADOPTING THE ONE HEALTH APPROACH

In Kuopio, Finland, professionals working on public health, environmental protection, biodiversity, and urban development realised that although each field was highly active, they were often working in silos. Sector-specific conferences brought together the same people, limiting opportunities for cross-disciplinary collaboration. At the same time, the city faced complex challenges: unhealthy lifestyles affecting residents' well-being, environmental pressures linked to urban development, and threats to local wildlife and ecosystems. To build shared understanding and align goals, Kuopio launched the Puijo Summit, an annual event on the Puijo hilltop, that brings together experts from different disciplines to explore how the One Health approach can guide planning and decision-making.

The summit combines seminars and workshops where professionals from health, urban planning, environmental conservation, academia, and community organisations meet, debate solutions, and develop collaborations. The event encourages a holistic perspective, acknowledging that promoting physical activity, sustainable urban growth, and ecosystem protection are interconnected. The initiative emerged when the city recognised that ambitious development plans and strong environmental commitments could appear contradictory. By applying One Health principles, the summit fosters multisectoral cooperation, reduces conflict in planning processes, and helps participants see how their work contributes to a shared vision for "a capital of good life."

Over time, the Puijo Summit has become a platform for new partnerships and projects that support healthier lifestyles, environmental stewardship, and animal and ecosystem protection. Participants consistently report that the summit creates a unique atmosphere of optimism, motivation, and shared purpose. A yearly “Puijo Summit Statement” publicly reinforces the city’s commitment to One Health. Kuopio’s experience shows that sometimes the most impactful action is creating a space where people can connect, learn from one another, and speak a common language, making complex challenges easier to address collectively and sustainably.

More information: here

Figure 8: One Health walk in Kuopio

CITY OF ELEFSINA: CULTURE AS AN ASSET FOR PROMOTING ONE HEALTH IN CITIES

Elefsina, the European Capital of Culture 2023, offers an inspiring example of how cultural heritage, creativity, and community life can support the promotion of One Health within cities. Rooted in its history as a major ancient Greek site and the birthplace of the Eleusinian Mysteries, the city possesses a rich identity. This distinctive identity, further shaped by its industrial past (with renovated spaces now serving cultural events) and the vibrancy of Mediterranean food, dance, and lifestyle, has been strategically leveraged to foster collective engagement, well-being, and environmental awareness.

A clear illustration of this approach is the Eco-Culture Festival, a four-day celebration of environment, ecology, and sustainability that welcomes participants of all ages. The festival shows how culture can drive environmental protection and embody One Health principles by bringing scientists, academics, artists, community initiatives and citizens together to explore the effects of the climate crisis on ecosystems and daily life, from water and food to agriculture and co-existence. Its activities included a picnic and tour of the Municipal Thermal Springs, which sparked conversations about global water scarcity and sustainable solutions, and a conference at the Municipal Observatory examining the impacts of light and noise pollution on the local ecosystem. Screenings of Greek documentaries drew attention to humanity's environmental footprint through themes of ecology, archaeology, and human geography. Weekly "Collective Kitchen: Edible City Nature – can we eat our city?" gatherings encouraged participants to reflect on sustainable urban food systems and rethink their relationship with local resources.

Elefsina’s experience highlights how cultural events can engage diverse audiences in environmental and health issues by being open, inclusive, and accessible. Culture inspires new perspectives, helps break down stigma around complex topics, and creates meaningful connections between people. Because cultural activities can take place anywhere, on streets, in schools, or with community groups, they can reach everyone and build a sense of belonging, hope, and shared purpose. Art and culture also contribute directly to well-being, helping people feel happier, healthier, and more connected to their environment.

More information: here

“Elefsina shows us that even simple and straight forward cultural initiatives can make a significant impact in linking human health, community vitality, and environmental sustainability.”

– Pascale Rouillard-Neau, Eurometropolis of Strasbourg

Figure 9: Conference on light pollution in Stephanion Observatory, Elefsina Ecoculture festival, 2024

HEALTH AND WELL-BEING CASE STUDIES

CITY OF LYON: RISK MITIGATION OF LYME DISEASE WITH THE ONE HEALTH APPROACH

In Lyon, increasing interactions among people, animals, and green spaces have created new exposure pathways for tick-borne diseases such as Lyme disease. Limited public awareness and fragmented responsibilities for green space management made prevention difficult. Aware that this challenge could not be met by public health or environmental services alone, the city adopted a ‘One Health’ approach and developed the ERATIQ project with the aim of understanding the interactions between humans, wildlife (birds and rodents), disease vectors (ticks) and the environment (urban development).

The ERATIQ project brought together researchers, veterinarians, sociologists, public health experts, municipal officials and citizen groups. Activities included monitoring tick populations and studying conditions conducive to the presence of ticks, such as vegetation type, microclimate, site use, and the presence of pathogens and rodents in urban and peri-urban parks. The 4 years of surveillance showed that tick densities were generally low in urban parks, and the risk of exposure to Borrelia burgdorferi was higher in peri-urban natural areas. These findings helped guide targeted communication and prevention. Workshops allowed stakeholders to co-design with end-users and sociologists recommendations for green space management and the implementation of public awareness campaigns.

Lyon’s experience shows that managing vector-borne diseases in cities requires a systemic, interdisciplinary approach that integrates environmental, health, ecological, and sociological perspectives. Earlier involvement of sociologists would have strengthened understanding of risk perception and behaviour change. The ERATIQ model illustrates how cross-disciplinary collaboration can improve surveillance, communication, and green-space management strategies.

