



Royal
Horticultural
Society

Sharing the best in Gardening

Why we all need Greening Grey Britain



What's the problem?

Paving over your front garden affects far more than the environment on your doorstep. Discover how laying hard surfaces contributes to flooding and increases local temperatures.

Having it all

Even the smallest space can be green and inviting, while providing room for a car or two.

Planting ideas

There are plants that will thrive in the smallest, most inhospitable-looking gardens. Choose from our selection of tough plants for tough places.

Pave to perfection

If you want to pave your front garden, choose from our selection of some of the newest materials, which allow rainwater to soak away into the ground.

Further help & advice

Details of where to get further information and inspiration.

Welcome

The Royal Horticultural Society (RHS) is calling on the nation to get Greening Grey Britain, following evidence of an alarming trend of Britain paving over its front gardens and not growing any plants in them.

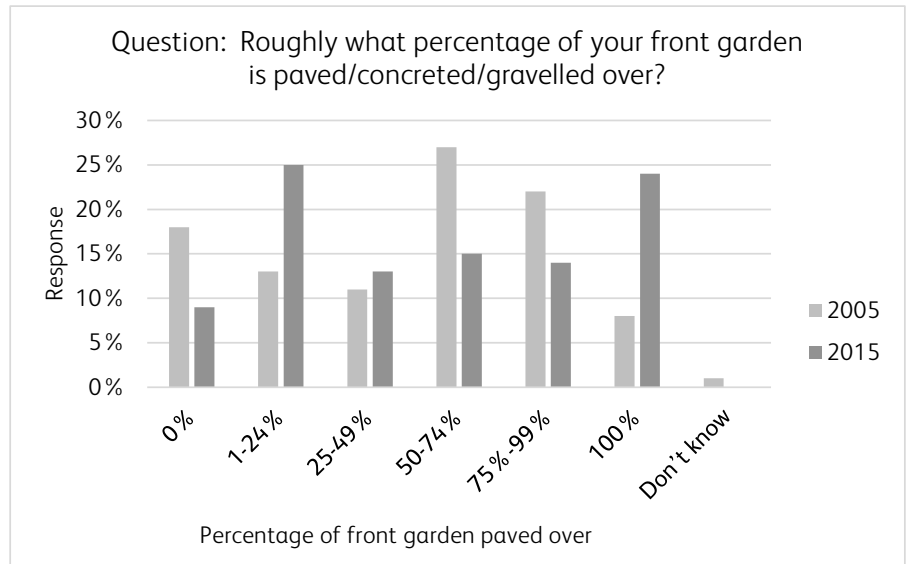
The RHS-commissioned Mori Polls of 2005 and 2015 reveal that three times as many front gardens are now paved over compared to ten years ago, a total increase of 15 square miles of 'grey', and that plant cover in front gardens has decreased by as much as 15%. Over five million front gardens now have no plants growing in them (that's one in three for the UK) and four and a half million front gardens (one in four) are completely paved over.

The RHS believes it is vital to reverse this trend for the nation's health, for wildlife, to mitigate against pollution and heat waves, and to protect the UK's homes from flooding.

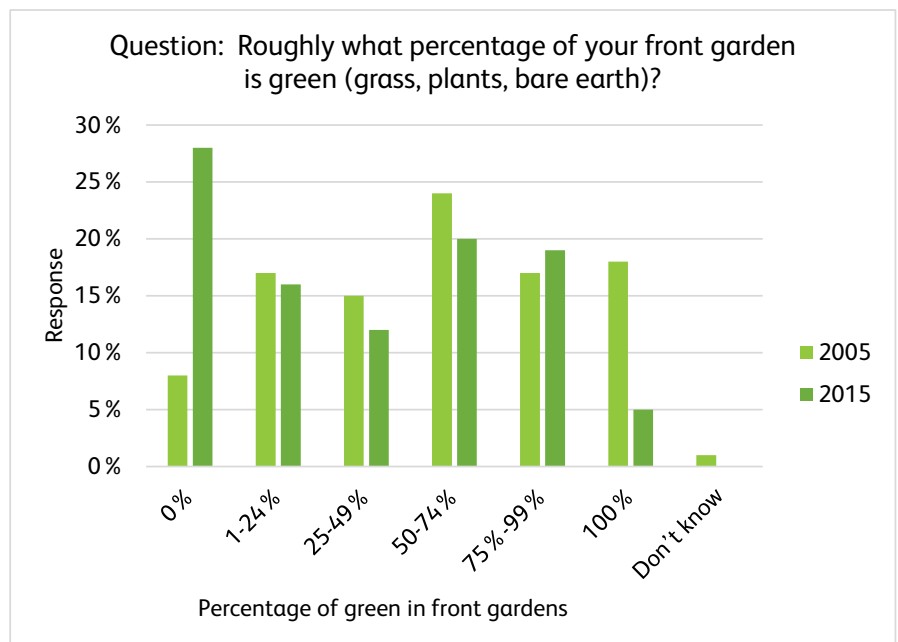
Greening Grey Britain is a call to action asking the nation to transform hard, cold grey areas into living planted up beautiful places, to enrich lives and benefit the environment.

