Learning from:



> OBJECTIVES

The Farfalle in ToUr project in Turin, Italy, combines butterfly conservation with providing job opportunities for citizens, who live with mental or physical illnesses. Connecting people with nature by creating and maintaining butterfly oases is at the core of this project. The Farfalle in ToUr demonstrates the potential of nature for improving health and well-being and social inclusion in a city.

> DESCRIPTION

The project was founded after doctors enquired how patients with mental and physical illnesses could be involved in protecting butterfly populations in the City of Turin. What started as a project with no external funding, running on low costs and citizens volunteering, gained more attention once it became an active part of the EU-funded project proGlreg in 2018. It started with as few as two volunteers as 'users' in the project and went on to recruit 12 paid users who now act as experts for the project. These users are in charge of co-designing all activities surrounding project planning, implementation and awareness raising. Since they need to be out in the gardens, interact with others and especially school children; these users, who all are patients with mental or physical illnesses, feel resourceful, relevant and connected with society and nature. There is a primary focus on awareness raising in this project and several public events, photo exhibitions and meetings take place during the course, with a lot going online following the pandemic restrictions of course.

The main actors involved and targeted in this project are not only the patients as experts, but also school children, educators working for different social cooperatives (II Margine and

La Rondine) and refugees. This multidisciplinary approach and being able to reach out to vulnerable communities and children makes it quite unique. The project also promotes citizen science: citizens are involved in planting plant species, which attract pollinators and butterflies in their own gardens or balconies particularly well. Twice a year citizens are invited to Pollard Walks, which entail regularly counting butterflies along transects during flight season. These walks are organised in partnership with the European-wide initiative- "The Butterfly Monitoring Scheme" to help monitor the butterfly population. Overall citizens are involved in the planning, designing, implementation as well as monitoring of the Farfalle in ToUr project. All data collected is open source and can be accessed online to understand the changes in biodiversity before, during and after the implementation of these Butterfly Oases.

The Butterfly Oases are all in gardens owned by public institutions such as the Local Health Company. Currently, there are four Butterfly Oases with ten more gardens to follow in future. In 2020, some of the Butterfly Oases were integrated into the city's green corridors to allow pollinators to move even easier across Turin. Citizens were also given plants and seed bombs to attract pollinators in their surroundings.

> CHALLENGES

Like every project, there are some challenges involved as well. Some of them are listed below:

- Including different municipal departments led to diverging agendas and viewpoints emerging which had to be aligned and compromises to be found.
- There were some technological barriers, e.g.:

URBAN DESIGN ELEMENTS :: NOISE MITIGATION :: HEAT MITIGATION :: BUSINESS COLLABORATIVE GOVERNANCE :: AIR QUALITY IMPROVEMENT :: FLOOD MITIGATION

- Difficulty in obtaining sufficiently sized green areas
- Difficulty in installing an adequate irrigation system with one solution chosen was to plant resilient and drought resistant plants.
- Difficulty to procure native cultivars to plant in the oases.
- Need to establish a specific plant- insect interaction
- The lack of knowledge about wild pollinators had to be addressed as well.

> OPPORTUNITIES

Some of the key opportunities for and within this project are:

- Having a couple of mental health centres on location in the city made it possible to involve more in establishing butterfly oases and engaging them in the butterfly monitoring process, which in turn made it easier to spread the project work and outreach.
- The users and experts of the oases stay in the same mental health centre for their whole life, so ideally they could take part in the project for years to come. This enables the long term maintenance of the project.
- There is a shared mental health system between Italian cities, which could help in replicating and adapting the project concept beyond Turin.
- The multidisciplinarity of partners was key in making the project successful
- Being part of the ProGIreg project created many synergies between the project and the City of Turin and new collaborations were born with local associations. The collaboration between project partners, municipal departments and citizens is essential for its success.

> LESSONS LEARNED

The project has run for quite a few years now and many insights were gained since. To make the implementation, management and maintenance of the project run smoothly, it is necessary to include different departments within the municipality and across public bodies right from the start. They should join and be part of the co-creation and co-design process for the nature-based solution implementation. Another essential element is to involve multiple stakeholders and be empathetic towards users and citizens ascertaining their dedication and commitment to remain part of the project in the long run and take ownership of the activities. It is also fundamental to consider local realities and governance structures in place (e.g. neighbourhood and environmental associations, city districts, urban farmers) and involve all, particularly citizens and students, in disseminating insights and taking part in citizen science actions. Improving the interaction between different local actors helps in strengthening local networks and connecting people with the same aim: a healthier and more viable city. Social networks are fundamental for users, allowing them to come out of isolation by sharing experiences and skills with other stakeholders.

> INSPIRATION FOR OTHERS

These butterfly oases are easily established in other cities within Italy as the same mental health organisations are active across many cities. This provides many more opportunities to engage citizens with mental illnesses. It is also important that the butterfly monitoring methods are shared and accepted by the scientific community and commonly used also in other projects. Outside of Italy projects such as the Farfalle in ToUr project can inspire cities and communities in other countries that have a similar mental health system and in which users are engaged in different activities organised in diurnal centres to stimulate new interests and skills with those living with such illnesses. Mostly, mental health centres are managed centrally by coordinating public bodies, which makes it easier to involve different centres around the country.

Today many projects focus on urban regeneration. One strength could be to couple in the nature-based solutions with connected aims, like urban pollinator protection and social inclusion. This could ensure a wider array of stakeholders interested in different environment or social aspects of the project.

FURTHER INFORMATION _

All fact sheets were produced from questionnaires and interviews conducted by the ICLEI team. Contact ICLEI Europe for more information or access Oppla: https://oppla.eu/casestudy/21250

Contact point:

Simona Bonelli, University of Turin, Dept. Life Sciences and Systems Biology

Authors:

Daniela Rizzi (Senior Officer NBS and Biodiversity) Shreya Utkarsh (Officer NBS and Biodiversity) Roger Roca Vallejo



(Junior Officer Sustainable Resources, Climate & Resilience)





GET IN TOUCH







twitter.com/REGREEN_nbs



(in) linkedin.com/company/regreen-horizon-2020



This project has received funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement No 821016.