

tinyforest



Powered by earthwatch
EUROPE



TINY FOREST
Tiny Fact File





What is a Tiny Forest?

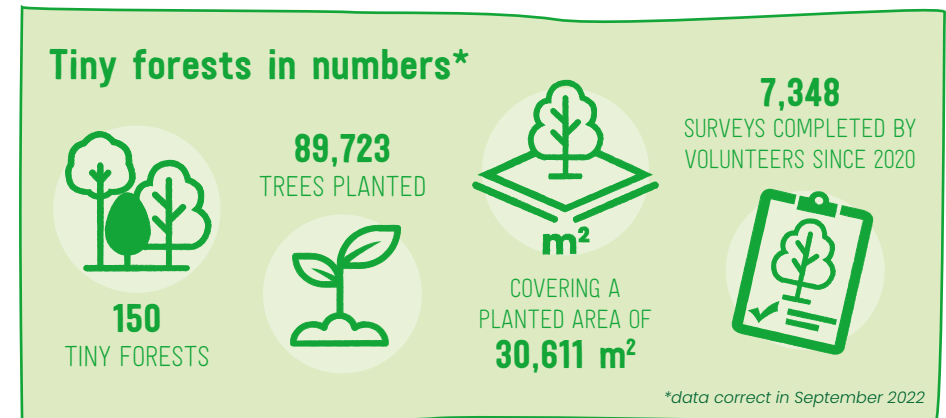
A Tiny Forest is a dense, fast-growing native woodland, about the size of a tennis court. These forests are not only great homes for butterflies, birds, bees and other wildlife but also a place for people to connect with, and learn about, nature.



These super tiny, super powerful forests aim to mimic the features of a traditional forest but in a really small space. To do this, the Tiny Forests will have a good mix of native trees which, over time, will create a wildlife rich environment. You don't need huge amounts of space and you can plant them anywhere that land is available – in a park or a school, next to a road or on a brownfield site.

mitigate the impacts of climate change, as well as providing a nature-rich habitat to support urban wildlife.

Earthwatch Europe is pioneering Tiny Forest in the UK and is conducting research across the country to help understand how these super tiny woods have the potential to be a super powerful tool in the fight against climate change and habitat loss. We work with partners – including businesses, local authorities, schools and communities – to plant and care for their Tiny Forests.



Small and Mighty – Why Tiny Forests are important

Image © Sophia Mose



Tiny Forests may be small, but they have a big impact. From creating homes for urban wildlife to providing a learning space for children to engage with nature, Tiny Forests are super small, super powerful community assets.

URBAN NATURE-BASED SOLUTION

Environmental issues such as flooding, heat stress and loss of biodiversity are increasingly affecting urban areas. Creating thriving and climate-resilient urban areas that support economic growth, whilst also enhancing livelihoods and wellbeing, is a considerable challenge. Tiny Forest can play a part in facing this challenge.

Tiny Forests capture carbon from the atmosphere, help with urban cooling and provide much-needed urban wildlife habitats.

We collect scientific data for each Tiny Forest to assess the environmental and social benefits of trees in urban settings, including carbon capture, thermal comfort, biodiversity, water regulation and connection to nature. We train volunteers as citizen scientists to help our researchers collect these data.

OUTDOOR CLASSROOM

Some children spend as little as 16 minutes outside a day, yet being outside has numerous benefits. Spending time in nature helps children understand the natural world and builds confidence. It also provides health benefits – children who spend time outside are happier, better at paying attention and less anxious than those children that don't get to be outside. Tiny Forest provides a focal point for children's activity outside – children are encouraged to help plant the forests, care for them and help with wildlife and carbon surveys.

Tiny Forest also provides an outdoor learning resource to complement classroom education. Our learning and science experts deliver training sessions for teachers, as well as assemblies and classes for school children. This experience equips both teachers and children with the knowledge and skills to understand the natural world and take positive environmental action.



COMMUNITY ASSET

From Dagenham to Dundee and from Bristol to Bradford, there are over 140 Tiny Forests in the UK and we've got more planned for the future. Each of these forests is cared for and enjoyed by the local community. In their early stages, Tiny Forests need to be well looked after to ensure that they grow healthily. Under the careful coordination of our Tree Keepers (more about them on p12!), local communities water, weed and care for their local forests. This not only builds connections with the forests themselves but also helps to foster connections in the community.

