

Peat-free Horticulture

demonstrating SUCCESS

Addendum 2023



Holmes, S. & Bain, C. (2023) 'Peat-free Horticulture – Demonstrating Success: Addendum Report 2023', IUCN UK Peatland Programme, Edinburgh

February 2023

The report can be downloaded from www.iucn-uk-peatlandprogramme.org

The International Union for the Conservation of Nature (IUCN) is a global organisation, providing an influential and authoritative voice for nature conservation.

The IUCN UK Peatland Programme promotes peatland restoration in the UK and advocates the multiple benefits of peatlands through partnerships, strong science, sound policy and effective practice.

Based on research by Susie Holmes – Susie Holmes Consultancy Ltd.

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1. INTRODUCTION

The IUCN UK Peatland Programme launched 'Peat-Free Horticulture – Demonstrating Success' (Holmes and Bain 2021¹) as part of its contribution to the United Nations Climate Change Conference (COP26) in Glasgow in 2021. The report highlighted the damaging environmental impact of peat extraction on wildlife, water and climate, and demonstrated the significant progress being made towards a sustainable, peat-free horticulture industry.

In the years since then, there has been continued effort to end the use of peat across the horticulture sector, government bodies and the environmental and gardening NGOs.

At its annual conference, held in Aberystwyth in 2022, the IUCN UK Peatland Programme held a session exploring the progress being made against the UK Peatland Strategy 2018. The four UK devolved government administrations provided updates on the policy progress, which together with substantial progress in the development, sale and use of peat-free products, merited this addendum report.

As nations gathered again to discuss the global challenges of climate change at COP27 in Egypt, a new Global Peatlands Assessment (UNEP 2022²) was published by the United Nations Environment Programme. Among the many threats to peatlands worldwide, the commercial extraction of peat for horticulture is highlighted as affecting countries from the northern to southern hemispheres. Lessons learned in the UK and in Europe about the opportunities for peat-free horticulture are being shared globally as a sustainable solution.

There is increasing recognition among world leaders and citizens of the need for urgency, as well as an understanding that all sectors should operate sustainably with environmental protection, human well-being and healthy economies interlinked.

Being peat-free is an essential part of a sustainable horticulture industry and the key question now is how to urgently achieve that goal. This report demonstrates that progress can be made even in the most challenging areas. A clear route map could capture these successes and target the remaining hurdles with measures to support the horticulture sector, helping both our peatlands and an important part of our economy.

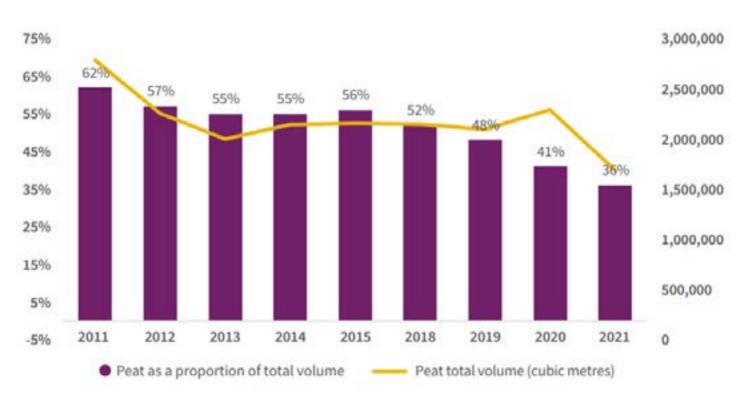
^{1.} Holmes, S. & Bain, C. (2021) 'Peat-free Horticulture – Demonstrating Success', IUCN UK Peatland Programme, Edinburgh. Available at <u>https://www.iucn-uk-peatlandprogramme.org/sites/default/files/2021-12/Demonstrating%20Success%20Peat%20and%20Horticulture%202021.pdf</u> (Accessed November 2022)

^{2.} UNEP (2022). Global Peatlands Assessment – The State of the World's Peatlands: Evidence for action toward the conservation, restoration, and sustainable management of peatlands. Main Report. Global Peatlands Initiative. United Nations Environment Programme, Nairobi. <u>https://www.unep.org/resources/global-peatlands-assessment-2022.</u>

2. HORTICULTURAL USE OF PEAT UPDATE

The latest monitoring data from the Horticultural Trades Association (HTA) Growing Media Monitor Report, 2022 shows that the overall proportion of peat in horticultural growing media fell from 41% in 2020 to 36% in 2021. The total quantity of peat used (1,690,000 cubic metres) also decreased, for the first time in eight years, with 600,000 cubic metres less peat being used in the sector in 2021 compared to 2020.

The volume of all growing media (peat and peat-free) sold in the retail market was back to the more normal pre-pandemic levels range of 3.0 - 3.5 million cubic metres after a pandemic peak in demand during 2020 when 4.3 million cubic metres were sold.

