



**Member surveys on Defra proposals for
peat removal in professional
horticulture**



BACKGROUND, OBJECTIVES AND METHODOLOGY

Background



In March 2023 Defra announced its intention to ban the sale of products containing peat, and its intention to impose no restrictions on use in professional horticulture until the end of 2026. HTA's understanding is that Defra's intention is to apply any restrictions equally to the UK and imported supply chains, and that exemptions beyond 2026 would be considered in a limited number of cases (for instance in plugs less than 150ml in volume, plants for national plant collections, etc).

This introduces the potential for professional use of peat in the production of plants for sale in the UK to fall within the scope of a ban on peat containing products in horticulture from 1 January 2027, three years earlier than the government's voluntary target of 2030 that the industry has been working towards since 2012.

To assess the potential impact of this on UK plant producers and plant retailers, the HTA conducted market research among its members asking them to assess the likely impact of the measure on their business. The data obtained has been used to provide an assessment of the impact Defra's proposals would be likely to have on UK horticulture's (and its globalised supply chain's) systemic capability to meet demand for the UK's plants and trees.

Sample and method



Two separate surveys were conducted by the HTA in April 2023, one among UK commercial scale ornamentals growers and plant producers, the other among retailers of plants and trees.

The surveys were online self-completion surveys, with business principals asked to complete a questionnaire asking about the likely impact of Defra's proposed measures on their business. The surveys were administered by the HTA via invitations sent by email. To ensure that as representative as possible a sample was achieved, the HTA sent email invitations and reminders to all of its retail members (see next slide), and to all of its grower members as well as growers it has records for outside of its membership.

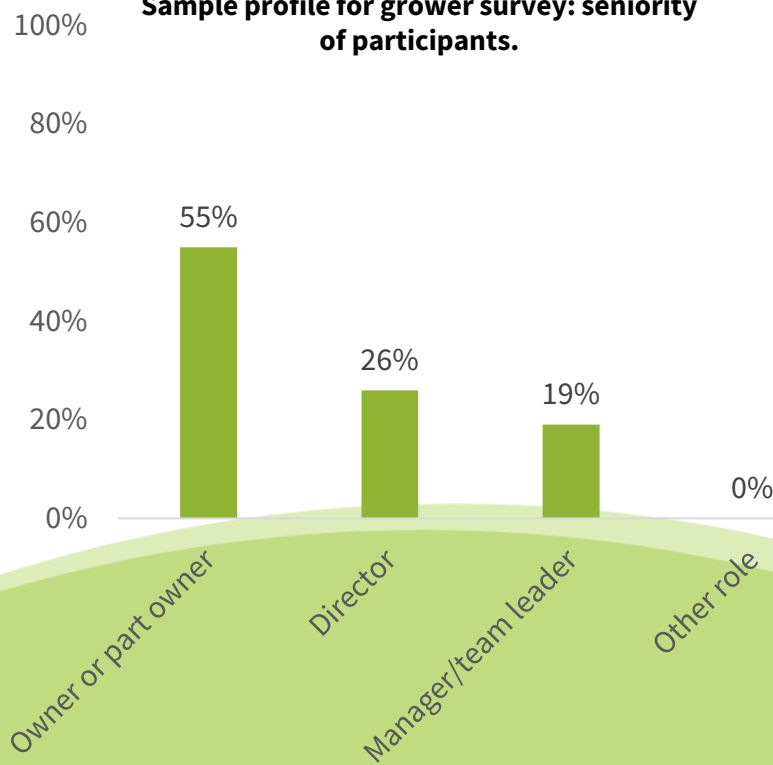
Email invitations are set up in such a way that the link to the survey is unique to a specific business being invited to the survey. This ensures that only one response per business can be submitted, and ensures traceability of responses received; in short there is no opportunity for businesses to attempt to skew the data by submitting multiple responses, and the achieved sample (see next slide) can be assessed for representativeness against the population it aims to describe.

