

Refuge Bench

by [yannick vaille](#) / © 2019-06-20 15:23:20 / Frankreich / 4235 / FR



Year of commitment : 2018

Biodiversity & Ecosystems : / Urban Microfarm, Shared garden , Green and blue corridor, Other, Ecosystem restauration, Environment education, Ecosystems preservation /



2 000 €

Builder

Sineu Graff

GENERAL INFORMATION

After two and a half years of internal development, participation in several competitions that we have won (thanks again to all those who voted to support us) and the confrontation of the concept with many competent people: the Refuge® bench is now marketed by us! We are in the launch phase, the Colmar refuge bench having been installed in 2018 and the first orders are being delivered in the coming month.

On the Refuge de Colmar bank, a field observation validated the presence of chrysopids, anthocorids, staphylinids, several spider species, pyrrhocorids and osmias. This allowed us to validate the effectiveness of the Refuge Bench in attracting pre-selected insect species and as a tool to boost biodiversity.

The feedback is of a different kind and is located upstream or at conferences:

- Users settle very naturally on the bench and take the time to observe the insects once they are installed.
- Requests for citizen facilities have been spontaneously made in the cities of Strasbourg and Paris. Especially in the context of shared gardens.

Banc Refuge® - Forme en U avec grille

Celui-ci remplit ainsi plusieurs fonctions :

- Short rest area.
- Consolidation of the existing ecosystem.
- Enhancement of public space.
- Public awareness of urban biodiversity.

"The Refuge® bench transforms the public bench into an ecological tool

What is the "Refuge® bench"?

A gendarme (Pyrrhocoris apterus) heading to Refuge® Bank - DEFI-Ecological

The result of the collaboration of skills that might not have met if we had not been in a Cooperative of Activity and Employment, the Refuge® Bank is an expression of the best of cooperation.

Eco-designer (Philippe Riehling), naturalist (Julien Hoffmann) and urban furniture professional (Vincent Schaller President of Sineu GRAFF) we have designed a bench that extends around the trees and allows us to accompany the biodiversity present thanks to insect shelters (15 in number) placed under the seat.

"The Refuge® bench is an expression of the best of cooperation.

The entomofauna targeted by the Refuge® Bench

Insects are very demanding small animals, for many of them. Indeed, many insects will be found in very specific environments, whether on a particular plant or in a specific biotope.

We have therefore compiled a large amount of data and feedback to eventually select a range of materials, depending on the insects present in urban environments, whether they are known or expected to attract.

"Several intermediate experiences have already allowed us to see the effectiveness of the refuge bank

We also worked on the shape and size of the facade openings after painting in order to best meet the needs of the targeted insects.

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It should be noted that this cohabitation requires careful recruitment of insects: useful for the ecosystem and safe for users.

Discover the hosted insects by [clicking here](#).

A pedagogical and scientific scope?

Each Refuge® bench is equipped with an explanatory educational panel that sends back, through a QR code, to a platform that describes the approach but also all the insects potentially attracted.

The public space then also becomes a source of information on a battered nature that we accompany for a worthy return.

This same site also allows to give indications of insect presence per insect, in each city where the device is present.

A standardised system like this one, deployed throughout France and Europe, provides important data on the population dynamics of certain species and also on the presence of indicator insects in urban areas.



Discover the online pedagogical interface of the refuge bench by [clicking here!](#)

The choice of materials to furnish the shelters

One of the main objectives of this system is to attract specific insects to the area so that they can reproduce, take refuge or spend the winter.

Provided all the basic elements are present, some materials therefore specifically attract certain types of insects. If we take the chrysope (here the golden-eyed damselflies), they are attracted by narrow horizontal facade openings and a refuge filled with straw.

As such, we created a batch of fifteen necessary materials using local craftsmen, an institute for the reintegration of out-of-school youth, a local artisanal and family brickworks... and we ourselves harvested what no one could get us!



The choice of materials for construction

Steel and solid wood are the two main materials of the Refuge® bench. We want to offer a sustainable, city-proof system, both for quality of use and increased durability.

- Steel, treated with Powder Blast technology, does not use any product that is harmful to the environment and ensures the mechanical strength and durability of the Refuge® bench.
- Robinia wood is a naturally Class 4 wood, allowing it to be used outdoors without any treatment.
- Then, the choice of colour plays on the contrast that black brings with the earth of his own. The land of its own having a role of "beacon" for some species, hosts of our device.

