OUTDOORS: GARDENING

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Hurrah for hedges
Green wonders do much more than you might think

In our struggle against climate change, garden hedges do more than you’d first think: they sequester carbon and help mitigate some of the extreme weather patterns we’ve come to expect.

Gardens make up 15 to 25% of space in our towns and cities and most have hedges. Like all other plants, hedges photosynthesise by absorbing CO2 and transforming it into the energy needed for growth.

Hedges use large volumes of CO2 to reach maturity. This is stored in the stems and branches and less carbon is then needed for the hedge to tick over, replacing old or dying branches and the foliage we remove while clipping.

As with trees, carbon is only stored in living plants. You could easily lose the benefits of this carbon sequestration if it is released back into the atmosphere after felling or trimming.

But you can prevent this by composting clippings and using them as mulch.

The stored carbon is safely absorbed by the soil.

Hedges also reduce the effects of frequent all-year-round storms, gales, floods, huge temperature swings and the dangerous air and noise pollution of our cities.

Between 2017 and 2019, the Royal Horticultural Society and Reading University conducted experiments and examined no fewer than 109 scientific papers. They wanted to see which hedge species and cultivars mitigated this damage most efficiently. The results were published last August.

Researchers found that some species, like Cotoneaster were especially good at combatting heavy rain, while Cherry laurel, Prunus laurocerasus, did a good job dealing with air pollution.

Overall, they found the five best performers were: Beech, Fagus sylvatica; Holly, Ilex aquifolium; Privet, Ligustrum species and cultivars; Western red cedar, Thuja plicata; and Rosa rugosa.

The scientists also concluded that every kind of hedge worked well, so you’re doing your bit, whatever you grow.

Hedges reduce the impact of the fierce gales we’re always enduring. A dense hedge, ideally one metre thick, reduces wind speed, thereby protecting our plants and houses against the worst effects.

Walls and fences are utterly useless as the wind effortlessly surges over them.

In the same way, hedges absorb the worst air pollutants. Small round or ovate leaves are good and hairy or rough ones capture the dust-like particles from vehicle exhausts. The rain either washes off these particulates or they simply drop to the ground.

Polluted air is a major concern for people with respiratory problems, like asthma. So you may want to choose one of the most efficient air purifiers, like Yew, Taxus baccata.

Other good performers include: Holly, Barbary, Berberis...
Undoubtedly hay fever sufferers want to avoid pollen-producing plants, so, where possible, should grow female ones that don’t produce pollen.

With climate change, heavy downpours are all-too-frequent and the more we cover the land with concrete, the greater the damage flooding will cause.

Around 40% of our front gardens have often been tarred, slabbed or chipped to make parking spaces. So it’s all the more important to have a garden hedge. This ensures there’s some soil to soak up much of this excess water rather than leading to run off.

Hedges also slow down rain’s impact on the ground. They let it gradually soak into the soil instead of causing compaction and run-off. Roots then absorb moisture and slowly release it through evaporation.

Evaporation cools the air, as does the welcome shade cast by a hedge. So, our gardens become much more pleasant even during a heatwave.

In their report, researchers found these trees dealt with water most efficiently: Cotoneaster, Forsythia x intermedia, Hawthorn, Crataegus monogyna and Privet, Ligustrum.
Hedges use large volumes of CO2 as they grow to maturity.