



Regaining Paradise?

Sustainability in the Early Years

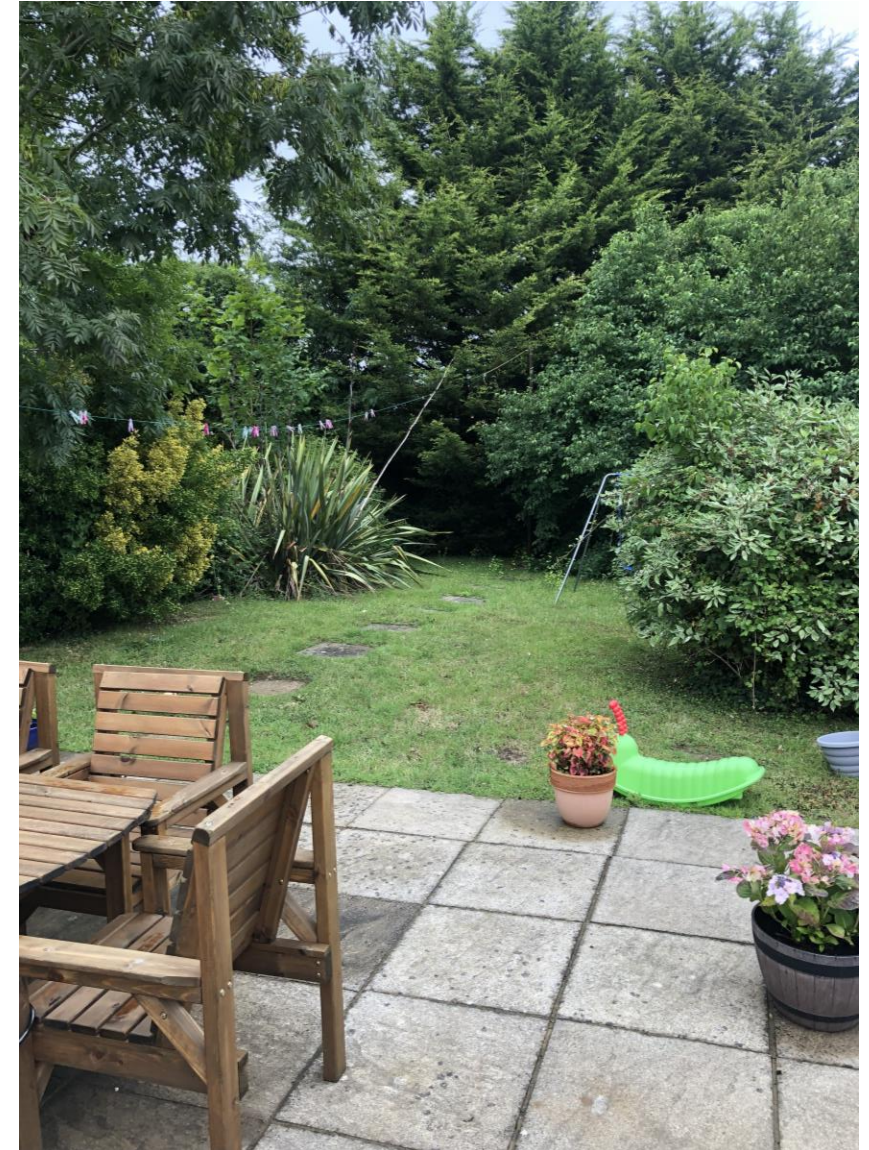
John Muir Award

Module number
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Student number

