

**Befriend a
Giant redwood**

In the Astley Ainslie



Giant redwood, Astley Ainslie Hospital

Do you want to be able to continue walking with trees in the Astley Ainslie, the most complete Victorian urban landscape in South Edinburgh where there are 1700 trees with 60 different species, and several of them are over 100 years old?

Well if you care, get involved. And one way to do that is to befriend a tree. Choose your own special tree in the Astley Ainslie and keep an eye on it. You will enjoy learning more about trees, and also increase the chances that your tree won't be cut down when the NHS leaves the site. It would be great if generations to come can enjoy the trees in the Astley Ainslie.

Suggestions for looking out for your tree

Make friends with a tree and rediscover our natural connection. Choose a tree, spend time observing and thinking about it, and document how it changes during the seasons. Come back and visit it over and over again to see what it is like at different times of the year, in the rain or a gale as well as in the sunshine. You can be factual or fantastic – what is it like to be a tree?

- Start a notebook, journal or scrapbook
- Draw or paint it, or make a rubbing of its bark
- Write a poem or sing a song about it

When does it bud? When does it break into leaf, flower, and develop seeds? When do the nuts drop from your tree and when do its leaves change colour and finally drop to the ground, forming a deep carpet beneath the tree? You could also think about:

- When was it planted, and was it connected with any historical events?
- What is its height and spread, and its girth (the diameter of its trunk)
- What birds, mammals and insects does it support?
- Does it look healthy?

Engage with your tree. Check out Peter Wohlleben's¹ book – find out what dramas are being played out around your tree, and investigate its social network.

- Slow down, breathe deep, and look around
- What can you hear? What do you see? How do you feel?

Record any information you want. These are just suggestions. Our knowledge and experience of nature is now slender. We need to recreate the understanding that we are only a part of nature, and wholly dependent upon it for our lives, health and well-being, and even our survival.

Visit our website at: <https://aact.scot>

Go to our website for information and suggestions for tree befriending, including links to other useful websites, TED talks, apps, books, and how to share information about trees.

¹ Wohlleben, P. (2015). The Hidden Life of Trees. What they feel, how they communicate.

Some anecdotes about the giant redwood

The earliest redwoods evolved around the same time as the dinosaurs, approximately 240 million years ago, compared to about 250,000 years ago for humans.

In 1853, English botanist John Lindley named the species *Wellingtonia gigantea*. What he didn't realize was that the name *Wellingtonia* had already been used for another species. While the mistake was eventually rectified, the name remained.

Giant redwoods have been popular ornamental trees in the UK since 1853 and grow very well in Scotland where some of the largest UK examples can be found, with the largest (45 m tall) at Castle Leod, north of Inverness.

A giant redwood called General Sherman is the biggest tree by volume on the planet containing some 1,486.9 cubic metres (52,508 cubic feet) of wood. It is estimated to be 83.8 m (274.9 feet) tall and its girth at ground level is 31.3m (102.6 feet).

Wood from the trees is highly resistant to decay, but due to being fibrous and brittle, it is generally unsuitable for construction. From the 1880s to the 1920s, logging took place in many redwood groves in California and as little as 50% of the timber is estimated to have made it from groves to the mill. The wood was used mainly for shingles and fence posts, or even for matchsticks.

Giant redwoods have an enormous capacity to remove carbon dioxide (CO₂) from the atmosphere and California's ancient redwood trees store more CO₂ per acre than any other forests in the world.

Photographs below: The avenue of giant redwoods, Benmore Botanical Gardens, Scotland was planted in 1863 by the American Piers Patrick; Giant redwood immature cones, Hope Park Crescent, the Meadows, Edinburgh.



The Giant redwood

Common name: Giant redwood **Scientific name:** *Sequoiadendron giganteum*

Overview: A non-native conifer (produces cones), the giant redwood is evergreen and its dark green needles are retained all year round. The giant redwoods in the UK are all young trees (no older than 150 years old!) but the tree can live for 2-3000 years. A fast growing tree, it can reach a height of 30 to 40 metres after 50 years.

Leaves: The foliage is dark blue green, cord like shoots with an aniseed scent.

Flowers or fruits: None

Cones and seeds: The giant redwood can reproduce itself, meaning both male (pollen-producing) and female (seed-bearing) cones are borne on the same tree on different branches. Male cones are small (2-3 cm), yellow and egg shape and abundant in the spring. Female cones are bigger (5-8 cm). The pollen is shed in winter or spring; the fertilized cones ripen in early autumn and shed their seeds in late autumn and early winter. The seed cones can remain green and closed for up to 20 years. The many seeds are air-borne and have narrow, lateral wings.

Look out for: The cinnamon-coloured bark giving the tree its name is usually 30 cm thick, and protect it from insects, birds and fungus. Its bark contains plenty of water-based sap and is spongy to the touch. It also protects the tree from forest fires.

Value to wildlife: Bats, insect pollinators, small mammals, song birds.

Threats: The tree is extremely resistant to insects, fire and rot but it is susceptible to honey fungus and extreme high or low temperature can harm it.



Needles, immature male and female cones; cones and seeds