Inside the Tiny Forest - Trees

Tiny Forests are made up of a mix of native trees with some forests having as many as 25 different types of tree or shrub. Each Tiny Forest site is carefully surveyed to check which mix of trees will thrive best in that location. There are more than 40 different species of tree present across the Tiny Forest network. Here we've picked out ten of the most common to look out for:



BLACKTHORN
(*Prunus spinosa*)

Early to blossom, **Blackthorn** trees have clouds of snow-white flowers in early spring. They're best known for their rich, inky, dark fruits known as sloes.



A familiar sight in hedgerows across the country, **Dog Rose** has pale pink flowers in May and June. Dog rose takes its name from the belief that its roots can be used to cure dog bites!



The **Downy Birch** is a small, spindly tree with thin branches and grey-white, papery bark. It is most commonly found on heathland, moorland and mountainsides. In spring, catkins dangle down from the branches and produce yellow pollen.



In late spring, **Hawthorn** trees have masses of creamy-white, strong-smelling blossom. During the autumn and winter, red fruits known as 'haws' appear. Hawthorn flowers provide food for pollinators and its fruits are a feast for hungry winter birds.



HAZEL
(*Corylus avellana*)

Hazel is a small, shrubby tree that is very common throughout the UK. It's well-known for its long, yellow catkins and its abundant nuts which are much-loved by squirrels, mice and humans alike. Hazel has a reputation as a magical tree and is said to protect against evil spirits!



HORNBEAM
(*Carpinus betulus*)

Hornbeam is a tall tree often found in ancient woodlands (and brand-new ones like Tiny Forest!). Its large catkins appear in spring, and its winged seeds are dispersed by the wind in autumn. Hornbeam is also called 'Hardbeam' as its wood is hard and difficult to work.



SILVER BIRCH
(*Betula pendula*)

Silver Birches are common and easily recognised by their white, papery bark. Like its cousin, Downy Birch, Silver Birches produce catkins in the spring which turn yellow with pollen.



SMALL-LEAVED LIME
(*Tilia cordata*)

The **Small-leaved Lime** has delicate heart-shaped leaves and yellow-green, sweet-smelling flowers. The flowers are very attractive to pollinators and the leaves provide food for caterpillars such as the Lime hawk moth.



SESSILE OAK
(*Quercus petraea*)

Less famous than the English Oak, the **Sessile Oak** is still a wildlife powerhouse. These trees can live for centuries and provide a home to lots of different wildlife; from squirrels and birds to caterpillars and bugs.



ROWAN
(*Sorbus aucuparia*)

Rowan is a small tree found on mountains, heathland and along woodland edges. In spring, Rowans produce clusters of creamy-white flowers which turn to bright red berries in the autumn. The berries are a favourite food of winter birds.

To find out which trees are planted in your local Tiny Forest, have a look at our website tinyforest.earthwatch.org.uk



Image © Josh Kubale

Inside the Tiny Forest – **Wildlife**

Tiny Forests aren't just about trees – they provide a home for a variety of wildlife. All of our Tiny Forests are still very young and as they develop, they will attract different wildlife. Through our ongoing surveys of these forests, we will monitor how the groups of species change as the forest grow. This will help us understand how the forests are developing. On this page, we take a look at some of the wildlife groups seen at the Tiny Forests over the last few years:



BUTTERFLIES

Butterflies love Tiny Forests and we love them! The forests have lots of safe places for the butterflies to lay their eggs. Once these eggs hatch, the forests provide an excellent habitat for caterpillars with plenty of food. Large and Small Whites, Red Admirals and Meadow Browns are among the more common species spotted in the Tiny Forests.

BETLES

Beetles play an important role in keeping Tiny Forests healthy. Some are predators which help to control populations of other insects. Others are nature's recyclers – helping to get rid of dead and decaying organic matter. Look out for easily-recognisable ladybirds and longhorn beetles – so called because of the large antenna on their heads.



BEES

Tiny Forests are buzzing with bumblebees searching for food and a place to nest. Bumblebees and other pollinators face many threats including habitat loss, disease, pesticide use, and climate change. Tiny Forests provide a food source and a home for bumbles in places where they might otherwise struggle to survive. Spring and summer are a great time to spot bumblebees in Tiny Forests as trees like blackthorn, hawthorn and dog rose produce sweet-smelling flowers for the bees to feed on.