As urban re-greening is increasingly used as a nature-based solution to global change, this integrated model provides a transferable method for preventing tick-borne and other vector-borne diseases while maintaining healthy, biodiverse urban ecosystems.

The project also enabled Lyon and its stakeholders to establish a lasting collaborative network — the city’s first step toward a One Health approach, which later supported deeper OH work and ultimately led to the launch of the OH4C project.

More information: here

Figure 10: Awarness raising on ticks in Lyon's urban park

MUNICIPALITY OF BENISSA: A SUSTAINABLE SPORTS HUB

In Benissa, a municipality on Spain's Costa Blanca, Mediterranean coastline and mountain areas coexist within the same territory, creating ideal conditions for outdoor sport and active tourism. With more than 100 km of marked hiking trails, a safe environment, and excellent accessibility. Benissa has become an attractive destination for both amateur visitors and elite sports teams seeking training conditions in nature. The municipality noted that the rapid growth of sports tourism and the influx of athletes increased pressure on local ecosystems and infrastructure; at the same time, they wanted to encourage healthy lifestyles among residents and protect traditional agricultural landscapes.

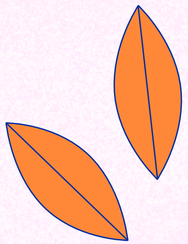
To address this One Health trade-off, Benissa implemented a strategy that links sport, tourism, environmental sustainability, and community well-being. The municipality designed eco-friendly routes for cycling, trail running and hiking that minimise erosion and protect sensitive habitats. Major events, including the international trail race Perimetral de Benissa, are organised with local businesses, volunteers, and associations, reinforcing social cohesion and supporting the local economy. Partnerships with clubs and federations encourage waste reduction and environmental awareness. Benissa is the first town in Spain adopting One Health and demonstrates that investing in nature and responsible sports tourism can generate benefits for all.

Figure 11: Professional biker in Benissa's mountains

CITY OF LAHTI: PROMOTING A PLANETARY DIET FOR PEOPLE AND NATURE

In Finland, new national nutrition recommendations published in 2024 emphasise improving public health through more plant-based eating. They call for significantly increasing vegetables, berries, and fruits, and limiting red and processed meat to 350 grams per week—a target many Finns, especially men, currently exceed. Research shows that Finnish children also consume too much red meat and dairy and too few vegetables and legumes compared to the EAT-Lancet "planetary diet," which aims to safeguard both human and planetary health.

In Lahti and the wider Päijät-Häme region, food is a strategic theme for sustainable development. The region is home to Food Campus Finland, a collaboration between major food companies, farmers, education institutions, the City of Lahti, and the regional development agency. Focusing on plant-based innovation, circular bioeconomy, and research, the platform aims to increase the value and international visibility of Finland's food sector. This work supports the goals of Lahti's Nature Step to Health programme, which highlights healthy and sustainable diets as a key measure.



Municipal public food services play a central role in shaping children's and young people's eating habits. In Lahti, early childhood education and schools serve as everyday settings where children can learn to appreciate new flavours and healthier choices. Päijät-Häme Food Services aims to increase the share of plant-based meals, ensuring that all families—regardless of resources—have access to nutritious, climate-friendly foods.

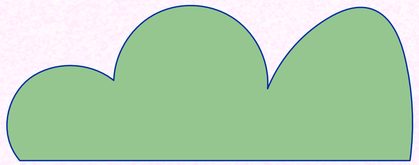
Schools in Lahti have piloted new recipes, tasting panels, and participatory food education, encouraging students to give feedback and even co-create dishes. Successful experiments, such as locally sourced Vesijärvi fish patties, demonstrate how pilots can become long-term practices. Ongoing work includes tasting panels, expanding food education through the Environmental Education Programme, and seeking project funding to scale development. Together, these efforts promote a dietary shift that benefits both human health and the environment.

Figure 12: Farming of organic food for schools

MUNICIPALITY OF LOULÉ: ACTIVE SUMMER FOR HEALTHY PEOPLE AND ECOSYSTEMS

In Loulé, a coastal municipality in Portugal's Algarve region, is challenged by climate change stressors such as heatwaves and water scarcity while there are increased risks of sedentary behaviour and social isolation, particularly among older adults and low-income residents. Tourism places a strain on local ecosystems through waste generation and intense use of beaches and public spaces.

To encourage healthy lifestyles and foster responsible interaction with nature, the municipality created Active Summer ("Verão Ativo"), a programme offering free or low-cost outdoor activities across parks, beaches, and community spaces, accessible to people of all ages. The initiative promotes well-being through physical activity, social connection, and environmental stewardship. Activities include yoga, guided coastal walks, inclusive fitness sessions for seniors, water sports, cultural workshops, and awareness sessions on marine conservation and waste reduction.



The Active Summer operates through collaboration between public health services, schools, sports clubs, NGOs, and local associations, ensuring that activities are inclusive and adapted to different needs and abilities. The programme shows how closely human well-being is tied to the environment, encouraging both locals and tourists to appreciate and look after the places they enjoy. The next step for Loulé is to consider how people can benefit from nature but without disturbing the habitats and have a harmonious co-existence with animals.

More information: here

Figure 13: Exercice in nature