Discover

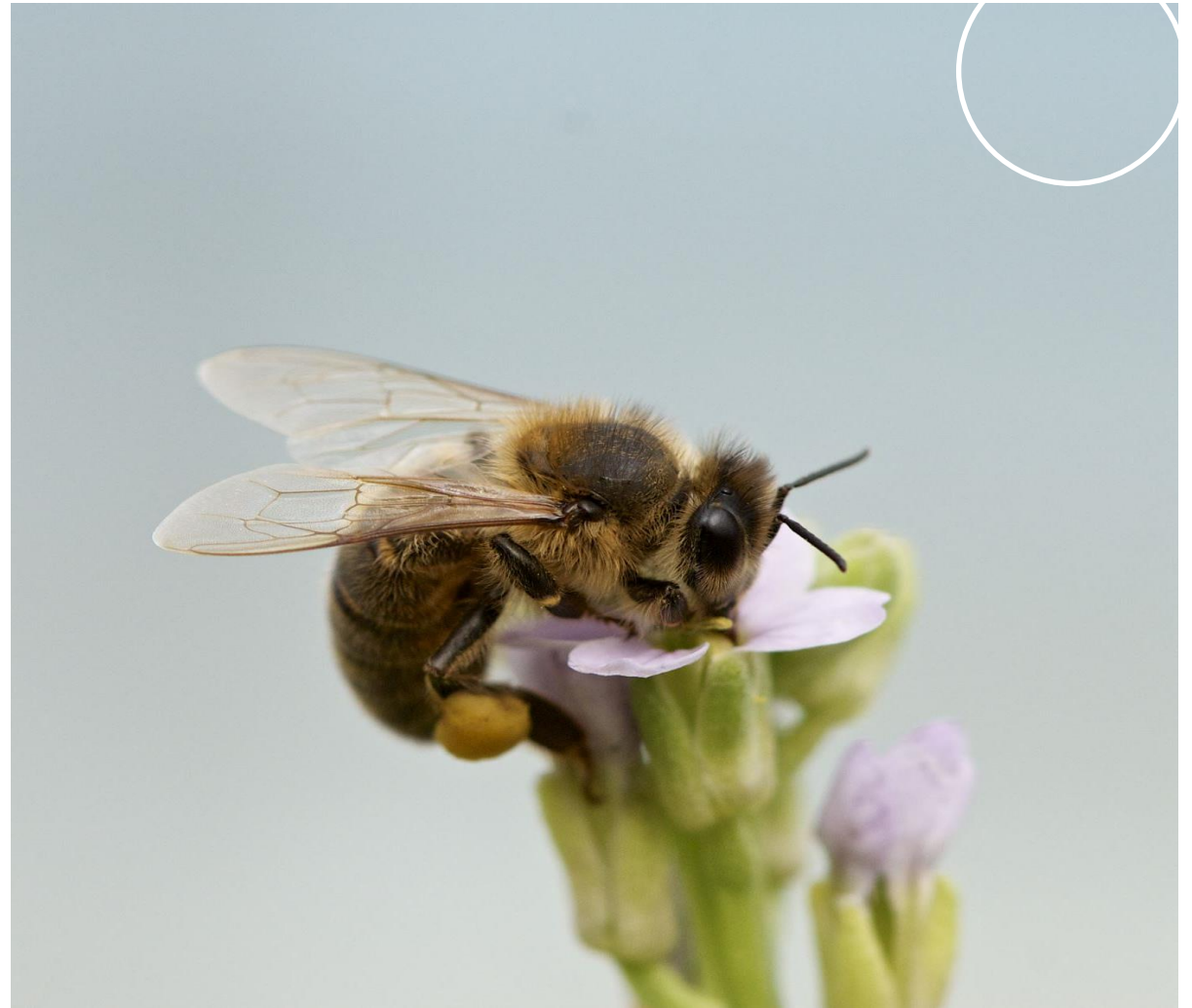
- The area I have chosen to carry out the John Muir award is the back garden of my family home, which is located in the east of Cardiff. The reason I have chosen this place is because as a family it is somewhere that we spend a lot of time together. My daughter enjoyed spending time playing here with friends throughout her childhood. The trees that can be seen in this photograph were planted by myself and my daughter when she was 3 years old, and 23 years on my nephew now gets to use the garden.
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Explore

Bees

Food Production: Bees are responsible for pollinating a significant portion of the world's food crops. They facilitate the transfer of pollen from the male parts to the female parts of flowers, enabling plants to produce fruits, vegetables, nuts, and seeds. Crops such as fruits, vegetables, berries, and nuts heavily rely on bee pollination, contributing to a diverse and nutritious food supply.





Explore

Birds

Birds play a vital role in seed dispersal. They consume fruits and berries, digest the fleshy part, and excrete the undigested seeds in different locations. This process helps plant species spread and maintain healthy populations. Some bird species, like frugivorous birds, have specialized digestive systems that allow them to disperse larger seeds, which other animals may not be able to carry.



Explore

Butterflies

While bees are known for their significant role as pollinators, butterflies also contribute to pollination. As they move from flower to flower in search of nectar, they inadvertently transfer pollen grains, allowing for fertilisation and the production of seeds.

Butterflies, particularly certain species, have a close relationship with specific plants. They lay their eggs on particular host plants, and when the caterpillars hatch, they feed on these plants. By doing so, butterflies help in the dispersal of plant seeds and contribute to the reproduction and survival of those plant species.