Sample profile – seniority of survey participants

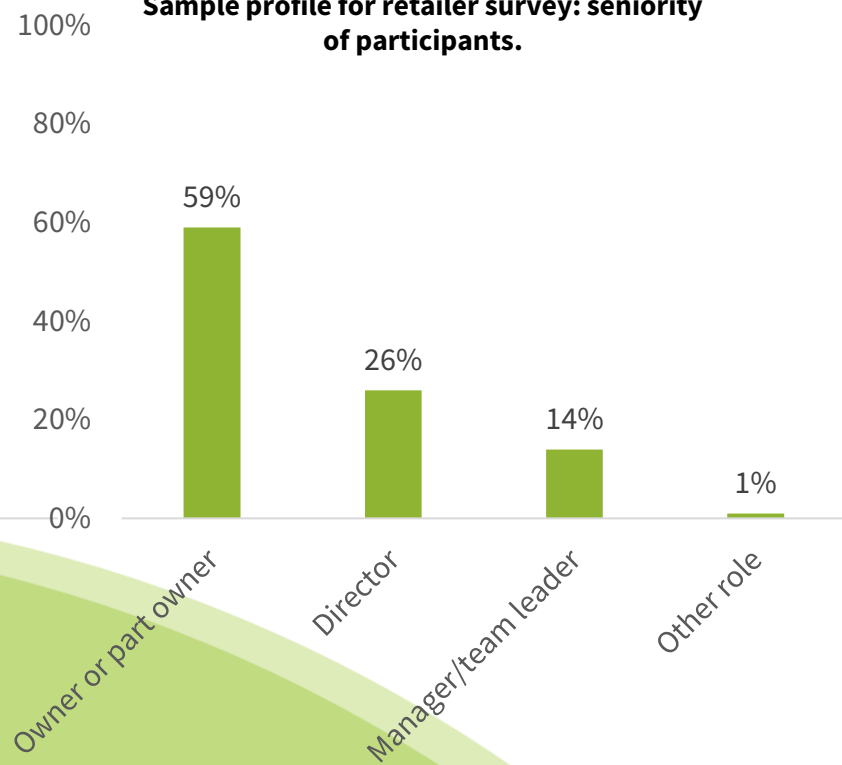


The survey was completed by senior members of staff among both participating retailers and growers. From this data we can be confident that the data provided by participants in the survey reflects the views of individuals with a strong and full perspective of the business, its suppliers, operations and customers.

Sample profile for grower survey: seniority of participants.



Sample profile for retailer survey: seniority of participants.



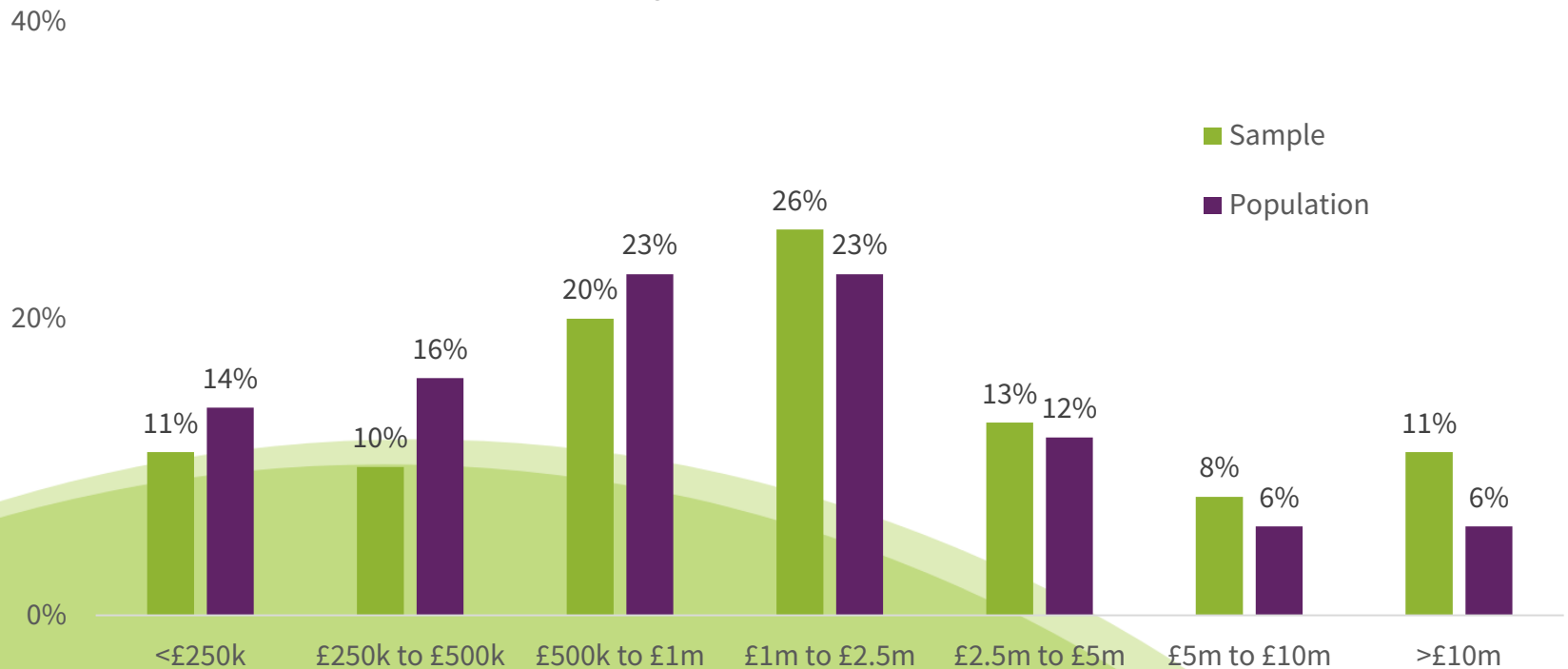
Base: 69 growers and 123 retailers (all who answered the question).