Initiatives across RHS Britain in Bloom, Shows and Science highlight the detrimental impact of paving over Britain and demonstrate how anyone can plant up an area of hard landscaping for improvements ranging from better health and wellbeing and providing food for bees and butterflies, to helping reduce flood risks.

Work to get Greening Grey Britain began in earnest with the 2015 launch of Europe's biggest community gardening campaign, RHS Britain in Bloom in April 2015 with a three year target to transform 6,000 unloved grey spaces into thriving planted up places.



- The significant increase in 100% paved over gardens is the biggest concern
- Three times as many front gardens are 100% paved over vs ten years ago
- Nearly one in four UK front gardens are completely paved over
- Number of front gardens with no paving has halved over last ten years
- Nearly 54% of the total surface area of front gardens is hard surfacing (grey)

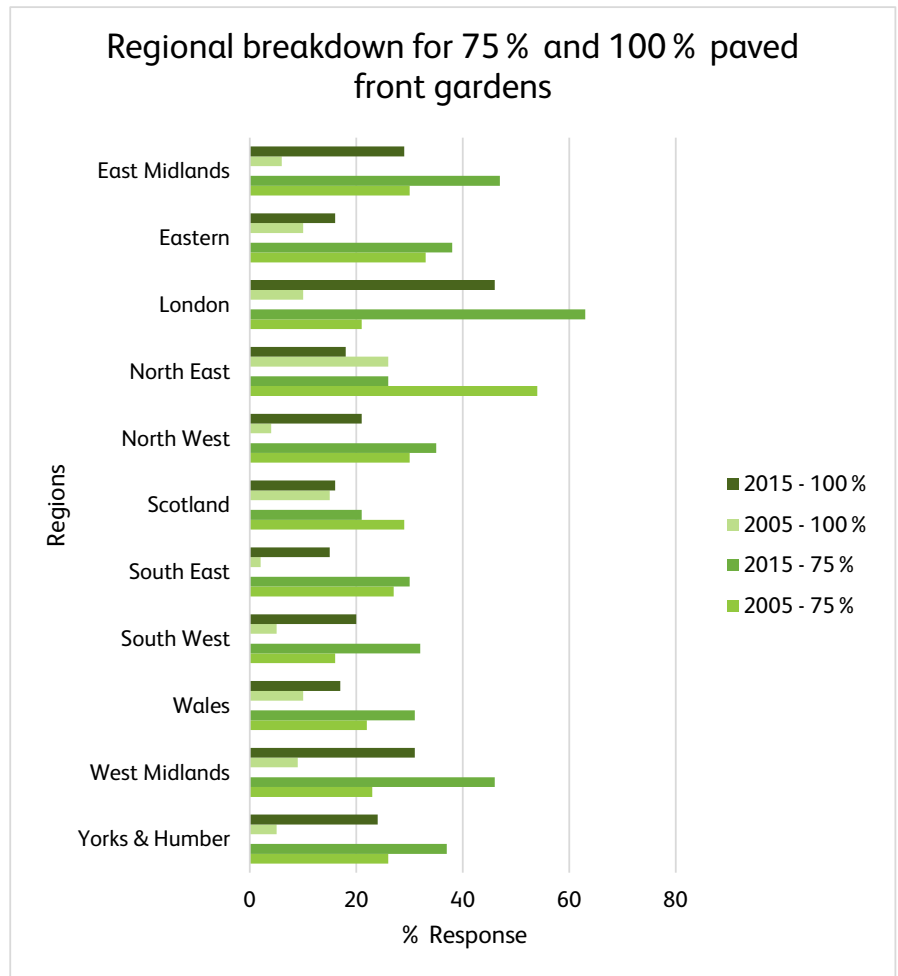


- Almost one in three front gardens in the UK today have no plants
- Three and a half times as many front gardens have no plants compared to ten years ago
- Planting has decreased 15% overall



Over the coming months the RHS will share and promote ideas ranging from pulling up a paving stone and planting up the space, to creating a window box, planting up front gardens and transforming grey community areas.

