

## CASE STUDY

# El bosque comestible de Alcalá de Henares

*"We are restoring the peri-urban ecosystem of  
the Henares riverside"*

Enrique Nogués Julián,  
Environment Councilor of the Municipality  
of Alcalá de Henares



## PROFILE SNAPSHOT

Website	<a href="http://bit.ly/bosque-comestible">bit.ly/bosque-comestible</a>
Social channels	<a href="#">f @AytoAlcalaH</a> <a href="#">t @AytoAlcalaH</a> <a href="#">i @AytoAlcalaH</a>
Contact us through Alliance	Montserrat de Miguel ( <a href="mailto:mambiente-juridicos@ayto-alcaladehenares.es">mambiente-juridicos@ayto-alcaladehenares.es</a> )
Country	Spain
Main sector	Public-private
Uforest thematic discipline	Forest ecology
Stage of development	Implementation



By creating healthy, inclusive and accessible green-and-blue areas for local residents, and by increasing social cohesion and interaction.



By restoring derelict natural areas with self-sustainable, low-maintenance solutions.



By improving air and temperature quality, and by managing hydro-meteo risks.



By protecting a Natura-2000 site, and by fostering native plant and animal biodiversity.



## START-UP

In 2017, the Municipality of Alcalá de Henares started to plant an edible forest for animals in the Isla del Colegio, a small artificial island south of the city whose riparian forest had been nearly destroyed by intensive agriculture. It is a pilot project that stems from the European project 'Nature4Cities,' which offers technical solutions to include nature-based solutions (NBS) in urban planning.

### EL BOSQUE COMESTIBLE'S GOAL:

To create a 7,080-m<sup>2</sup> edible forest in the island Isla del Colegio to:

- Increase biodiversity in a peri-urban area.
- Restore the riparian forest and its ecosystem services.
- Improve distribution and connection of green spaces at the urban level.



## INITIATIVE MODEL

### MAIN ACTIVITIES:

**What does El bosque comestible do?**

- Plant stacked layers of self-sustaining, native and edible vegetation for animals, such as:
  - Straight tall trees, like fruit and nut trees (apple, pear, plum, chestnut, etc.), and nitrogen fixing trees.
  - Low trees, like fruit and nut trees (nectarine, almond, peach), flowering trees, and nitrogen-fixing trees (dogwood, ash, etc.).
  - Shrubs, like fruit and berry shrubs (blueberries, rose, currant, etc.).
  - Herbs, like perennial woody plants (flowers, herbs and ground plants).
  - Soil cover layer, low plants that offer food or habitat and push their way at the edges and empty spaces between plants (strawberries, cappuccino, clover, thyme, etc.).
  - Vines that climb the trunks and branches of the trees (grapes, hops, passionflower, honeysuckle, squash, cucumbers, melons, etc.).
  - Roots, like shallow roots of food (garlic, onion, radish, carrot, etc.).
- Plant thorny shrubs along the Natura 2000 protected riverside strip that was allocated for the riparian forest, hindering access to allow for its regeneration.
- Build tree pits to benefit water infiltration.
- Build bug hotels to offer a safe hideaway for wildlife.
- Install protection systems against rabbits.

### BENEFICIARIES:

**Who benefits from El bosque comestible's activities?**

- 1. Alcalá de Henares' local residents** that have access to green, attractive natural areas for leisure and sport and were able to volunteer for the first planting phase.
- 2. Private companies** that support plantation projects as part of their Corporate Social Responsibility (CSR), buying plants and materials and engaging their staff in planting activities.

### PROMOTION:

**What is El bosque comestible's promotion strategy?**

El bosque comestible's communication strategy and channels:

- The Environment Council Service of the Municipality of Alcalá de Henares organises volunteer and environment education activities.
- Traditional news media.
- Social media.
- Website of the Municipality of Alcalá de Henares and Oppla, an European nature-based solutions repository.



## GOVERNANCE:

### How does El bosque comestible implement its activities?

- **The Municipality of Alcalá de Henares** leads and defines the project and develops the Environmental Education for Sustainability Plan. It also engages citizens to volunteer, and companies to donate.
- **Environmental associations** propose and participate in volunteer planting activities.
- **Neighbourhood associations** design and participate in planting activities.

## FINANCES:

### What are El bosque comestible's main resources?

To cover planting and maintenance, there is **mixed funding**:

- Private funding from company donations.
- Public funding from the Municipality of Alcalá de Henares.

The collection and analysis of data for the European project "Nature4Cities" is funded through the Horizon 2020 European public funding.

## POLICY AND STANDARDS LEADING THE INITIATIVE:

The project follows the Municipality of Alcalá de Henares' environmental **guidelines** to:

- Ban the use of glyphosate in public areas.
- Apply physical, inert methods (eg., acetic acid, geotextile, etc.).
- Protect weeds in tree pits.

In addition, the Nature 2000 Network protects a 100-metre strip of land on each side of the river bank. Finally, the main framework of reference is the Nature4Cities project.



## UNIQUENESS

### What makes El bosque comestible a one-of-a-kind project?

- The **forest's food provision is not meant for human consumption**, but for animals', especially insect pollinators and birds.
- It takes into account the **symbiosis between soil life and plant roots** to improve growing conditions.
- It engages **local companies and residents** and uses self-sustaining, low-maintenance vegetation to make up for low budgets.



## EXPECTATION

By **2025**, El bosque comestible aims at consolidating the ecosystem, and increasing its surface towards the river and the urban orchards.

### What does El bosque comestible need to be successful?

- Citizen respect for nature, and a sense of joint responsibility for its conservation.
- Ongoing donations and volunteering.

### What are today's main challenges?

- Plant theft and vandalism.
- The lack of specific budget allocated for this project.

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