Sample profile – representativeness by business size (1 of 2)



Membership of the HTA is based on business turnover, and as such HTA records data on the turnover of member businesses. Among garden centres the survey sample is broadly representative of the population of these business types by business size. Among garden centres the sample is broadly representative by business size. HTA estimates that it has over 80% of UK garden centres in membership. The sample does not include DIY stores or supermarkets, the implications of which is discussed in the relevant sections of the analysis.

Sample profile for garden retailer businesses by turnover



Base: 69 growers and 123 retailers (all who answered the question).

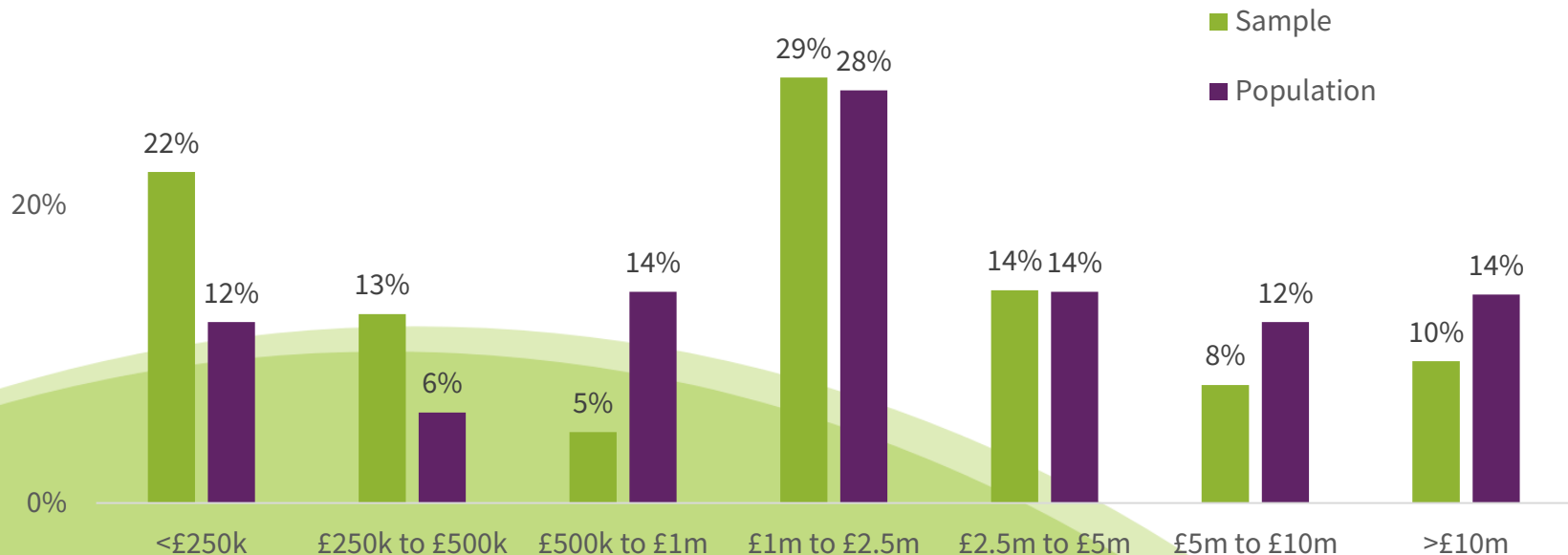
Sample profile – representativeness by business size (2 of 2)



Membership of the HTA is based on business turnover, and as such HTA records data on the turnover of member businesses. HTA estimates that there are c. 400 ornamentals growers in the UK whose output according to Defra is worth c. £1.5b per annum. Across the survey sample the average crop value of participating growers was £3.3m, which corresponds well with dividing £1.5b by 400 businesses (£3.75m). HTA has around 150 grower businesses in membership, and comparing the survey sample with the business size of HTA grower members suggests that the survey sample is broadly representative by business size, although potentially slightly over-representative of smaller businesses.

40%

Sample profile for grower businesses by turnover



Base: 69 growers and 123 retailers (all who answered the question).

