

For climate-proof, nature friendly urban areas







Tiny Forests are dense, fast-growing, miniature native woodlands with varying layers of native trees, creating a diverse and complex ecosystem.

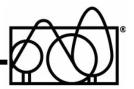
600 trees are densely planted in a tennis court sized plot, resulting in accelerated forest development, and uses no chemicals or fertilisers.

Tiny Forests are based on a robust forest management technique developed by the Japanese botanist Dr Akira Miyawaki.



They are extremely effective urban naturebased solutions countering environmental issues such as flooding, heat stress and loss of biodiversity which are increasingly affecting urban areas.

Tiny Forests also provide several social benefitsreconnecting people with nature, raising awareness, and improving general health and well-being of the local communities, thereby making a direct positive impact on the environment and people.



What are the benefits of a Tiny Forest?

Connecting people with nature



Tiny Forests are nature-rich accessible green spaces that help reconnect people with nature. They also act as inspiring outdoor classrooms, bringing communities together to learn about their Tiny Forest, local wildlife and associated ecosystem services.

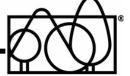


Mitigate the impacts of climate change



Engaging with your local Tiny Forest initiative is one way of being a part of the solution that helps mitigate the effects of climate change, one Tiny Forest at a time.





What are the benefits of a Tiny Forest?

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Raising awareness of the environment



Environmental issues such as flooding, heat stress and loss of biodiversity are increasingly affecting urban areas. Tiny Forests not only act as talking point to start dialogues about these environmental issues, but also provide opportunities to mitigate them.

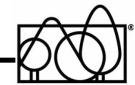


Urban wildlife refuge



Tiny Forests support urban wildlife by providing naturerich habitat patches, capable of attracting over 500 animal and plant species within the first 3 years!





More on Social Benefits of a Tiny Forest

There is growing evidence base on the benefits of trees for improved mental and physical health.



Tiny Forests create opportunities for people to come together as a community to care of and maintain their local forest.



Increasing people's connection to nature through education, engagement and citizen science activities.

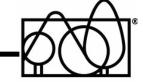


Raising awareness of the climate crisis and the importance of nature-based solutions in urban areas.



Tiny Forests provide a publicly accessible place for people to relax, enjoy and appreciate nature in the built environment. They can support health and wellbeing through simple aesthetic value, actively watching wildlife, personal involvement in the project and as an educational resource or skills-building experience.





Role of Earthwatch

Establishing Tiny Forests

We collaborate with local city councils, on-board partners, and carry out all the activities in between that ultimately result in establishment of a Tiny Forest.



Engaging Community

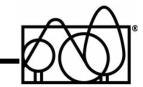
We engage communities to plant, maintain and monitor each forest over time. We reconnect people with nature and raise awareness of climate change.



Citizen Science

Through volunteers, we collect environmental and social data relating to every forest we plant, to assess the benefits they provide over time and between forests.





How do we create a Tiny Forest?

Step 1

Plan



We first conduct a soil survey, and based on the site specific insights, our science team decide which native species to plant to make the forest more resilient.

Step 2



We work with partners to come up with the design of Tiny Forest that suits site specific needs to create an inviting, accessible and functional space.

Step 3
Prepare



We then prepare the soil, add natural additives like manure and compost to help the trees have a head start. We do not use any chemicals or fertilisers. Step 4
Plant



With the help of local partners, we engage the local community during planting days, and to support the continued care and use of the Tiny forest.

Step 5
Monitor



We engage with the community for the basic care and maintenance of the forest for the first two years and engage with citizen scientists to collect data.





How do we track the impact of Tiny Forest?

With the help of citizen scientists, we are gather data from all the Tiny Forests we plant to understand the growth and development dynamics, environmental and social benefits over time.

The parameters we are currently measuring are

Thermal comfort



Using thermometers to assess the temperature difference between the inside of the forest and surrounding area along a transect.

Flood mitigation



Assessing the forest's ability to store water through assessing soil characteristics including texture, colour, moisture and compaction.

Biodiversity



Conducting species surveys focusing on pollinators and soil dwelling organisms.

CO2 absorption

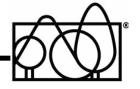


Measuring above-ground biomass through tree height and stem diameter to assess carbon capture potential.

Social



Conducting social surveys with local residents and volunteers to better understand how the community is utilising the forest and its benefits.



Tiny Forests grow quickly



Jan 2017

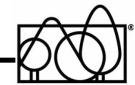
Jul

2017

Jun 2017



*After two growing seasons (planted in winter 2015)



Our first UK Tiny Forest - Witney, Oxfordshire



Benefit summary

Establish a branded, nature rich green space, for the benefit of employees, the local community and wildlife.

Demonstrate your commitment as a responsible business taking practical action on the climate and ecological emergencies.

Direct links to national and local sustainability and climate strategies.



Purpose-led volunteering opportunities that complement your CSR, sustainability and wellbeing agendas.

Positive environmental impact such as increased biodiversity and carbon capture.

Contribute to a science-based project that informs the development of nature-based solutions to climate-proof our cities.



Supporting a Tiny Forest

An investment of £32,000 + VAT will enable Earthwatch to:

- \triangle Use our Five step approach to create a new Tiny Forest, which your organisation can brand.
- △ Provide a volunteer or team-building day for your staff and/or community (typically 40-100 people) to plant the Tiny Forest, including an environmental education session.
- △ Build capacity of the Tiny Forest Keeper Team, engaging 4-5 employees/community members as "Keepers" (1hr/month required mostly in spring/summer to water and weed for first two years).
- △ Engage your staff and/or your community in a monitoring event* to raise awareness and collect valuable data on urban nature-based solutions for climate change.
- △ Train volunteers to monitor the environmental and social benefits of the forest for at least two years, contributing to our data platform and giving you scientific data to use in your reporting and communications.



^{*}By using citizen science, which actively involves non-scientists in scientific research, collecting and analysing data.



Super Tiny, Super Powerful

