

The Rotary Campaign for Peat-free Composts

- For Peat's Sake!



Registered Charity Number: 1124062



Blue Diamond are pleased to sponsor the printing of this Peat-Free guide produced by Nailsworth Rotary.



Our Nailsworth Garden Centre will be Peat free from 2022, with a further emphasis on sustainability. We are committed to be Peat free in all centres by 2025 with the introduction of 3 new fully sustainable Peat free own brand composts as well as a peat free alternatives for all planting needs.

In 2022 our Growing media core range consists of 65 different Lines, Peat free & Manures now account for 58% increasing from 39% 2021. On top of our increased ranging of peat free product we have introduced reduced peat compost from some of the brand leaders which will enable us to take a further 5 million Litres of peat out of the market.

We are also proud to be partnered with The Soil Association and more details can be found on our website:

<https://www.bluediamond.gg/news/category/soil-association>

What is peat?

Peat is formed mainly from bryophytes (mostly sphagnum mosses), herbs, shrubs and small trees.

The definition of peat, according to the International Peatland Society, is the surface organic layer of a soil that consists of partially decomposed organic material derived mostly from plant material which has accumulated under conditions of waterlogging, oxygen deficiency, high acidity and nutrient deficiency.

Where are the main areas of peat globally?

Peatlands cover four million square kilometres globally. Germany and Canada account for over half of all peat extraction for horticulture. Other important areas are the Baltic States, Finland, Sweden and Ireland.

The majority of peat used in horticulture in the UK originates in the Republic of Ireland where, until recently, three main power stations were using peat as the only source of energy in the country.

At one time the peat moors of Somerset provided peat for domestic heating. This was before the uptake of the material as a horticultural growing medium and has also contributed to the total used.

A survey of manufacturers in 2019 recorded 811 hectares (c 2,000 acres) were used in the UK for peat extraction.

**The International Union
for Nature Conservation
estimates that peat bogs
cover just 3% of the
world's surface
(4 million square km)
but hold as much carbon
as all other vegetation in
the WORLD put together!**

How can the use of peat affect climate change?

According to Dr Mark Gush, Head of Environmental Horticulture at the Royal Horticultural Society (RHS), the four main benefits of going peat-free are:

- 1 **Carbon storage**
- 2 **Flood mitigation**
- 3 **Preserving diversity**
- 4 **Effect on water purity**

1 **Carbon storage**

Beneath the surface of peat bogs lies a huge store of carbon which has been laid down over millennia. The water in the bog keeps the carbon in, but as soon as peat begins to drain by extraction, mainly for horticulture, it begins to oxidise and the carbon starts to be released.

Peatlands are the UK's largest store of carbon - an estimated 3.2 billion tonnes - more than all of our forests. **Just in England alone, the peatlands, which have been highly degraded, are releasing approximately 22 million tonnes of carbon dioxide annually, significantly contributing to climate change.** As bogs grow, plants take in more carbon from the atmosphere and store it.

Providing they are waterlogged, bogs are “carbon sinks”, so healthy bogs mitigate climate change.

2 Flood mitigation

Restoring peat bogs is crucial for mitigating flooding as bogs soak up rainfall like a sponge and release it slowly, thus reducing flood risk.

3 Preserving diversity

Peat bogs are home to a unique flora and fauna, which only thrive in these exceptional conditions.

4 Effect on water purity

Water filtered through healthy peat bogs is of a higher quality than that from degraded bogs, making it cheaper to treat as drinking water. Around 70% of our water comes from British Uplands, and over half of this passes through peat.



Alternatives to peat

The latest data suggest that in 2020 5.4 million cubic metres of growing media were used in UK horticulture, of which 41% was peat. However, some 30 years after the start of the peat debate, there remain only three options that are making commercial headway, these being:

- 1 Wood fibre and bark**
- 2 Coir**
- 3 Green compost**

Such alternatives to peat need to emulate its qualities, the principal ones being that they are:

- Consistent (renewable)
- Available in significant quantities
- Preferably UK sourced
- Low in pH
- Low in nutrients

**Being a renewable resource is now, of course, a necessity
and one which peat cannot achieve**

1 Wood fibre and bark

Most peat-free potting composts use either wood fibre or composted bark as their primary ingredient. These have good drainage qualities and can be tailored to the needs of most plants. Wood is a renewable and sustainable resource that can be grown here in the UK, although there is competition for its use from biomass energy production.

2 Coir

A fibrous waste product from coconuts, coir has to be transported from tropical regions (mostly India and Sri Lanka), so has a relatively high carbon footprint, but still has less environmental impact than peat use. It has excellent natural water-holding ability, and a sufficient mix of fine and coarse fibres to hold air in its pore spaces, making it a good growing medium. A drawback is that it does not hold nutrients well.

3 Green Composts

Many Local Authorities are collecting and composting green waste. The resultant compost tends to have a high nutrient content and a high pH, making it an excellent soil improver or mulch.

There is an Industry Standard (BSI PAS 100) for green compost that enforces consistent and regulated processing in order to encourage its use in potting composts. Due to its high pH and high levels of nutrients, green compost tends to be mixed with other materials to make potting compost - it is usually no more than 30% of the overall product.