Sample profile – grower use of peat in production



A risk in the survey sampling and methodology is that the sample capture grower/producer businesses whose reliance on peat is in excess of the national average. The survey sampling and method carries a risk that businesses with most to lose from the removal of peat (e.g. those least prepared) are most likely to respond and provide answers which do not reflect the views of all growers. To mitigate this risk growers were asked about the proportion of their growing media which was made up of peat last year. HTA collects data from growing media manufacturers in a Growing Media Monitor study funded by Defra on the volume of raw materials supplied to the professional market. The data from the Growing Media Monitor shows that in 2022 43% of the volume of growing media supplied to the professional sector was comprised of peat. For products aimed at the production of finished ornamentals the figure was 50%. Across the survey grower participants who reported buying in growing media reported that their growing media was comprised 45% peat. This suggests that the survey sample provides a representative view of ornamentals growers based on the extent of their peat use.

Base: 47 growers (all who answered the question).

45%

The proportion of growing media used by survey participants that is made up of peat

The proportion of growing media supplied to the professional sector in 2022 as reported by the Growing Media Monitor

43%

Points to note on sampling and method



The retail of garden plants in the UK is split into three main channels. HTA collects estimates based on consumer surveys of the share of total consumer expenditure on plants and trees. The largest channel is the specialist garden centre channel, which accounts for c. 45-50% of the value of retail sales of outdoor plants. The retailer survey in this paper is representative of this channel. HTA estimates to have >80% of this channel in membership due to the fact that in order to participate in the National Garden Gift Voucher Scheme a retailer needs to be a member of the HTA. The DIY channel accounts for 15-20% of the market by value, and is dominated by two major retailers (B&Q and Homebase). The survey does not include data from these retailers, as for these retailers to share the level of data asked for risks their data being accidentally identifiable in the data set by virtue of its size. Supermarkets account for around 10-15% of consumer expenditure. For similar reasons to the DIY stores, data from supermarkets is not included in this survey. However, data and case study feedback from these latter two channels has been collected and canvassed separately from this survey in order to inform HTA representations and assessments.

