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How to bring your garden to life

Could your garden be a vital frontline in the battle to protect and promote biodiversity? Science writer Barry Hague spoke to Professors Rosie Hails at NERC's Centre for Ecology & Hydrology and Nigel Dunnett at the University of Sheffield to find out more about the value of our gardens.

Gardens are good for wildlife and our wellbeing.
Marg O'Connell | Flickr

Be they postage stamps or sweeping grounds, our gardens are important places. Each one is a small link in a chain not only connecting us and our daily lives with fundamental natural processes but also creating a space for those processes to take place.

Nature comes to town

Around 25% of the land in a typical UK city is made up of domestic gardens and they first revealed their mettle in supporting urban biodiversity in the steel city. Led by the University of Sheffield and initially supported by NERC, Biodiversity in Urban Gardens (BUGS) was the first large-scale study to prune back the notion that biodiversity is simply about hedgerows, forests, uplands and wetlands. The study showed that gardens weren't ecological deserts and that actively enhancing their attractiveness to wildlife was both practical and beneficial. Since BUGS completed its work in 2007, our understanding has deepened further.

"Biodiversity has been declining and at the same time people have become less connected to nature," said Rosie. "Gardens are one place where these two challenges can be tackled together."

The payoffs are very real. A project supported through NERC's Biodiversity and Ecosystem



OUR TOP THREE BIODIVERSITY TIPS FOR THE GREENER GARDENER

Mix and match: mixes of wild annual flowers planted on disturbed ground can benefit biodiversity and provide colour, which attracts insects.

Nurture nettles: leave a corner where stinging nettles can thrive – they're a brilliant survival aid for butterflies and other key species.



Pond life: a wide range of wild species, such as newts and water boatmen, can rapidly set up home in a new pond.

Service Sustainability (BESS) programme, for instance, recently highlighted that where there are more plants and birds, people suffer less from stress, anxiety and depression. The same project previously found that if people saw a greater variety of birds at their garden feeders, they got even more enjoyment from watching them.

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"Gardens are a perfect example of how different aspects of nature are closely interconnected," said Rosie. "A diversity of plants encourages a diversity of herbivores and that in turn encourages a diversity of predators. We now understand much more about the value of a garden in helping these relationships to function and about the different forms this value can take, not least in terms of our own wellbeing."

From grey to green

Every May, around 160,000 people make a pilgrimage to the Royal Horticultural Society's Chelsea Flower Show. Nigel has regularly contributed to the iconic gardening event, staging award-winning show gardens that embody concepts and messages germinating from his work in ecological and planting design.

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Part of a multi-university team currently wrapping up a NERC project on the relationship between biodiversity and the 'ecosystem services' nature provides such as clean air, Nigel was appointed a Royal Horticultural Society Ambassador in 2016 to spearhead its 'Greening Grey Britain' campaign. This aims to get communities turning grey places into green spaces and transforming tarmac into havens for nature.

"It's a campaign that's about much more than gardens," he said. "But gardens and gardening have to be front and centre of the fight to make urban spaces more vital, sustainable, beautiful and beneficial. They're key elements in our psychological and physical health, and in our ability to cope with a changing climate. As well as helping efforts to improve air quality, gardens can provide shade and help reduce urban temperatures."

In his view, it's essential to work closely with people and be realistic:

"If we want to green our towns and cities, we've got to make sure our ecological objectives fit with the sorts of spaces that people will love, enjoy and use. For both conventional and roof gardens, ecology has to go hand-in-hand with being easy to manage and beautiful to look at. We don't want to put people off by making gardens a burden and we need to move on from thinking about biodiversity purely in terms of rare species and specialised environments. Taking simple steps to encourage common but keystone species like butterflies and bumblebees will automatically encourage rarer ones to follow in their wake."

Front, back, big, small – the message is clear. Your garden can be good for you and for nature.



Nigel Dunnett is Professor of Planting Design at the University of Sheffield. Find out more about the Royal Horticultural Society's Greening Grey Britain campaign at <https://bit.ly/rhsgreeninggrey>.

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