Explore

Squirrels

Squirrels are omnivorous and consume a wide range of insects and small animals. They actively hunt for insects, larvae, and pests that can potentially harm plants in gardens. By reducing the population of these pests, squirrels indirectly contribute to maintaining a balanced ecosystem and promoting plant health. Also, squirrels are known to dig and bury their food caches in the ground. This digging behaviour helps to aerate the soil, allowing for better water drainage and nutrient circulation. It can enhance the overall health of the garden soil by preventing compaction and promoting root growth.



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Explore

Herbs

Herbs provide habitat and shelter for various organisms, including insects, birds, and small mammals. They offer protection, nesting sites, and food sources for many species, thus supporting biodiversity and helping to maintain ecological balance.

Some herbs contain natural compounds that act as insect repellents or attract beneficial insects that prey on pests. For example, planting herbs like basil, mint, and dill alongside vegetables can help deter harmful insects and attract predatory insects like ladybugs or lacewings, which feed on pests.



Explore

Trees

Trees absorb and store carbon dioxide from the atmosphere. Through photosynthesis, trees convert carbon dioxide into organic matter, storing carbon in their trunks, branches, leaves, and roots. This helps mitigate climate change by reducing the concentration of greenhouse gases responsible for global warming.



conserve

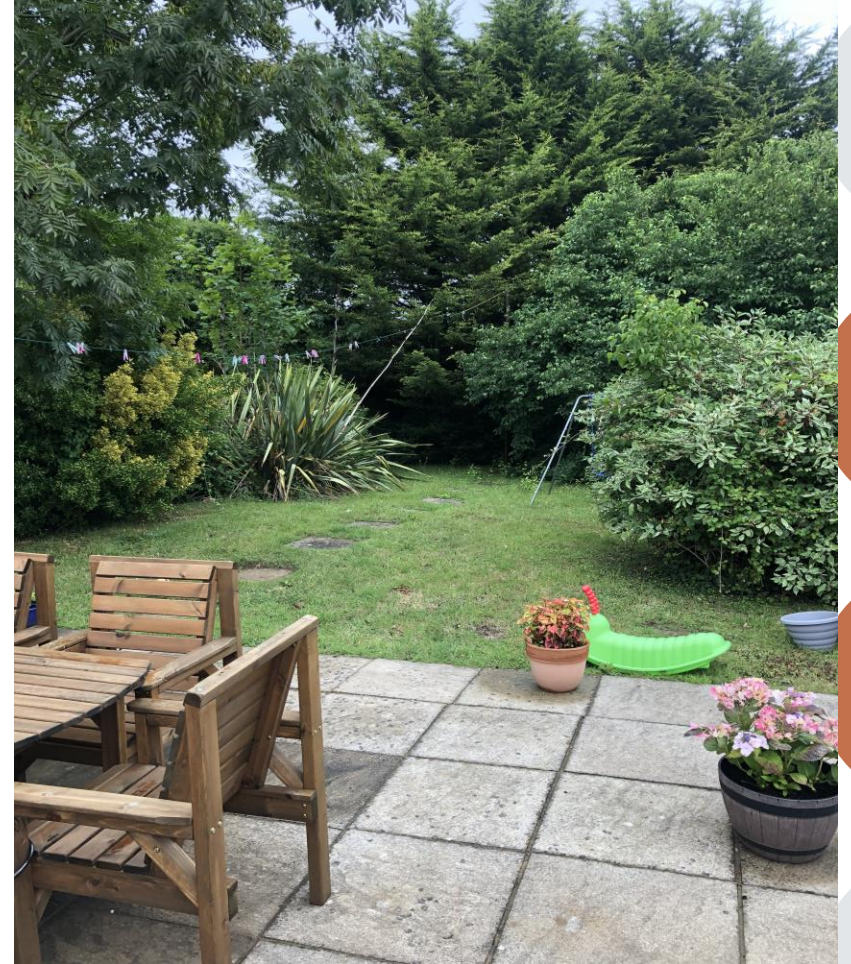
This picture shows what is left of a tree that used to be in the garden but was cut down some time ago by the local authority due to its height. Until undertaking the John Muir award I had given little if any thought to this at all. It is only through the award that I have begun to understand the importance of trees and the role they play in the environment.