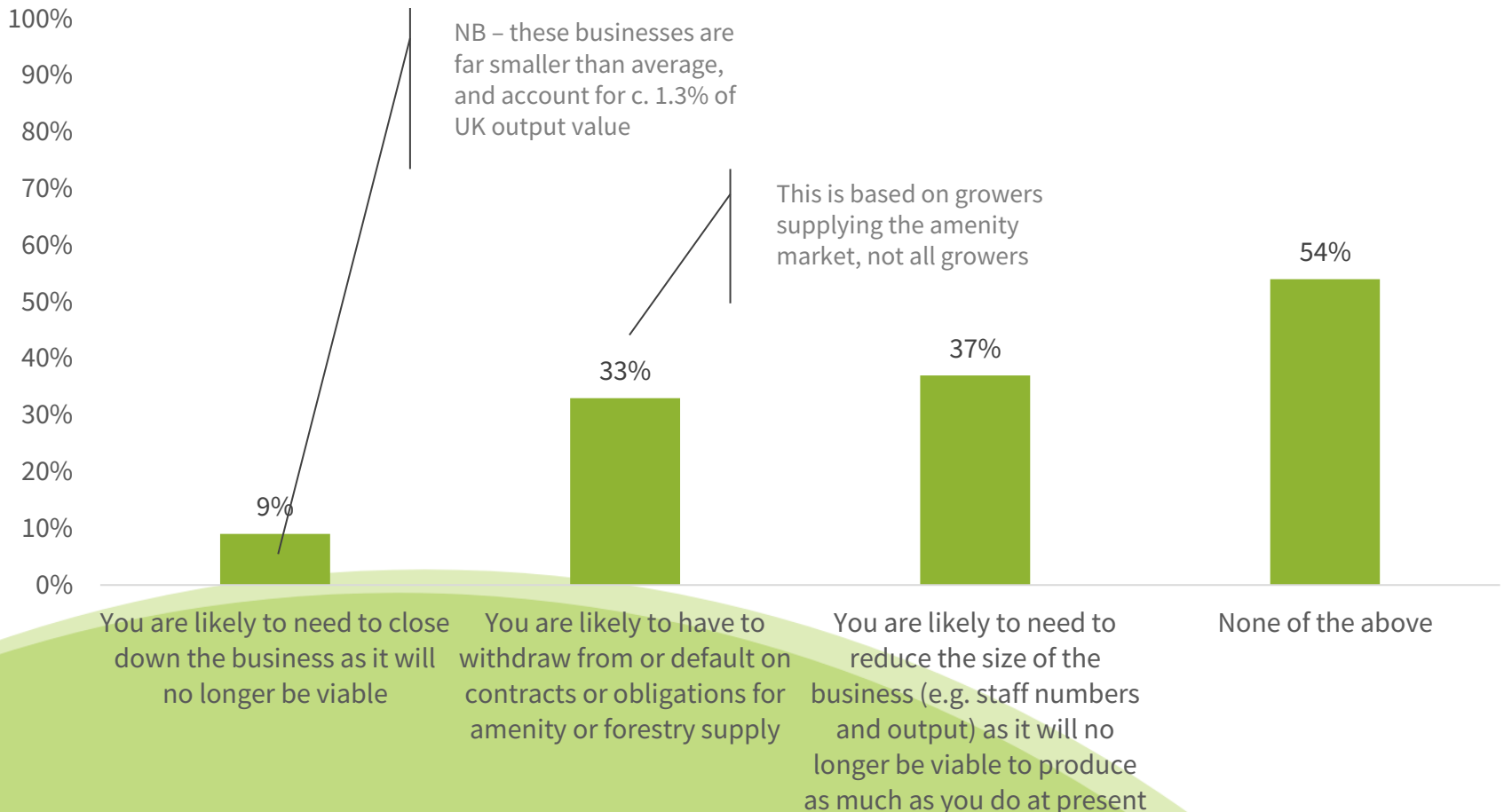
PERCEIVED IMPACTS OF A 2026 PEAT REMOVAL DATE

This section assesses the perceptions and assessments among growers and retailers of what a 2026 date would mean for their businesses. It sets the context for the subsequent modelling of the UK supply chain's likely ability to meet demand for plants and trees under different scenarios for removing peat from professional horticulture

Enterprise-level impact of the removing peat by the end of 2026 on growers



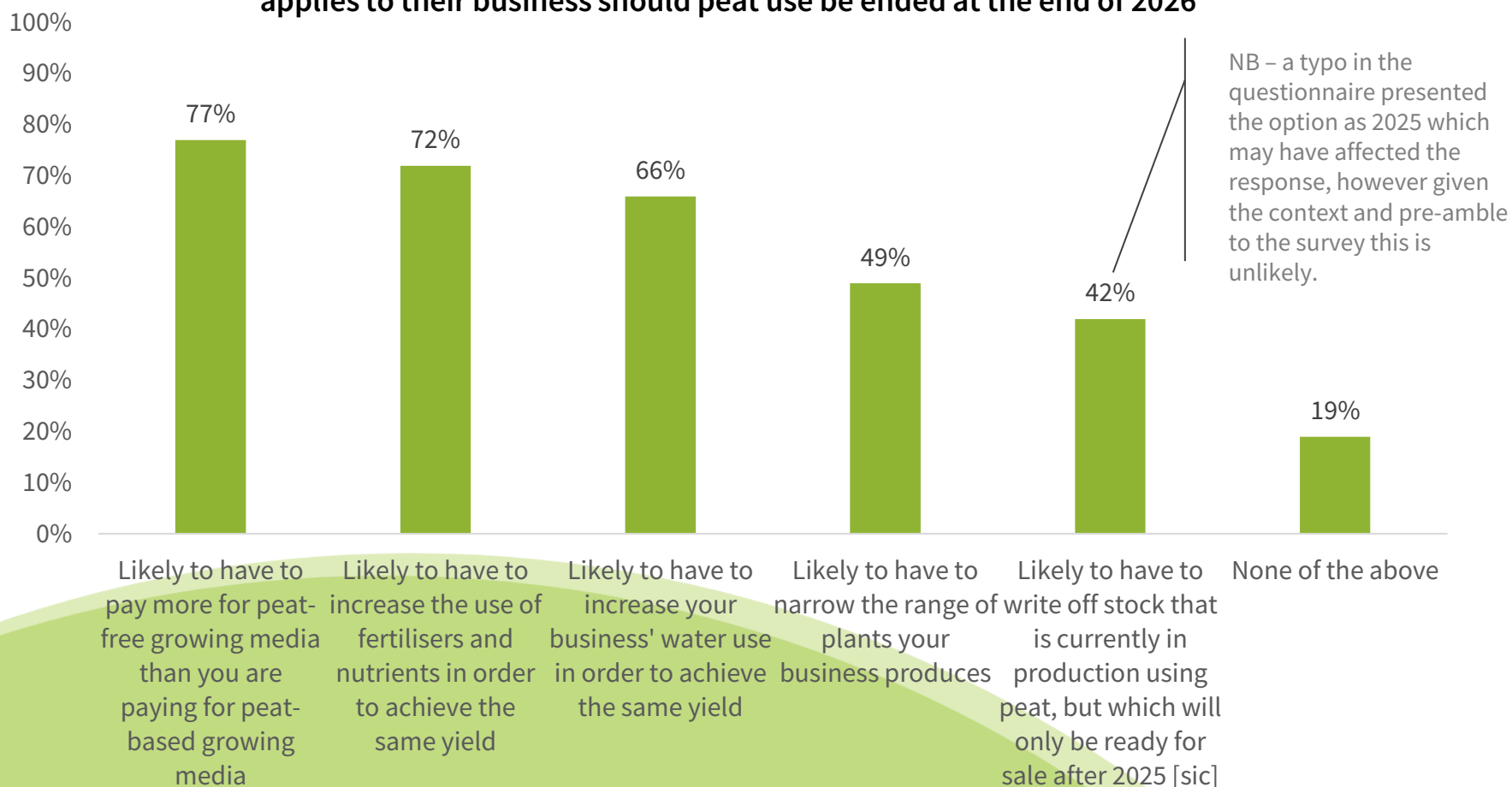
Chart to show the percentage of growers who say that each given statement applies to their business should peat use be ended at the end of 2026