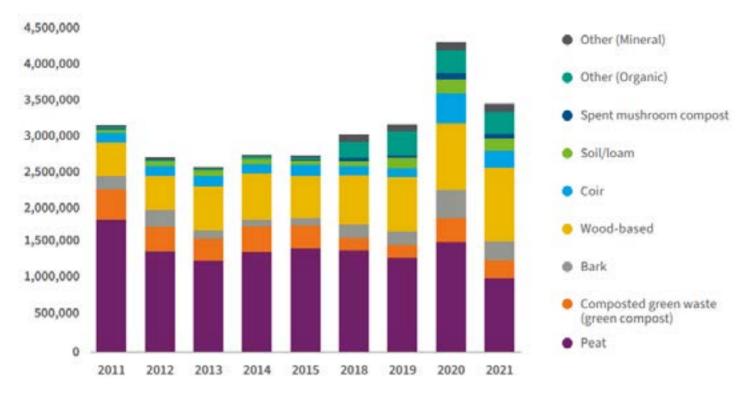


The HTA Growing Media Monitor Report gives data for the use of peat and alternative materials in both the retail (amateur gardening) and professional horticultural sectors.

Since 2019 there has been a significant reduction in peat use in both the retail and professional grower markets, ignoring the atypical 2020 season. The retail market still accounts for the majority of the total volumes of growing media used, making up 72% of the total market. The reduction in peat use has been greatest in that sector, with more immediate options for substituting peat than in the professional grower market. Within the retail sector, peat now only makes up about 30% of the materials used and this is set to fall further with retailer commitments to reduce peat use.

Around 1 million cubic metres of peat is currently still being used for amateur gardening products, which is a significant amount that needs replacing by 2024 to meet government phase-out targets for peat in horticulture.

Volumes of peat sold in the retail and professional markets 2011-2021 and peat as a proportion of total growing media volume sold (HTA, 2022)



Overall volume (cu m) of ingredients used in retail growing media, 2011-2021 (HTA, 2022)

In 2022, the spring and summer gardening retail seasons presented customers with a prominent and wide range of competitively priced peat-free materials. Monitoring of retailers by the Wildlife Trusts (RSWT 2022) shows that most of the largest retailers of plants and growing media had made commitments to being peat-free, with several having already achieved a 100% peat-free target.

In the professional sector some specific crops, for example mushrooms, blueberries, ericaceous plants, houseplants and plug plant production, are reported as being reliant on peat either for supply chain, technical or financial reasons and more research is needed to address this.

The main alternatives to peat are wood-based materials and the use of these has increased but there is still competition for the raw materials from other industries and energy price increases will have an impact on production costs of wood fibre.

The use of coir fell in 2021 due to supply chain issues in India and Sri Lanka related to Covid-19 but availability is increasing again, and coir now accounts for the largest volume of non-peat material in the professional horticulture sector. This is due mainly to the impact of soft fruit production which now uses 100% coir substrate. There are also some real opportunities to recycle and reuse the coir waste from soft fruit production (estimated to be 1 million cubic metres per annum).

3. GOVERNMENT POLICY ON HORTICULTURE AND PEAT

The Department for Environment, Food and Rural Affairs (Defra) has stated that the sale of peat in retail gardening products will be banned in England from 2024 (England Peat Action Plan, (Defra 2021). In August 2022 Defra published the response to its public consultation on ending the retail sale of peat in horticulture in England and Wales. More than 5,000 responses were received with over 95% in favour of government taking action to ban retail peat sales.

The date for phasing out peat for use in commercial horticulture within the Defra consultation has been proposed as 2028 with some exemptions for ongoing use. Concern has been raised by environmental bodies that open-ended exemptions and a lack of more urgent targets for all peat use to be banned, gives encouragement for peat extraction sites to continue operating and even lead to proposals for new extraction sites.