Conserve

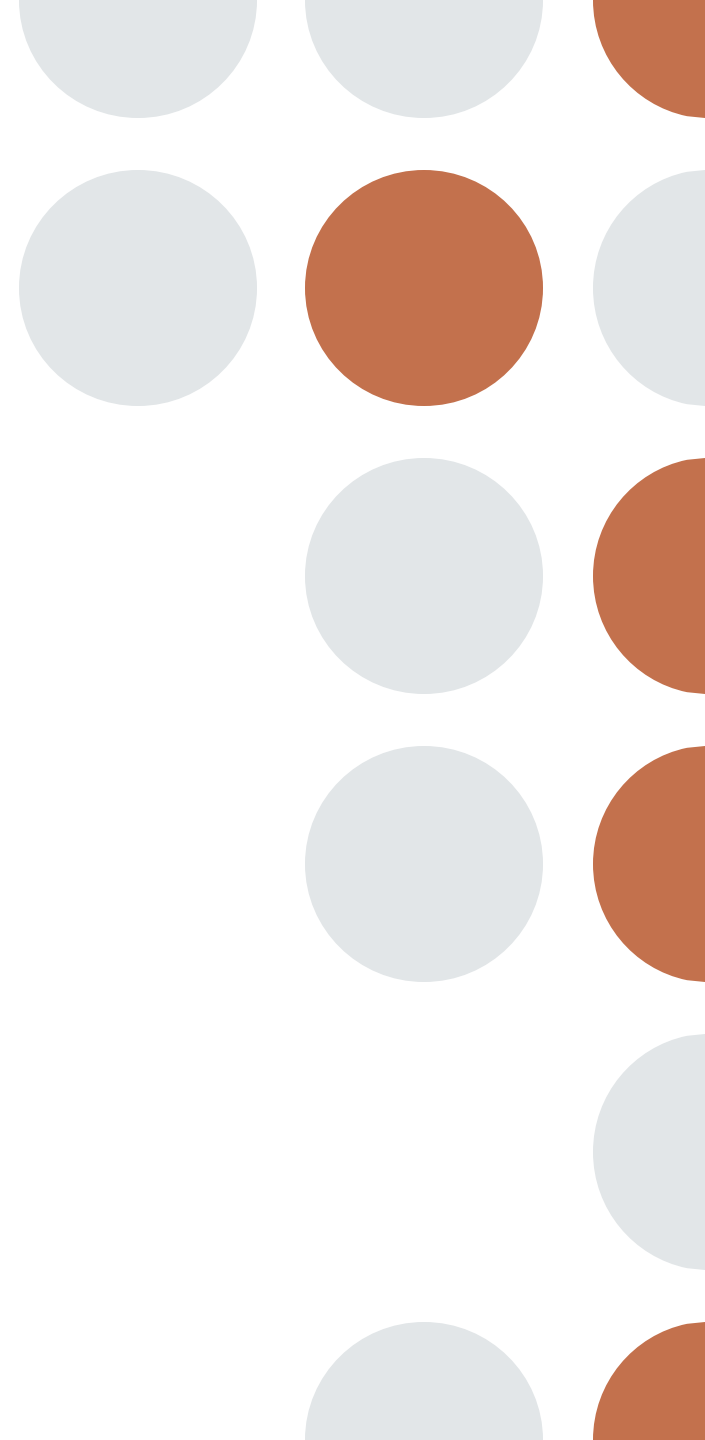
The local authority has made contact regarding the trees at the bottom of the garden and are considering the possibility of removing them due to their height, depending on an inspection.