Anticipated in-business impact of the removing peat by the end of 2026 on growers



Chart to show the percentage of growers who say that each given statement applies to their business should peat use be ended at the end of 2026

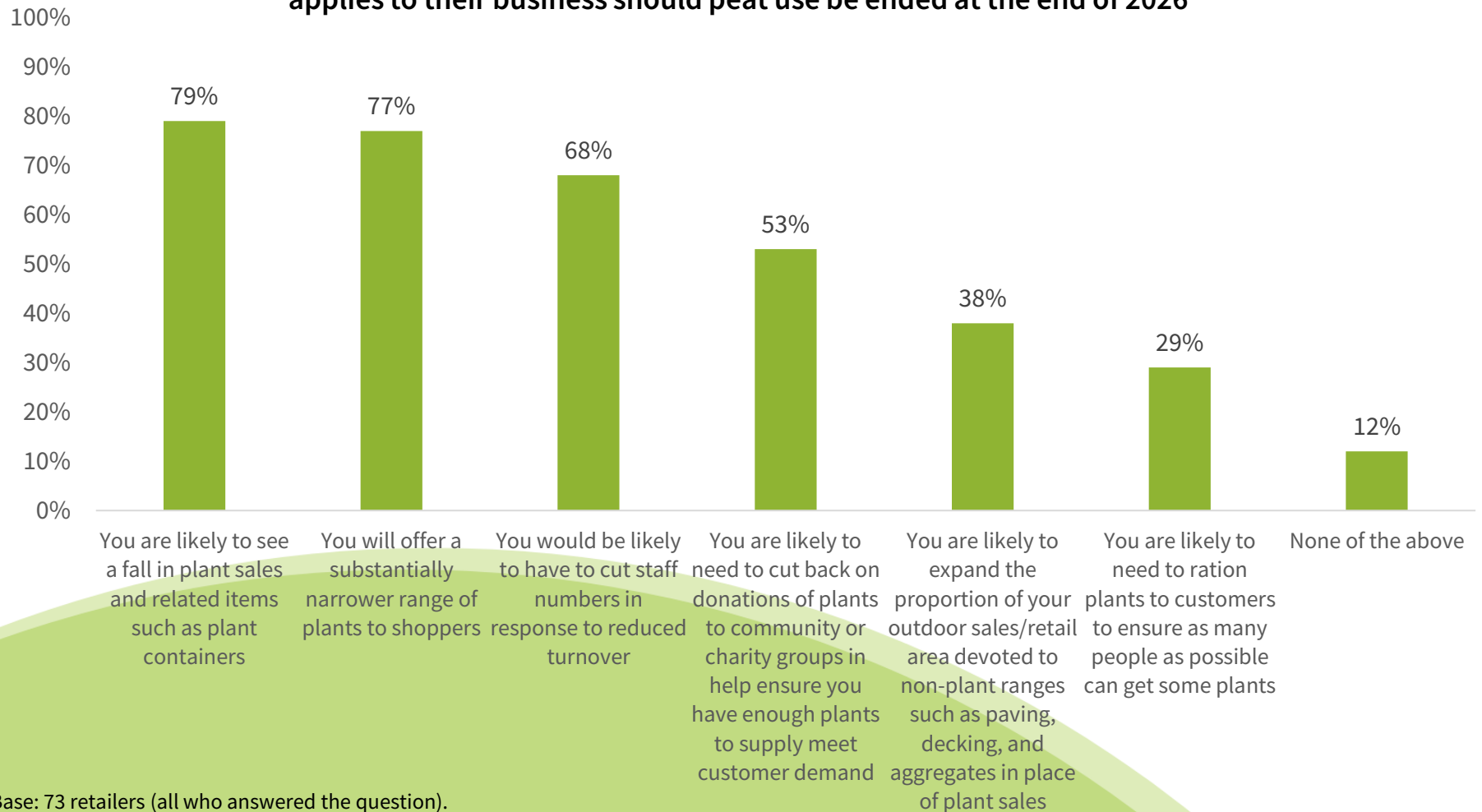


Base: 53 growers (all who answered the question).