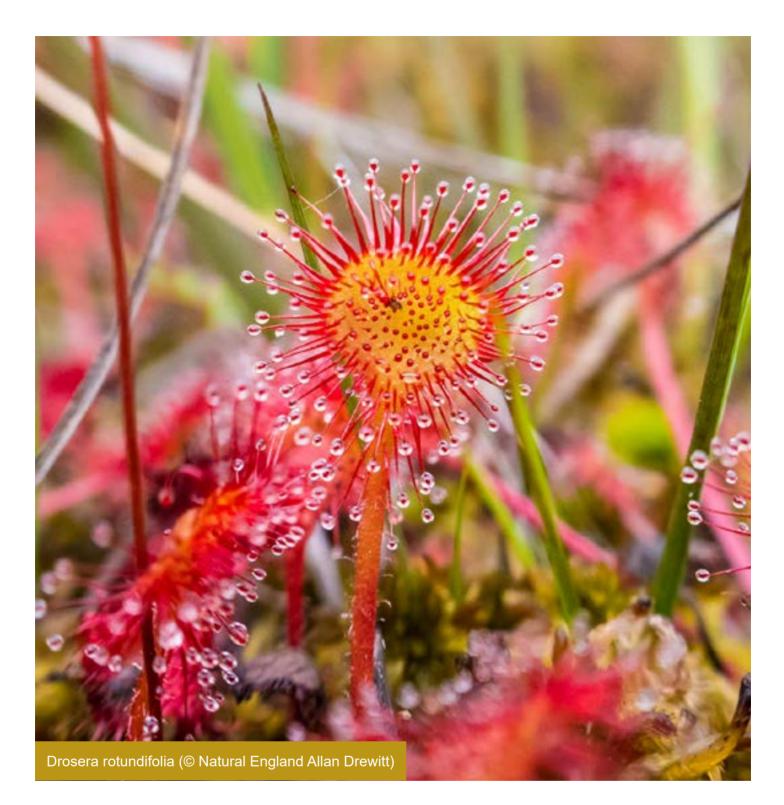
In 2022 the major fertiliser company ICL Group, who operate several peat extraction sites in Scotland, had a proposal to extend its peat extraction works in Dumfries and Galloway rejected by the planning authority after strong opposition from local people and the statutory agencies. The company had also submitted another extension proposal to a site in South Lanarkshire which was later withdrawn.

The ongoing extraction of peat in the UK, primarily in Scotland but also in England and Northern Ireland, risks undermining important biodiversity and climate change goals as these both require urgent restoration of peatlands, rather than waiting until the peat resource is exhausted or the permitted extraction period ends.

There is no current planning permission for peat extraction in Wales and in December 2022 the Welsh Government announced that steps will now be taken to implement a ban on peat retail sales following the Defra consultation which saw 92% of Welsh respondents supporting a ban.

The Scottish Government is consulting (February 2023) on a ban on the sale of peat related gardening products.





The Northern Ireland Peatland Strategy 2021-2040 drafted by the Department of Agriculture, Environment and Rural Affairs includes proposals to ban the use, import and sale of peat compost in Northern Ireland by 2025. All four of the UK devolved administrations have stated plans to work together to form a coordinated approach to ending peat use in the UK.

The Office for Internal Markets (OIM) is exploring the potential impact of the Defra proposals on the UK internal market and is due to report in February 2023 (<u>https://www.gov.uk/oim-projects/request-for-a-report-into-proposed-regulation-banning-sales-of-peat-in-england</u>).

The UK government is continuing to support the Horticultural Trades Responsible Sourcing Scheme which is promoting the use of sustainable raw materials for growing media production.

The Responsible Sourcing Scheme for Growing Media has been developed by the Growing Media Association under the auspices of the Horticultural Trades Association and in collaboration with leading retailers, Defra and NGOs. It assesses the impact of each raw material that accounts for more than 5% of the volume of the mix against seven criteria listed below:

- **Energy Use –** This assesses the energy used to create the raw material. Renewable energy such as solar power will generate a better rating than a non-renewable energy, such as coal.
- **Water Use** This refers to how much water is used in the process of creating the raw material. Water is a finite resource, so we need to use it carefully.
- **Social Compliance** This is all about people, making sure that people employed to provide the raw material are working in acceptable conditions, that their health and safety is considered, and no child labour or bonded workers are used.
- **Habitat & Biodiversity –** We want to make sure that the area where the raw material is produced minimises the impact to wildlife and creation of biodiverse habitats.
- **Pollution** It is important to minimise the amount of pollution to the environment through the manufacturing process.
- **Resource Use Efficiency** This assesses the amount of waste generated and what efforts are taken to minimise waste. If the raw material can be used as a by-product from other industries, then this will gain a better rating.
- **Renewability** This assesses the amount of time it takes to replace the resource used.

The Scheme does not consider fertilisers or any other ingredients used in small quantities.

Retail growing media bags will inform customers by using the Scheme logo:





4. FURTHER RECOMMENDATIONS

Whilst considerable progress has been made in reducing peat in horticulture and with bans on certain sectors due to be implemented, there will still be exemptions, particularly in the professional sector, that need to be addressed.

Following on from the recommendations in the IUCN initial Demonstrating Success report, there has been further work funded by the Esmée Fairbairn Foundation (Sizzle 2022) that explored ways to address barriers to ending peat use in horticulture. Particular emphasis was given to supporting the development of peat-free material from garden and food waste derivatives with the aim of identifying possible trial work at a regional level.

Knowledge transfer and training are vital to the rapid transition towards peat-free horticulture. As part of this effort, The Royal Horticultural Society (RHS) has appointed a peat-free postdoctoral fellow and will appoint three PhD students to help the horticultural trade transition to sustainable growing media. This £1million, co-funded, five-year project led by the charity convenes government, growers and growing media manufacturers through the Growing Media Association and horticultural product supplier Fargro to research sustainable alternatives to peat in large-scale commercial settings.