Sineu Graff, our privileged partner in charge of the industrialization of the Refuge® bench, is attentive to the origin of the materials and the principles of eco-design. Wood chips are stored in silos and heat the site for energy recovery.

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A system declined in range

If the reuse of the tree grid made sense, we also know that the installation of these other modules will require more pedagogy for optimal installation (orientation, location, etc.).

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For the entire DEFI-Écologique team, the Refuge® bench is the first concrete example of a promising economy in the field of environmental protection.

Get off the beaten track.

To make the protection of species and environments a fully-fledged economic sector is also, in our opinion, to give it the political weight it does not have and which scleroses it. In this respect, the social and solidarity economy that we bring to our hearts gives full meaning to Refuge® Bank and to the notion of sustainable development as we understand it.

Propose a solution that is as ambitious as it is coherent.

Progress Status

Delivered

Data Reliability

Self-declared

Funding Type

Private

Website Enterprise / Infrastructure

https://blog.defi-ecologique.com/banc-refuge/?utm_source=LinkedIN&utm_campaign=ENTYV

Sustainable Development

Attractiveness :

- Simple and aesthetic
- Several places available
- Visual observation of the ecosystem present.
- The digital pedagogical interface: a fun and educational tool for all ages.
- A strong attraction tool for youth.

Well Being :

- The arrangement of 3 modules side by side allows several users to rest at the same time.
- The opportunity to observe an ecosystem and be part of it for a break.

Social Cohesion :

Refuge Bench is in itself a tool of interaction. Several users will be able to pause at the same time. The originality of a direct observation of the insects leads naturally to the interaction and the discussion on the observed insects, on their importance and appreciation by the different users and finally on the pedagogical aspect that it proposes to the young audience.

Preservation / Environmental Improvement :

With 15 hotels with different insects, the refuge bench is a reception area for insects in environments often marked by urbanization and the lack of spaces and resources for them. Their presence favors and stimulates an entire ecosystem that will be consumers of these. Finally, their visibility to the general public stimulates and feeds a reflection on their importance in the ecosystem and the importance of preserving the environment!

Resilience :

- Simple and solid.
- Easy set up.
- Replenishment for insect hotels every 3 years.

Responsible use of resources :

- The manufacturing of the refuge bench involves a supply of local materials, a French manufacture and the integration of an Esat on different stages of its manufacture.
- The wood used, consisting of Robinia is not treated.
- Wood waste produced during manufacturing is used as an energy resource by partner manufacturer Sineu Graff.
- The packaging and the overall reflection on its design integrate an ecological and local design.

Testimony / Feedback

Citizen membership:

- *Winner of the Aviva 2018 competition from a wide audience.*
- *Request for spontaneous implantations from various communities by the citizen.*
- *Reflection of settlements by various shared gardens.*
- *Very good feedback at various exhibitions and fairs.*
- *Various requests for use of the Refuge Bench as a teaching tool within schools.*
- *Community Membership:*
- *Very good feedback from communities especially those where the bench was installed.*

Strong interest in the Refuge Bench and its concept at the Mayors' Fair 2019.

Insect Attraction:

Very good results observed on the Refuge Bank installed in Colmar with the presence of chrysopus, anthocoris, staphylin, several species of spiders, pyrrhocoris and osmies.

biodiversity:

The Refuge Bench was presented at the Biodiversity 2019 Foundation!

Design:

The Refuge Bench has been presented at the Biennial of Design 2019 in Saint Etienne.

Governance

DEFI-Ecological

Holder Type : Private Company

Sineu Graff

Builder Type : Other

The Refuge Bench was created by Julien Hoffmann, founder of DEFI-Ecologique, Philippe Riehling, designer and member of the collective DEFI-Ecologique and Vincent Schaller president of Sineu GRAFF

Sustainable Solutions

Refuge Bench

Description :

As mentioned above, from a 'traditional' bench, we move to a bench that serves as a continuous ecological tool by locally boosting biodiversity, raising awareness of the importance of entomofauna and building a national database. insects present in developed areas.

- Biodiversity :
- Management of natural areas
- Environmental charter

Company (es) Website :

Company (es) Website :

Photo credit

DEFI-Ecological



Contest

Building candidate in the category



Grand Prix Infrastructure Durable



Prix du public