GROUND DWELLERS

Wildlife isn't just thriving amongst the grass and trees in a Tiny Forest – underground too is teeming with life. Insects like worms, grubs and centipedes all play an important role, helping to make healthy soil. The soil, as well as the trees in a Tiny Forest helps to capture and store carbon. The healthier the soil, the better it is at storing carbon.

Every year, in May, we hold a Tiny Forest Biodiversity Week where we, along with the local community, survey Tiny Forests for insects and wildlife. Anyone can get involved with Biodiversity Week. To find out how to get involved with surveying your Tiny Forest, visit tinyforest.earthwatch.org.uk.



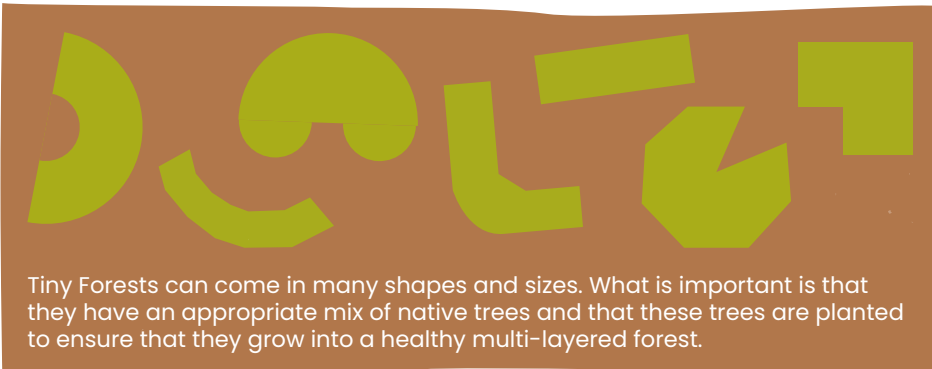
More Than Just Trees – the science of Tiny Forests

Tiny Forests are based on the work of Japanese botanist Dr Akira Miyawaki, who, beginning in the 1970s, pioneered a method of planting young native tree species close together to quickly regenerate forests on degraded land. Miyawaki surveyed forests near potential sites to identify the most appropriate tree species mix that would naturally occur in that area in order to create a diverse, multi-layered forest.

For every forest we plant, we carry out a survey of local native forest cover and assess the soil characteristics at the selected location. We use this information to identify the most suitable native trees for the site and supplements for the soil.



By planting a mix of trees and shrubs close together means they grow quickly into a multilayer forest.



Tiny Forests can come in many shapes and sizes. What is important is that they have an appropriate mix of native trees and that these trees are planted to ensure that they grow into a healthy multi-layered forest.

“The planting should centre on the primary trees of the location, and following the laws of the natural forest,”

AKIRA MIYAWAKI

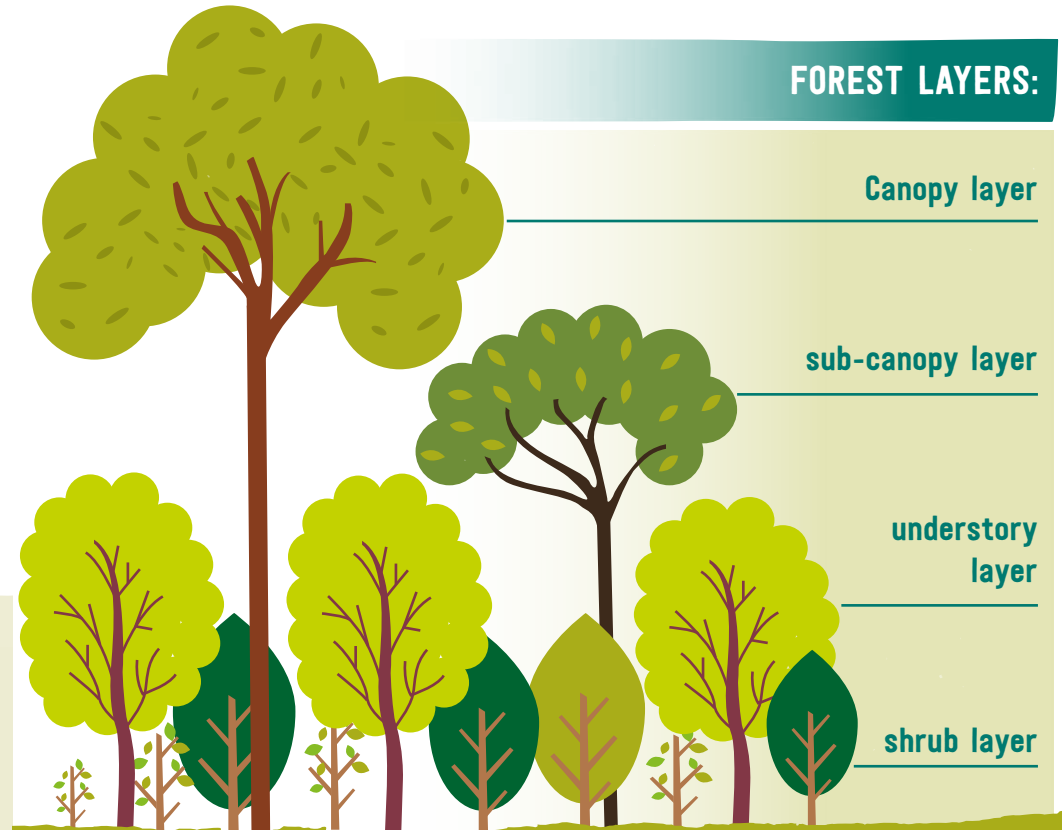
FOREST LAYERS:

Canopy layer

sub-canopy layer

understory layer

shrub layer



Caring for Tiny Forests – meet the Tree Keepers

The job of caring for the forests is anything but tiny and we're lucky to have an army of volunteers to help with the task. These Tree Keepers ensure that the Tiny Forests have everything they need to grow healthily, they help the local community to engage with the forests and they help to coordinate the science and survey activities in the forest.



MELANIE BOYLE IS A TREE KEEPER IN CHIPPENHAM, HELPING TO CARE FOR MONKTON PARK TINY FOREST.



What do you do as a Tree Keeper?

Weeding and chatting with passers-by who show an interest. Attend training webinars. Getting people together to weed and carry out the surveys.

What made you decide to become a Tree Keeper?

The scientific principles, wanting to learn more.

What's your favourite part about the role?

Meeting new people and seeing the trees flourish, we all feel a sense of achievement and that we are making a difference.

What's the best bit of wildlife you've seen in your Tiny Forest?

Butterflies.

What do you do when you're not looking after your Tiny Forest?

Walking and photography. Sustainability advocate, which is one of the reasons I like the Tiny forest idea, no plastic covers around dead trees, flourishing well cared for ones.

If you were a tree, what you be and why?

An oak, honest and trustworthy.

Describe your Tiny Forest in one word

Inspirational.



Tiny Forests, Big Ideas

Earthwatch planted the UK's first Tiny Forest in March 2020 in Oxfordshire, with partner Witney Town Council. Since then, we have continued to plant more and more Tiny Forests across the country in collaboration with a wide range of amazing partners. By 2030, we want to see more than 500 Tiny Forests being established in the UK and cared for by their local communities. We aim to engage 100,000 people with our Tiny Forest network by 2030, with a focus on underserved communities in urban areas.

Case study

Tiny Forest and Fever-Tree

Drinks producer, Fever-Tree teamed up with All Bar One in a partnership with Earthwatch to support the Tiny Forest movement in the UK.

In 2021, Fever-Tree helped to create London's first-ever Tiny Forest in Hammersmith Park, a stone's throw from Fever-Tree's HQ. Now Fever-Tree have joined up with All Bar One and are investing in the care of over 150 Tiny Forests across the country, through local community support and forest maintenance.

Fever-Tree and All Bar One's partnership is helping grow a network of local community volunteers committed to tree care in Tiny Forests throughout the UK with over 370 Tree Keeper volunteers to date. Volunteers from All Bar One and Fever-Tree have also been involved with helping to monitor Tiny Forests and gather vital survey data to support our national research.



"Maintaining biodiversity has never been more important in the climate change conversation. Fever-Tree is proud to partner with All Bar One to further the Tiny Forest movement in the UK to create urban green spaces that support wildlife and bring communities closer to nature."

JAMES ARCHER, HEAD OF SUSTAINABILITY AT FEVER-TREE

YOUR TINY ADVENTURE STARTS HERE...

Inspired to get involved with Tiny Forests? We'd love to hear from you! Get in touch with us at tinyforest@earthwatch.org.uk.



This booklet was kindly funded by Fever-Tree



FEVER-TREE

Earthwatch Europe,
Mayfield House,
256 Banbury Road,
Oxford, OX2 7DE.

Registered Charity Number: 1094467.

Cover image © Earthwatch