Five growers will work alongside the RHS. They are: Allensmore, Hills Plants, Johnsons of Whixley, The Farplants Group and Vitacress, who collectively produce more than 46 million plants every year. Areas of research and growing focus for the group will include peat-free plant and plug plant production, new growing media technologies to replace the estimated 1.7 million cubic metres of peat used by the UK horticultural industry in 2021, growing protocols, best practice use of the latest products, and developing peat-free solutions for challenging plant groups such as carnivorous and ericaceous species. Findings will be shared with the wider industry, including specialist nurseries, as well as the UK's 30 million home and community gardeners who, armed with a better understanding of sustainable alternatives and best practice advice, can aid the transition to peat-free. The RHS has committed to being entirely peat-free by the end of 2025, having banned the sale of peat-containing growing media in 2018.

A peat-free route map

There needs to be clarity about the hurdles facing those parts of the horticulture industry having most difficulty going peat-free. In some cases, the problems are technical, i.e. finding suitable materials that are consistent and meet the demands placed on them, and in other situations there are financial constraints, where perhaps peat remains the most viable option from an economic perspective. Both have ways forward which can be explored but if the overall goals are to be achieved there should be a clear route map to change, precisely identifying barriers, with timelines and milestones covering the different solutions; whether it is research, infrastructure and equipment support, additional funding or policy change.

5. PRODUCERS, MANUFACTURERS AND RETAILERS

Case Studies

- A. Dalefoot Peat-free composts from local renewable resources
- B. Eco Sustainable Solutions Recycling organic materials to make peat-free landscaping products
- C. B&Q Helping amateur gardeners go peat-free
- D. Co-op The first supermarket to stop selling peat-based growing media

CASE STUDY A DALEFOOT – PEAT-FREE COMPOSTS FROM LOCAL RENEWABLE RESOURCES

Introduction

Dalefoot Composts, founded by environmental scientist Dr Jane Barker and hill farmer Simon Bland, have been producing premium peat-free growing media from local, renewable ingredients since 1997. With added sustainability and environmental benefits, the composts have a strong customer base with gardeners and horticulturalists through a full range of composts to suit most gardeners' needs from seed sowing to no-feed tomato growing.

The company ethos is that if we want to make gardening carbon neutral or carbon negative we need to preserve peat bogs, not use peat to grow our plants, and support a move for gardeners to 'husband' their growing media. In addition to their peat-free range, Dalefoot has been restoring peatlands across the UK for 25+ years – including commercial extraction sites. The peatland restoration delivered by Dalefoot Composts' parent company, Barker & Bland Ltd has helped stop the release of 3.8 million tonnes of carbon since 2010 – the same as the carbon absorbed by over 25 million trees planted and grown over the same period.

Actively involved in promoting peat-free, RHS Chelsea 2022 had the first ever installation of a peat bog – under licence from Natural England, where Dalefoot Composts and the Eden Project combined forces to enable gardeners to experience the wonders of a living peat bog and explain that good peat-free gardening can help gardeners reverse climate change.



CASE STUDY A DALEFOOT – PEAT-FREE COMPOSTS FROM LOCAL RENEWABLE RESOURCES (CONTINUED)

Peat-free growing media production

Using traditional gardening recipes, the range of Wool Composts[™] is uniquely made from bracken, comfrey and wool – all UK grown.

As well as being important carbon sink plants, bracken and comfrey also yield significant potassium, trace elements and minerals. In addition, harvesting bracken provides a non-chemical control of this invasive species and ecological benefit through habitat creation e.g. for violets and high brown fritillary butterflies. Low value upland hill sheep wool supplies a natural, slow release of nitrogen to feed plants beyond the first year!

Through its natural hydroscopic properties it has natural water retentive properties that reduce the need to water by up to 50% - a particularly important feature in the face of climate change with hotter, drier summers, droughts, hosepipe bans and an increasing awareness of being more considerate and conservative in our use of water.

In addition to the range of Wool Compost, Dalefoot make 'Lakeland Gold', a blend of composted bracken – an excellent soil conditioner and mulch. The high lignin and hollow stem of bracken make Lakeland Gold an excellent 'clay-buster' that helps turn clay into a workable mineral soil.

"We are planning carbon capture crops for compost making, to enable the next generation of Dalefoot Composts to maximise carbon storage as a further step towards reversing the impact of the years of using peat-based composts." Simon Bland (Director)



Dr Jane Barker and Simon Bland, Dalefoot Composts (© Dalefoot Composts)

The addition of 'Double Strength' Wool Compost into borders and vegetable beds organically feeds the soil into the second year and has the ability to hold water in the soil, promoting resilience in gardens through dry conditions.

Importantly, all Dalefoot Composts are accredited for organic growing by the Soil Association and the company is Living Wage accredited.

Ambitions

To achieve a shift in gardening towards conserving our soils and growing media by investing in quality, long-term growing that can be simply refreshed rather than replaced.