The RHS also wants the nation to pledge to get Greening Grey Britain and transform hard, cold grey areas into living planted up beautiful places, to enrich lives and benefit the environment – pledge here at rhs.org.uk/ggb.



The worst culprit for paving over front gardens is London, with half of all front gardens paved over and a 36% increase over the last ten years. London also had the biggest decrease of plant cover in front gardens in the UK, with five times as many front gardens with no plants compared to ten years ago.

The North East is the only place in the UK that has reduced the number of completely paved gardens. Front gardens in the North East with 50% plants or more also increased by almost 30%.

Scotland has also seen an improvement with a reduction of the number of 75% paved front gardens.

- There was an average 9% increase for 75%, and 14% increase for 100% paved front gardens, over the 10 year period.

What's the problem?

Paving over our front gardens might seem like the ideal way to solve parking problems. But these extra hard surfaces can have a surprising impact on the wider environment. Clearly there is less garden to enjoy, but did you know that paving can also cause flooding and increase local temperatures?

While paving over one front garden might seem of little consequence, the difficulties start when neighbours on both sides of the street do the same, effectively tripling the width of the road. But how many of us really are swapping our patches of green for the hard stuff?

During the 10 years between the RHS-commissioned Mori Polls of 2005 and 2015, an additional **3 million front gardens were completely paved over**, which has tripled. In addition **an extra 3.8 million front gardens have lost all their plants**, which has more than tripled.

Paving over front gardens is certainly a fact of life in many urban areas. And the effects are cumulative, which means they're likely to become more noticeable in the future. Why is this a concern? First and foremost, it is the part hard surfaces play in causing environmental problems, and increasing the risk of flooding is top of this list.

Gardens can soak up rain, while paving, tarmac and concrete are less porous and increase the amount of rainwater that runs off by as much as 50%.

This additional water usually flows into street drains, which can't always cope with the thousands of extra litres in a storm. The excess then goes back up people's front drives and floods their homes. RHS Principal Horticultural Advisor, Leigh Hunt, explains, "The water has to go somewhere and, even if you are not flooded, it might be affecting your neighbours downhill."

In most UK cities rainwater run-off, mixed with any pollution it picks up along the way, is channelled into storm drains and ultimately rivers. However, in London, rather than heading straight for the natural watercourses, rain goes to the sewerage system, which can't always process the surge of water. In an emergency the excess has to be jettisoned into rivers.

The other main environmental impacts are at a local level. "If vegetation is lost from our streets there is less to regulate urban temperatures," explains Leigh. "Hard surfaces absorb heat in the day and release it at night, making it hot

and difficult to sleep." This is part of the 'heat island effect', which can also be responsible for poorer air quality and localised weather conditions, such as thunderstorms. Plus, higher temperatures mean that air conditioning units are more likely to be installed, which use extra energy and fossil fuels.

Then there is the removal of grass verges and the felling of street trees to accommodate dropped kerbs. Without the trees and plants, dust is no longer absorbed and there are less places for birds to nest and insects to feed.

Attractive front gardens have benefits for people too. They can provide screening, creating a private green oasis for enjoyment, or conversely by tending a front garden gives neighbours the opportunity to meet and can help to build community spirit.

You also need to consider the costly issue of subsidence. Hard paving can cause severe subsidence as it reduces or stops rainfall getting into the ground. This can cause the soil to shrink, especially if it is predominantly clay, which has consequences for structures built on it. Garden walls, paths and houses may develop severe cracks.

This still leaves the issue of convenience. Parking close to the house can be particularly important if you are vulnerable or disabled. And pressure on parking in most urban streets is great, particularly when many houses have more than one car.

If you do decide that you need to park outside your house, there are still plenty of ways to keep the front garden green and reduce the impact paving has on the environment.

For full details of the environmental benefits of gardens, see *RHS Gardening Matters: Urban Gardens* on the RHS website.



Having it all

Getting a parking space into the front garden and managing to keep some greenery can seem tricky, so here are some simple design solutions for gardens large or small.