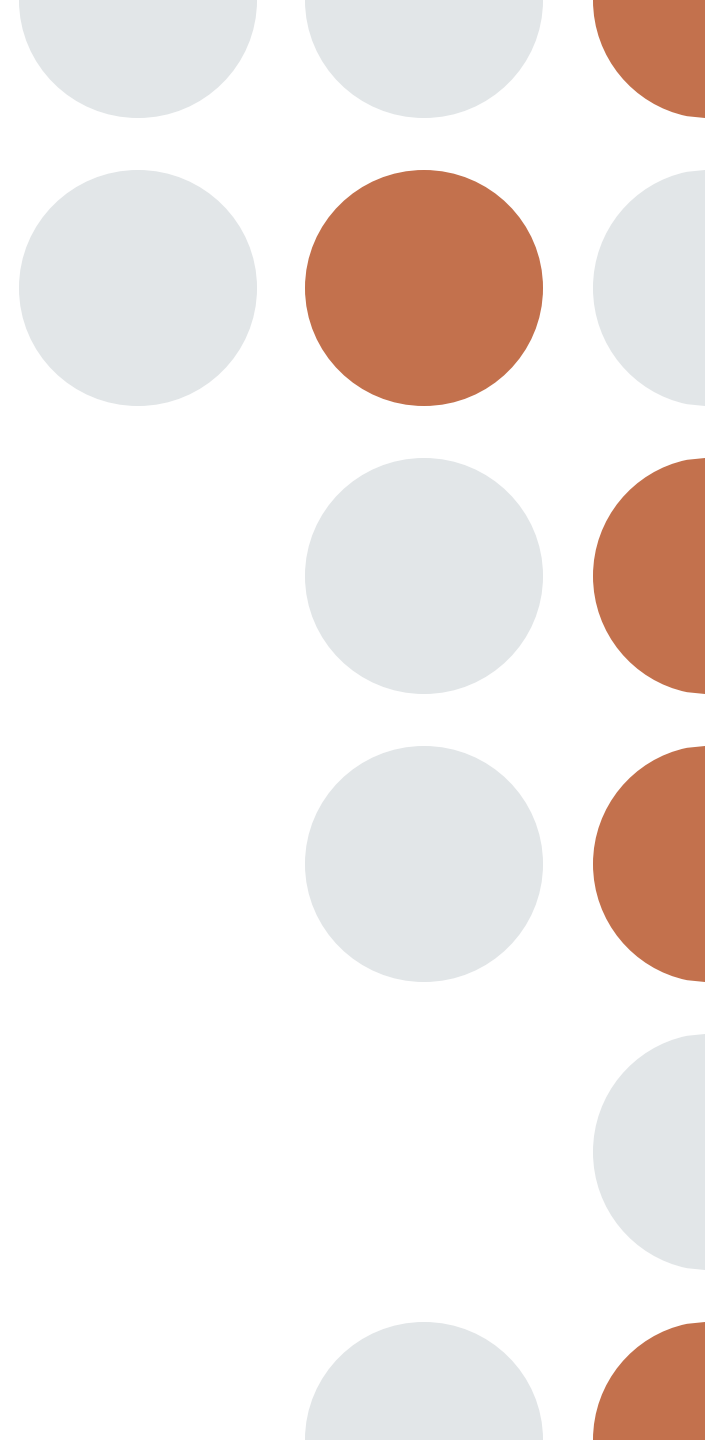
I decided to write to them to point out all the benefits that's trees bring.



Share

I have shared my experience of the John Muir Award, with my lecturers, family, friends, colleagues and the local housing association.





25 September 2023

Linc Cymru Housing Association
387 Newport Road
Cardiff
CF24 1GG

Dear Mr, xxxxx

You recently contacted my mother regarding the removal of some trees in the garden of her property, I believe at the time she expressed that she was not happy with the suggestion and said that the trees provided privacy to her garden, however, I would like to bring to your attention that trees are incredibly important to the environment due to their numerous contributions and ecological benefits:

1. Oxygen Production: Trees are known as the "lungs of the Earth" because they absorb carbon dioxide and release oxygen through the process of photosynthesis. They play a significant role in maintaining the balance of atmospheric gases, helping to regulate the amount of oxygen available and reducing the buildup of greenhouse gases.
 2. Carbon Sequestration: Trees are excellent carbon sinks, meaning they absorb and store carbon dioxide from the atmosphere. Through photosynthesis, trees convert carbon dioxide into organic matter, storing carbon in their trunks, branches, leaves, and roots. This helps mitigate climate change by reducing the concentration of greenhouse gases responsible for global warming.
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3. Biodiversity Support: Trees provide habitat and food sources for a wide range of organisms. Their canopies and branches offer shelter and nesting sites for birds, mammals, insects, and other animals. The leaves, flowers, and fruits of trees provide food for herbivores, while their decaying matter supports decomposers. The presence of trees enhances biodiversity and contributes to the stability of ecosystems.

4. Soil Conservation: Tree roots stabilize the soil, prevent erosion, and enhance soil fertility. They act as anchors, holding the soil in place and reducing the risk of landslides and soil erosion caused by wind and water. Trees also help to maintain moisture levels in the soil by reducing evaporation and increasing water infiltration.

5. Water Regulation: Trees are crucial for water regulation in ecosystems. Through a process called transpiration, trees release water vapor into the atmosphere, which influences the hydrological cycle. This process helps maintain adequate moisture levels, regulate local and regional climate patterns, and contribute to rainfall patterns.

I do wonder if there might be some form of compromise on this matter, I look forward to hearing from you soon.

Yours Sincerely

Janine Patterson