CASE STUDY B ECO SUSTAINABLE SOLUTIONS – RECYCLING ORGANIC MATERIALS TO MAKE PEAT-FREE LANDSCAPING PRODUCTS

Introduction

Eco is a family-run organics recycling company based in Dorset, founded in 1992. Since then, they have recycled over 4 million tonnes of organic material and currently recycle over 250,000 tonnes per year, producing quality and sustainable landscaping products and renewable energy. The garden material that they compost comes from local landscapers and 'green bin' collections from households.

The business has achieved UK Compost Certification Scheme accreditation (to the BSI PAS100 standard) for its composting site, was a founding member of the Composting Association (now REA) and is a member of the Soil Association. Although peat is not a good soil improver there are still some gardeners using products such as peatbased multi-purpose compost and grow bags to dig into their soil. Eco are keen to promote their peat-free soil improver products as a much better and more environmentally friendly alternative to this.

The composting process

Eco are committed to developing and supplying top quality, environmentally friendly peat-free products for use by landscapers and gardeners.

The green compost is made from

source-segregated garden offcuts delivered to their composting site near Bournemouth. The green waste is first checked for any contamination (such as plastics or glass) and then shredded before being composted outdoors in long heaps called 'windrows' for up to 12 weeks. The compost is turned regularly to aerate it, achieving the high temperatures needed to kill weed seeds and pathogens throughout the heap. It is monitored daily with probes to ensure that the temperature, moisture level and oxygen level are correct throughout the cycle. At the end of composting, the material is screened to produce the different size grades needed for the various products: soil improvers, mulches and manufactured topsoil. These products are sold nationally in large bulk bags.

The 'oversize' woody material that doesn't get broken down in the composting process is treated by drying, separating and screening it to produce biomass fuel which is an alternative to virgin wood chips.

Peat-free product range

Eco produce a range of soil improvers and mulches which are sold to gardeners and landscapers. These products are becoming increasingly popular with allotment holders and vegetable growers who are moving to 'no dig' techniques which rely on mulching to control weeds and build soil organic matter and soil health.

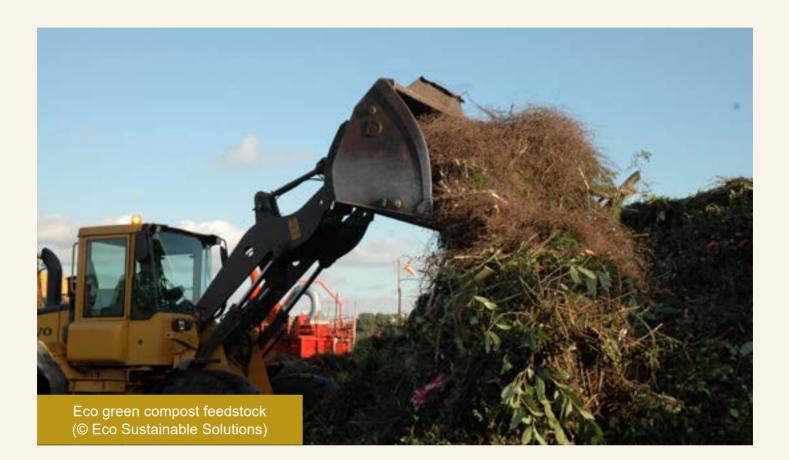
Ambitions

The company is continuing to develop new products and are working to develop their own peat-free growing medium for gardeners using their green compost.

"Composting is our heartland and we've produced our flagship soil improver, Eco Mix, for over 30 years. Compost is a fantastic way to improve soil quality, something crucial with climate change, and helps us move away from fossil-fuel derived, artificial fertilisers. It is also imperative to provide peat-free alternatives, but doing so using sustainable alternatives."

Tristan Dampney (Marketing Manager)

CASE STUDY B ECO SUSTAINABLE SOLUTIONS – RECYCLING ORGANIC MATERIALS TO MAKE PEAT-FREE LANDSCAPING PRODUCTS (CONTINUED)





CASE STUDY C B&Q – HELPING AMATEUR GARDENERS GO PEAT-FREE

Introduction

Major retailer B&Q has been leading the industry in the area of peat-free gardening for over 30 years. They introduced their first peat-free growing medium in 1991 and stopped selling 100% peat products in 2008. In 2014 B&Q introduced a range of peat-free bedding plants for sale in their stores and have increased the peat-free ranges since then by working with their suppliers on peat-free production.

Transitioning to 100% peat-free

B&Q will move to selling 100% peat-free growing media products in 2023 and are calling on the Government to ban the sale of peat-based compost by 2024 as planned.

Developing peat-free growing media

B&Q have worked with their suppliers to source and mix alternative ingredients to get exactly the right balance for a peat-free growing medium. They have an ongoing commitment to keep improving the quality of peat-free products and to secure sufficient volumes to achieve their peat-free goal.