Anticipated impact of removing peat in plant production by the end of 2026 on retailers



Chart to show the percentage of retailers who say that each given statement applies to their business should peat use be ended at the end of 2026



Base: 73 retailers (all who answered the question).

Analysis of retailer comments



The following table summarises the open-ended comments survey participants gave when asked what the impact of removing the use of peat from plant production would have on their business.

| Impact on business given by respondent | % of retailers mentioning |
|---|---------------------------|
| Range or availability of plants will fall | 43% |
| Sales or turnover likely to fall | 24% |
| Business costs will increase or productivity fall | 24% |
| Wastage will increase or plant quality will fall | 22% |
| Use of water or nutrients will increase | 21% |
| The business will need to reduce staffing levels | 8% |
| It won't adversely affect the business | 5% |

Analysis of grower comments



The following table summarises the open-ended comments survey participants gave when asked what the impact of removing the use of peat from plant production would have on their business.

| Impact on business given by respondent | % of growers mentioning |
|--|-------------------------|
| Range or availability of what they produce will fall | 25% |
| Sourcing of plants or plant material will become more difficult | 21% |
| It won't adversely affect their business | 19% |
| Wastage will increase or plant quality will fall | 15% |
| There won't be enough time to run trials or develop the knowledge of how to grow reliably in peat free | 13% |
| Use of water or nutrients will increase | 13% |
| Business costs will increase or productivity fall | 13% |
| Business won't be able to source enough growing media from its suppliers | 10% |
| Sales will fall | 10% |

Direct cost implications of switching to peat-free growing media

| | |
|--|------------------|
| Average proportion of growing media accounted for by peat among growers in the survey sample | 45% ¹ |
| Current cost of growing media as a proportion of total crop value | 3.1% |
| Cost of growing media as a proportion of crop value were the growing media to be all peat free | 4.1% |
| Percentage increase in costs to growers of switching to peat-free (NB – excludes indirect costs such as increased water or nutrient use) | 33% |

As noted in the sampling and methodology section of this report, the growers in the sample survey are broadly representative of growers as a whole in terms of the stage of their transition to peat-free production; from this point of view the data is likely to be broadly reflective of growers as a whole. In real terms, for a grower working on a 10% net profit margin, an increase from 3.1% of crop value to 4.1% of crop value would equate to an erosion of 10% of the funds available to re-invest in the business. This excludes any ‘knock-on’ costs such as increased water or nutrient use, or increased wastage or product rejections due to variability in quality or consistency. It also assumes that these costs are not passed on to the customer. Lastly, it is important to note that there is significant variability within the 3.1% average. Around one in five growers in the sample report the cost of their growing media as between 5% and 10% of total crop value, and for these businesses (whose peat as a proportion of the growing media they use is in line with the wider sample) the profit impact of a 33% increase in growing media would be disproportionately high.

¹ = this tallies very closely with the Defra sponsored Growing Media Monitor which puts the proportion in professional at 43%, or 50% if growing media specifically for finished ornamentals and propagation is taken into account

Verbatim comments from growers on the impact on their business



We won't be able to import plants from our business partners in Europe. All the production is based on peat. Due to not having any restriction of using peat in EU they will not change production just for UK.

Without several years of trials to evaluate changes in growing such as water use and extra feeding I think I would stop growing altogether. It is not worth the risk. I had a small batch of plants from Poland that died and DEFRA said it contained green waste as Poland had difficulties accessing peat so not very promising. Whatever we use at the least has to be sterile

We are an importer for small independent plant shops this is a major part of our business and would mean after 65 years we would have to close our doors for good along with most of our customers as they are not the growers in mainland Europe especially Holland growing peat free!

This is extremely short notice and will cause a real supply problem in the short-medium term in producing the same quality plants with limited available alternatives of the same quality

For ourselves, we purchase young plants wherever possible from UK suppliers, but have to buy some in Europe due to lack of UK availability. If there was a ban brought in on bringing young plants grown in peat from Europe, this would lead to a reduction of 1.1 million pounds in our turnover and a loss of 2.5 jobs. If there is a ban brought in for all plants grown in peat, this would lead to a reduction of around £6.5 million to our turnover leading to a loss of 40 staff. The European suppliers have no need or intention to quickly reduce their peat usage.

