

CASE STUDY

El bosque comestible de Alcalá de Henares

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

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PROFILE SNAPSHOT

Website	bit.ly/bosque-comestible
Social channels	f @AytoAlcalaH t @AytoAlcalaH i @AytoAlcalaH
Contact us through Alliance	Montserrat de Miguel (mambiente-juridicos@ayto-alcaladehenares.es)
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-m² 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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