If you need to park outside your house, the most logical solution is to pave over the garden. This is certainly a practical option, but with a bit of imagination you can combine paving with an attractive and welcoming garden. And by using materials that allow rainwater to penetrate the ground below, the hard surfaces you do install will shed less water that could otherwise contribute to flooding.

Begin by taking a close look at your front garden. How many cars do you really need to park and how much space do they take up? Have you got walls and fences that climbers could scramble up? Are there dead spaces that could accommodate plants, such as the corners? With the answers to these questions, you can create a design that minimises paving and maximises planting and permeable surfaces.



Simple containers with box, and slate chippings



A minimal amount of brick pavers and deep flower beds with plenty of soil



A modern design with green walls, stylish beds and gravel driveway

Planting ideas

Planting under cars

If the car is moved fairly regularly, then there are plants you can grow that will tolerate being parked over. These need to be low-growing so the car does not brush them, and tough enough to withstand the occasional running over. Try creeping Jenny, *Lysimachia nummularia*; bugle, *Ajuga reptans*; and thymes such as *Thymus serpyllum*. Just leave planting pockets in the paving or gravel to ensure there is soil for them to grow in, rather than hardcore or a bed of concrete.

Attract wildlife

Shrubs, trees and hedges provide shelter and nesting sites for birds and insects. With careful selection they can also provide food. Birds will eat berries from plants such as pyracantha, while a wide range of insects feast on the pollen and nectar produced by flowers. Aim to have plants in bloom from early spring to late autumn, and choose open, single flowers to ensure insects have easy access to their food. RHS Perfect for Pollinators recognises good plants, and examples include catmint, *Nepeta x faassenii*; honeysuckle, *Lonicera periclymenum*; ivy, *Hedera helix* cultivars; and *Aster novi-belgii*.

Colourful containers

Pots can be placed anywhere, allowing plants to be grown in areas of the front garden that don't have soil. For summer colour, plant bedding plants such as petunias and nicotianas in late May. These can be replaced with pansies in September to keep the display going through the winter. If you want the containers to look good for more than one season, choose evergreen shrubs and plant into pots at least 45cm (18in) wide using John Innes No.2 compost.

Climbers and screening

Climbing plants can easily be used to dress bare walls and fences with decorative foliage and flowers. Secure trellis or wires to the support posts or wall before you plant, as most climbers will need something to hang on to. Try *Clematis alpina* cultivars, *Hydrangea anomala* subsp. *petiolaris*, variegated ivy cultivars, and *Ceanothus* such as 'Delight'.

Planting and growing

Find out how to plant and care for a wide range of plants on the RHS's website at www.rhs.org.uk. From here, you can also click on to the *RHS Find a Plant*, which lists more than 70,000 plants and where to buy them.



Above: *Thymus serpyllum*
Below: *Clematis alpina* 'Pamela Jackman'



Trees	Shrubs	Hedges	Perennials	Dry shade
<ul style="list-style-type: none"> • Holly • <i>Magnolia x loebneri</i> 'Leonard Messel' • <i>Malus x zumi</i> 'Golden Hornet' • <i>Prunus</i> 'Shôgetsu' • <i>Pyrus calleryana</i> 'Chanticleer' 	<ul style="list-style-type: none"> • <i>Aucuba japonica</i> • <i>Camellia x williamsii</i> • <i>Choisya ternata</i> • <i>Escallonia</i> • Lavender • <i>Mahonia x media</i> 'Charity' • <i>Skimmia japonica</i> 	<ul style="list-style-type: none"> • <i>Berberis thunbergii</i> • Box, <i>Buxus sempervirens</i> • Dwarf box, <i>Buxus sempervirens</i> 'Suffruticosa' • Hornbeam • <i>Lonicera nitida</i> • <i>Thuja plicata</i> • Yew 	<ul style="list-style-type: none"> • <i>Alchemilla mollis</i> • <i>Anemone hupehensis</i> • Catmint, <i>Nepeta</i> • Geraniums such as Rozanne • <i>Heuchera</i> • <i>Stipa tenuissima</i> • <i>Phormium</i> 	<ul style="list-style-type: none"> • <i>Bergenia</i> • <i>Cyclamen hederifolium</i> • <i>Euonymus</i> (variegated) • <i>Lamium</i> • <i>Luzula sylvatica</i> • <i>Pachysandra</i> • <i>Vinca minor</i> 'Illumination'

Pave to perfection

It is preferable to keep any soil covering, except plants, to a minimum. If you do choose to pave, go for permeable products that allow rainwater into the ground below. Here are just some of the materials available, however you may find more options at your local builders' merchants or DIY store.