Over the last four years B&Q have partnered with suppliers to develop a high quality peat-free formulation under the 'GoodHome' brand. This 100% peat-free growing medium was launched in 2020 and is formulated using coir (coconut fibre) and other sustainable ingredients to replace peat. It is made available to customers at the same price as peat-based versions despite it costing more to produce.

B&Q now sell a large range of peat-free products under the GoodHome brand, as well as branded peat-free products. They undertake trial work at their research nursery in Hampshire to help drive continuous improvement in their products.



CASE STUDY D CO-OP – THE FIRST UK SUPERMARKET TO STOP SELLING PEAT-BASED GROWING MEDIA

Introduction

In 2021 the Co-op became the first UK supermarket to completely end the sale of peat-based growing media in all its stores to make it easier for amateur gardeners to reduce their carbon and environmental impacts.

Peat-free progress in 2022

In 2022 Co-op, in conjunction with their supplier Westland Horticulture, is selling only their New Horizon peat-free bagged compost, which will be available in 1,100 of the convenience retailer's food stores which sell growing media. The product range includes the New Horizon peat-free Tomato Planter and peat-free growing medium in 20 litre and 50 litre pack sizes.

Westland's New Horizon product is based on wood-fibre which is a renewable resource made from wood-chips at their production site in Northern Ireland. Westland are signed up to the UK's Responsible Sourcing Scheme for their growing media production.



"It seems quite simple really, it is clear that extracting peat contributes to climate change, not to mention its impact on the environment and our wildlife who depend on it – and so, that is why we only sell peat-free bagged compost at Co-op. We want to make it easier for our members and customers to make small changes in their everyday lives which, together, add up to make a big difference to our environment."

Martin Spencer (Co-op's Buyer for Home and Leisure)



6. GARDEN ORGANISATIONS

Case Studies

- E. Knepp Estate Market Market garden growing sustainably without peat
- F. Beth Chatto Plants and Gardens Making peat-free work and educating gardeners

CASE STUDY E KNEPP ESTATE MARKET GARDEN – MARKET GARDEN GROWING SUSTAINABLY WITHOUT PEAT

Introduction

Knepp is a 3,500-acre estate just south of Horsham, West Sussex. The land was once intensively farmed, but since 2001 it has been devoted to a pioneering rewilding project. Free-roaming grazing animals are now the drivers of habitat creation, and with the restoration of dynamic, natural water courses, the project has seen extraordinary increases in wildlife. Rare species like turtle doves, nightingales, peregrine falcons and purple emperor butterflies are now breeding at Knepp and populations of more common species are rocketing.

The story of Knepp's paradigm shift in land management has been written about in the book 'Wilding: The Return of Nature to a British Farm' by Isabella Tree.

The Market Garden

In 2021, a regenerative agriculture project on 350 acres adjoining the rewilding project was launched as a demonstration model, relating this new

approach to farming with the overall support-system of rewilding. Within this new regenerative farm, 2.5 acres of horse pasture were converted into a market garden in spring 2022 by growers Rosanna Catterall and Signe Greve Jensen.

The selling of home-grown produce began in June, and the site will be used to demonstrate how vegetables and cut flowers are grown regeneratively: aiming to reverse climate change by rebuilding soil organic matter and restoring degraded soil biodiversity. All practice is organic, peat-free and the site is in conversion to Soil Association certification.

The Market Garden uses compost produced within the regenerative farm, and any compost used for seed sowing or potting on is organic and peat-free.

A similar practice is used in all of Knepp's other garden areas too, although currently the Market Garden is the only site in conversion to Soil Association status.



CASE STUDY F BETH CHATTO PLANTS AND GARDENS – MAKING PEAT-FREE WORK AND EDUCATING GARDENERS



Introduction

Beth Chatto, OBE, the award-winning plantswoman, started her gardens from scratch in a very low rainfall area in Essex in 1960.

She was a specialist in working with nature, not against it and growing plants that are adapted to a particular environment rather than trying to force them to grow in conditions that they are not adapted to. The Gardens have both very wet and very dry areas so are planted accordingly with species that will thrive in those environments. The dry/gravel gardens are not irrigated so it is essential that the species used can cope with drought, as tested very well in the summer of 2022. The gardens were listed by Historic England in 2020.

The plant nursery

In 1967 Beth Chatto started the nursery to raise plants for use in the garden and to sell to the public. The Beth Chatto nursery propagates more than 150,000 plants a year and sells over 2,000 varieties of plants, many of them more unusual ones not commonly found in garden centres. Many of the plants are propagated from seed; it can take up to five years or more to produce certain slow-growing plants from seed.

Since 2019, the nursery's peat use has reduced by 90%. The plants produced on the nursery are all potted on and sold in peat-free growing media with sustainable growing a key part of the nursery ethos. The mixes used are based on bark, coir and wood fibre. Trials are ongoing to eliminate peat use at the propagation stage.