Peat-free composts are now widely available and give good results. This makes them the natural choice, particularly as peat-based composts come with a high cost to the environment.



Tips from the RHS when buying peat-free composts

- 1** If the bag doesn't say peat-free then it most likely isn't.
- 2** Wording such as 'environmentally friendly' or 'organic' can often confuse gardeners into thinking they are buying peat-free products, but this is not necessarily the case.
- 3** Check the label on the bag to see if it is recommended for particular plant groups or activities such as seed sowing or growing bedding plants.
- 4** Read and follow any advice offered on the label of peat-free products, as many need slightly different treatment to peat when caring for the plants growing in them. Pay particular attention to watering and feeding requirements as they do tend to differ from those regarding peat.

How are Governments and independent organisations reacting to the eventual elimination of peat in horticulture?

In the UK, the first Government target for peat reduction was introduced in 1995, and aimed for the UK to be 40% peat-free by 2005. In 2018 the Government, under the leadership of Theresa May, published their '25 Year Plan to Improve the Environment'. This Plan gave new targets for peat use in composts used by amateur growers to be ended by 2020, and in all horticulture by 2030.

In May 2021, the UK Government announced its intention to ban peat for amateur use by 2024, subject to consultation.

Other countries are now bringing in restrictions, such as Germany which aims to be peat-free for retail products by 2026.

In the Republic of Ireland, conservation groups called for a judicial review of Government policy regarding the activity of the main peat producer, Bord na Móna. The High Court ruled in favour of the pressure groups with the consequence that, from September 2019, peat harvesting in the Republic must cease on sites larger than 30 hectares (75 acres), pending a change in planning laws.

The RHS has been working on replacements for peat in compost for the last 20 years, and has successfully tested several peat-free products. The organisation is so convinced of the necessity to remove peat as a horticultural growing medium that they only sell peat-free products in their shops. The RHS commissioned a major scientific review of growing media in 2016 and, following extensive testing at RHS Wisley, has endorsed the compost **Sylvagrow**, produced by Melcourt Industries Ltd at Tetbury, as one of the viable peat-free composts. This product has also received a Royal Warrant as a result of its use at Highgrove House.

Peat-free products have been tested by 'Which? Gardening Magazine' for several years. It was found that peat-free composts can perform as well as many which have a high peat content.

Take the initiative, buy peat-free and you will find that the results are equally as impressive as peat products. You may need a little more water, follow the instructions and your plants can look as fabulous as those in our Rotary town planters. Our photographs in this booklet speak for themselves!

The proof of the pudding!

In 2014 Nailsworth Rotary introduced the first flower troughs into the town of Nailsworth, Gloucestershire. The troughs were purchased by the Town Council and, to help establish them, plants and compost were funded by the Council. By 2016 Nailsworth Rotary were funding all of the planting and peat-free compost. Each year the plants are chosen by our Nailsworth Rotarian who has spent his life in the horticultural world. The troughs are planted and maintained by a Rotary Team. Four floral displays bloom throughout the summer and winter in the town.

Nailsworth Rotary realised early on the significance of degrading peat bogs, and the huge impact on the environment. We discovered that a manufacturer, Melcourt Industries Ltd, operating from a site near Tetbury, were producing peat-free composts. Following discussions with the Company, they kindly offered sufficient of the product **Sylvagrow** for our spring and summer plantings, and we started using signage in the troughs to show the reasons why we are now using peat-free compost. This excellent cooperation has continued and the results have been consistently outstanding each year, receiving very positive responses from our townsfolk. Thus, from perhaps a sceptical attitude initially, we are convinced that we have equalled the success of using our original peat-based compost.



The photographs below were taken in August 2021. They are of our troughs outside Nailsworth Town Library. These troughs were planted on 2 June 2021.



As you can see, the Surfinias, Pelargoniums and Nemesisias provided a stunning display and gave pleasure to all during the recent difficult times.



**Please follow our example and support
the need for change to peat free!**

Acknowledgements

We wish to thank and acknowledge the following:

Catherine Dawson, Technical Director
Melcourt Industries Ltd

Dr Mark Gush, Head of Environmental Horticulture
Royal Horticultural Society

Melissa Mabbitt - 'Going Peat Free', April 2021
article in 'The Garden' RHS Members' Magazine

Charlotte Olver, Editorial Assistant
RHS 'The Garden' RHS Members' Magazine

The Royal Horticultural Society (RHS) which has
given permission for extracts and information used
in this booklet

Ceri Thomas, Editor
Which? Gardening Magazine



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Please contact us if you would like to be involved with Nailsworth Rotary. Many of our speaker evenings are open to the public and we welcome those who would like to see if Rotary is for them. We are very keen to promote and support environmental projects.

Our members work with Stroud Valleys Project, Stroud Court Community Trust and Nailsworth Community Garden. We have been involved in a number of environmental projects locally and love to get stuck in and make a difference.

Please visit our website or Facebook page for more information - we'd love to hear from you.