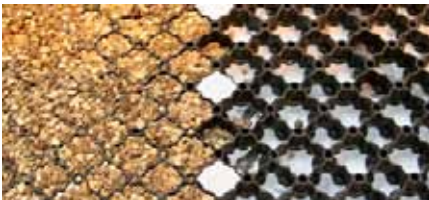
Brick pavers

These bricks have the appearance of traditional block paving, but their interlocking shape ensures rainwater can penetrate the tiny gaps. They need to be installed correctly on to compacted aggregate so the water can drain away freely.



Gravel

Gravel is by far the cheapest permeable hard-landscaping option. It comes in many colours, depending on where it was quarried, and can be bought in bags or by the tonne. You can also buy recycled products, which is a by-product of the ceramics industry.



Matrix pavers

Also known as cellular paving, these hexagonal cells are made from recycled plastic and hold an aggregate of your choice, such as resin-bonded gravel. Just lay them according to the manufacturers' instructions, so that rainwater drains away thoroughly.



Grass reinforcement

There is a range of products that can be used to reinforce grass. These make the surface suitable for driving vehicles over and prevent it turning into a muddy field.

“There is a recognised critical need to increase green in our towns and cities by 10% to help combat predicted rises in temperature. The evidence suggests we need to increase this target to deal with the 15% loss of greenery in front gardens. We need to urgently increase plants in urban environments, and better understand how to select and use ornamental plants, not reduce them. Whatever the pressures to pave, there is *always* room for plants.”

Sue Biggs,
RHS Director General

Relevant facts:

- Traditional, non-permeable paving in front gardens, such as asphalt, block paving and concrete often requires planning permission by law. However, what you can and can't do varies between England, Scotland and Wales – see the Permeable Paving page on the RHS website for details
- Trees, hedges and climbers can reduce cost of heating and cooling. In particular, summer cooling savings have been estimated at around 30 %
- Garden plants and trees intercept intense rain, slowing run off and reducing pressure on drains, especially during summer storms
- 45 % of local authorities are considering either selling parks and green spaces or transferring their management to others
- 10 % increase in vegetation would help control the predicted climate change increases to summertime air temperatures

Further help & advice



By ensuring front gardens contain a balance of hard landscaping and plants, we can:

- Prevent flooding by soaking up summer storm rains
- Provide homes to up to 260 species of wildlife (insects, birds etc)
- Absorb pollutants, helping us breathe easily
- Keep us cool in summer and help insulate homes in winter
- Make us feel good to come home – it's scientifically called 'restoration'!

All your horticultural questions can be answered by the RHS Gardening Advice; this service is free to RHS members. Or you can visit the Greening Grey Britain website at rhs.org.uk/ggb.

The RHS website also contains a wealth of free information to help you select the right plants for your space, as well as contact details of specialist nurseries and suppliers.

RHS Membership

If you aren't an RHS member already, you can support the charitable work of the Society by joining up and also benefiting from a range of membership privileges which include:

Free entry with a family member guest to RHS Gardens and Garden Flower Shows at Wisley, Rosemoor, Harlow Carr and Hyde Hall, and Flower Shows in London

Free access to over 150 RHS partner gardens, some throughout their opening season, others at selected periods.

Free monthly magazine The Garden, full of practical advice, ideas and inspiration (RRP £4.25).

RHS Flower Shows Privileged entry and reduced-rate tickets to Chelsea and Hampton Court Palace Flower Shows and the RHS Flower Show at Tatton Park.

Flower Shows Reduced-price tickets to BBC Gardeners' World Live and the Malvern Spring and Autumn Garden and Country Shows.

Free gardening advice Invaluable support and answers to your gardening questions. Available by email, telephone, and post or in person at RHS Gardens and Shows.

Access to seeds Apply for seeds harvested from RHS Gardens.

Special Events Reduced price tickets to hundreds of lectures, tours, workshops and events around the UK. Please check your Members' Handbook for further details.

References

2015 Mori Poll to 1,492 people in the UK aged 15+ with front gardens, Mar 6-22 2015

2005 Mori Poll to 1,723 people in the UK aged 15+ with front gardens, May 19-23 2005

NB The figures provided are rounded to whole numbers.

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