The Beth Chatto Education Trust

The Beth Chatto Education Trust was launched as a charity in 2015 because Beth strongly believed that the key to creating a healthier planet is education. The Gardens run an annual programme of courses, workshops and projects for children, adults and community groups. They also have guest lecturers from time to time.

As part of the courses on propagation and general horticultural skills (Royal Horticultural Society Level 2 Certificate) there is an emphasis on growing plants sustainably, without the use of peat.

Harriet's Plants - peat-free plants from above (© H Thompson)

7. NURSERIES AND GROWERS

Case Studies

- G. Greenwood Plants Commited to phasing out peat for the production of landscaping plants by the end of 2023
- H. Harriet's Plants Peat-free houseplants

CASE STUDY G GREENWOOD PLANTS – COMMITTED TO PHASING OUT PEAT FOR THE PRODUCTION OF LANDSCAPING PLANTS BY THE END OF 2023

Introduction

Greenwood Plants is a landscape supply nursery working with the new-build property sector. Producing around six million plants a year, it operates from seven nursery sites across the UK, with more than 100 acres of production capacity, and employing over 100 people.

Greenwood's strategy is to become the best in the industry through the consistent delivery of an effortless client experience. To achieve this Greenwood aims to reward its loyal client base, attract new clients through unique programmes and services, and demonstrate sustainability leadership by pioneering new initiatives.

Greenwood's company ethos is that 'Every Plant Matters' and this mindset is applied to every facet of the business. Greenwood has used this mantra to galvanise company culture, embed a psyche of excellence, and ensure the organisation becomes increasingly professionalised as it continues to grow.

Transitioning to 100% peat-free

An essential component of Greenwood's commercial growth strategy is the attainment of sustainability leadership within the industry. This is based on becoming fully carbon neutral, acting as an engaged and active stakeholder in local communities and environments, and exercising responsible planetary stewardship.

Over the past year, Greenwood has initiated several pioneering sustainability practices to use resources efficiently, reduce waste, encourage biodiversity, and improve its carbon footprint – such as launching its G Cycle scheme, switching diesel forklifts and other vehicles to electric, reducing waste, recycling water, using biodegradable sundries, and becoming a peat-free grower.



CASE STUDY G GREENWOOD PLANTS – COMMITTED TO PHASING OUT PEAT FOR THE PRODUCTION OF LANDSCAPING PLANTS BY THE END OF 2023 (CONTINUED)

Greenwood's Sustainability Strategy

Greenwood recently published its new Sustainability Strategy, which clearly outlines the company's ambition to be 100% peat-free by the end of 2023.

At the start of 2022 Greenwood set up independently monitored trials to evaluate how some of its key plant species performed in peat-free media. Since that point, the trials have continued to expand, now covering several different species, pot sizes, and growth stages, to prepare the company for its transition.

Greenwood has around 2,000 plants in the trial, which uses a standard commercial peat-based mix, two commercially available non-peat mixes, and a number of its own peat-free mixes to compare and contrast growing success between the different media.

Peat-free trials in a real-world setting

To date the trials have progressed well, with some growing media better supporting the growth of plants at different lifecycle stages. Although the rate of growth and development has clearly varied between the mixes, these differences are more prominent in the earlier stages of growth, and so far, have tended to level out once the plant has reached its initial stages of maturity. Pleasingly, all plants have developed strong subterranean root systems which promise ideal conditions for further growing on.

As a next step Greenwood is partnering with one of its clients to transition its peat-free nursery trials into a real-world setting by supplying a number of new-build property sites with its peat-free product lines, where the onward development of the plants will be further observed and monitored.

Greenwood held an Open Day in June 2022 to invite its clients to visit their peat-free trials and learn more about their transition away from peat-based media. Several clients attended and expressed interest in this new initiative, keen to understand how it can support the attractiveness of their offering to national house builders.

A positive contribution to net zero

Net zero is a growing topic and the regulatory pressure on house builders to reduce their entrenched and operational carbon footprints is now explicit. Offering plants grown, and subsequently permanently planted in peat-free growing media, clearly makes a positive contribution to the ongoing discourse around the topic of net zero, and in encouraging further greening of the built environment.

Greenwood will continue its peat-free trials into 2023, scaling the size of the trials to increasingly significant numbers, to ensure it is fully ready to support its annual production of more than six million plants in peat-free growing media from 2023.



CASE STUDY H HARRIET'S PLANTS – PEAT-FREE HOUSEPLANTS

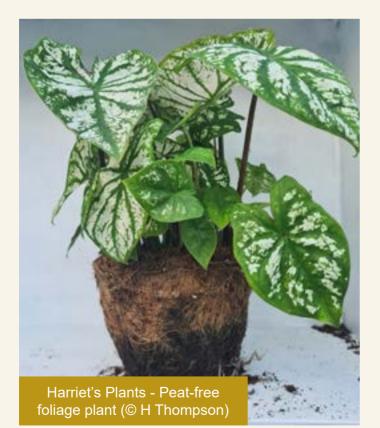
Introduction

There has been a significant increase in interest in houseplants in the UK in the last few years, with the pandemic encouraging even more focus on their value in our homes. A survey by the Royal Horticultural Society in 2019 showed that around 72% of adults owned a houseplant and this rises to 80% of 16-24 year olds.

Houseplants are known to clean pollutants from the air we breathe, reduce stress and improve air quality in our homes and offices. They also help with mental well-being and focus, especially for people not fortunate enough to have a garden.

Foliage houseplants have seen the most significant growth and as most of these are not native to the UK they are grown in glasshouses.

The houseplant growing industry in the UK has declined with only a few producers left and the majority of plants are imported from the Netherlands and further afield.



Most of the large commercial nurseries still use peat in their growing medium although some have moved to coconut fibre (coir) as a more sustainable alternative.

Harriet's Plants commitment to 100% peat-free

Harriet Thompson, founder of Harriet's Plants, studied plant science at the Eden Project in Cornwall and has always had a passion for growing and using sustainable growing methods.

In 2019 she set up the nursery in Lichfield, Staffordshire to fulfil her dream of providing sustainably produced houseplants for the UK so that people can enjoy plants that don't damage the environment when they are grown.

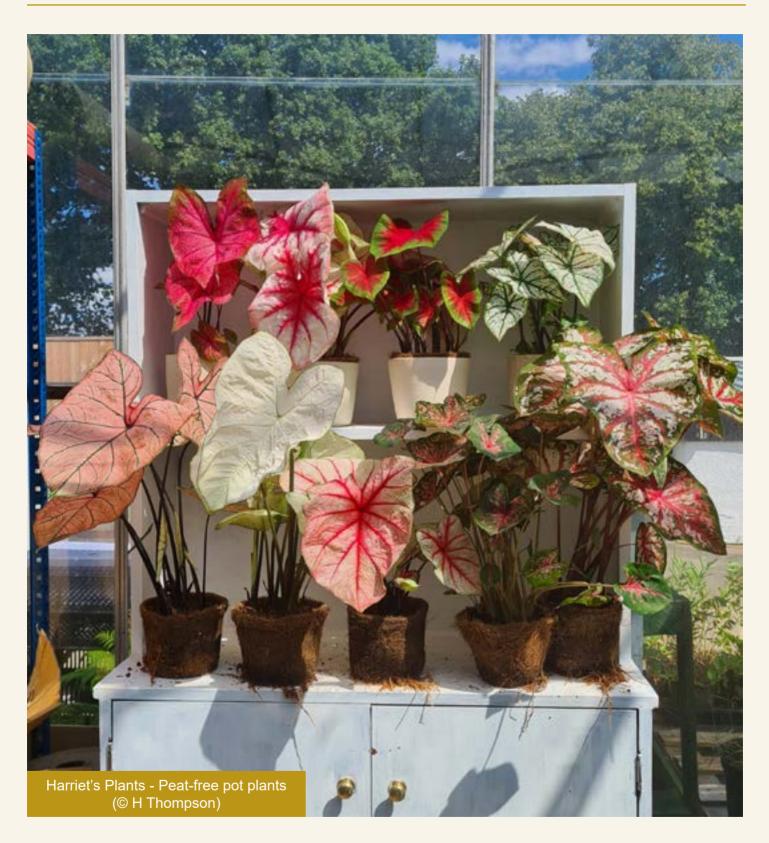
Harriet's Plants supplies independent houseplant specialists with UK grown peat-free and pesticide-free plants.

Harriet avoids the use of pesticides and grows plants from seeds or cuttings to avoid the need for importing plants (with the associated risk of importing pests and diseases). She also uses coir pots as an alternative to plastic ones, sourcing these from a single selected supplier that minimises their impact on the environment.

The nursery uses Melcourt's Sylvagrow peat-free growing medium to grow all their plants and has had excellent results with this. 'Sylvagrow' is made from a blend of fine bark (a by-product of sustainably managed British forests), coir (from a single, known source) and green compost (from a carefully selected source). They also supply this growing medium to customers for potting on of plants.

In 2022 Harriet's Plants won a silver medal at the RHS Malvern Spring Show. The mission of the nursery is to increase awareness about sustainable plant production and provide customers with an alternative to imported plants.

CASE STUDY H HARRIET'S PLANTS – PEAT-FREE HOUSEPLANTS (CONTINUED)



"We can all do our part to reduce our impact on the planet and choosing to be peat-free is a good place to start."

Harriet Thompson (founder of Harriet's Plants)



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Greenwood Plants Melanie Asker <u>www.greenwoodplants.co.uk</u>

Harriet's Plants Harriet Thompson www.harrietsplants.co.uk