The shorter timescale is going to make it very difficult to adapt our growing techniques without impacting on plant quality - we are effectively taking a leap of faith. We have gradually reduced peat use by 10% a year over the last 5 years and were on target to be peat free by 2028/29. Moving the goal posts at this late stage is putting a great deal of strain on the business and its team

Currently we are having difficulty planning our production as we don't know if we can sell the products that we need to produce now. We are running trials this is currently causing us extra costs due to the extra water and fertilizer use. The huge uncertainty of what is required and what is not and is allowed is causing mayhem with planning. We also trade a lot with Europe so we are wondering if the peat ban is going to cause an import ban as the Dutch growers are not going to produce enough product for the UK market as they have currently huge costs with dealing with the Brexit mess

Our nursery is now 90% peat free by volume but the 10% affects a wider range of trees by genera because of the propagation/liner element. Although we are increasing our propagation internally we still rely on suppliers of some liners from the EU for some of the specialist lines. One important tree we propagate internally that currently requires peat as a pot grown rootstock liner for grafting is Magnolia, this would be a good example of currently a problem tree

We were working with 60% peat free last year but still 80% peat in propagation. Propagation is the basis of our company, if that goes wrong we won't have plants to sell. With 1600 varieties it needs a lot of trialling.

Verbatim comments from retailers on the impact on their business



Major cost to the business in terms of watering and feeding of plants, extra time on management having to source suppliers, higher wastage of plants as plants are not as good in peat free compost, more plants going to landfill of plants

We will prioritise investment in non-plant categories to try to safeguard the longer term business. Cost implications of having to hand water each plant individually due to different needs, increased use of fertiliser

We will definitely find it more difficult to buy the range, volume and quality of plants we can currently source which will have a detrimental effect on our business - dramatically cutting sales of plants which are our core business

Reduced range, higher costs, increased losses. Need for additional feeding. Already watering considerably more so additional overhead costs. Potential loss of sales as customers losses increase denting confidence in future plant purchases.

We are 100% behind peat free alternatives but there is shortage of suitable material to grow quality plants. The industry has been making strides to grow in peat free material and would have achieved the overall result but this enforced ban could have a negative effect on plant quality and consumer confidence in the plants we sell. If there is not enough peat free material available then supply will be reduced and the industry will suffer.

Apart from supply issues - extra staff time on watering plants & availability of water with cost implications. This could be the tipping point for directors to close garden centre & release land for housing

We won't be able to get plants, that will destroy sales, reducing a key part of our business, not helping green the world

We may consider closing the business - Defra is making too many barriers to our total trade

We will undoubtedly see a reduction in the volume of plant sales and related items such as compost and containers.

Plants is our reason for existing as a business. We are a plant shop with giftware etc attached we are not a John Lewis with a few plants attached. Without plants we might as well close down. There is no way that the volume of plants we sell can be sourced if peat is not allowed. Foreign nurseries are unlikely to grow peat free to satisfy the UK rules and UK growers cannot meet demand. The quality of plants in peat free compost is poorer. Once they leave the perfect conditions on the nursery they deteriorate rapidly, they need more care, more fertilizer, more water and loads more die, which is a waste of valuable resources and money

We would struggle to get the same quality of hanging baskets without the extra 'trial and error' period. We have already noticed that hardy plants coming in peat free compost are needing a lot more water...we are currently watering at least once a day, twice when it's sunny...and it's only April. Usually we'd only water that often in summer.

Commentary on grower and retailer views on the impact of Defra's proposals



The key theme emerging from both growers and retailers is the likely shortfall in supply or availability of plants and trees to satisfy demand, whether from UK or overseas sources; the consensus view from retailers based on their comments is that European suppliers are not in a position (and have little incentive) to take on the costs and risks of producing in peat free in time for the 2027 season.

Other themes emerging are that there would be several unintended consequences from the measure in terms of increased water use through the supply chain to keep plants saleable, as well as increased nutrient use to achieve comparable yields. In a survey of this nature it is important not to conflate the opinion or knowledge levels of survey participants with empirical scientific evidence of increased need for water and irrigation. Irrespective however of whether or not it is technically possible to produce plants in peat-free growing media with similar levels of water or nutrients, the other factor that emerges in survey participants' comments is that a 2026 date severely curtails the timeframe available to perform trials and to develop the knowledge of how to manage water and nutrient use. It is important and fair to note that some survey respondents noted that they would be unaffected by the 2026 date as they had already made a transition to peat-free production. This is however a small minority of comments received.

Whilst amenity suppliers are a small part of the overall sample of growers, around a third of these suppliers are stating that the impact of a 2026 date on them would be to have to withdraw from contracts or arrangements to supply amenity projects. On the whole these types of projects tend to be public planting and landscaping works, for instance the supply of plants and trees to public planting/greening schemes, parks, and other green spaces as opposed to private individuals. Such a shortfall in availability of plants and trees for the UK's green infrastructure is modelled in the next section.

Overall, it is likely that businesses would need to adapt their business models in order to navigate the risks to their business. Few businesses say they would be likely to close (although there are some). More likely responses among growers is to narrow the range and reduce the volume of what they produce in order to mitigate the commercial risks of crop failures and to downsize businesses and employment accordingly. Among retailers, around two thirds anticipate having to reduce staff numbers because of a drop in sales of plants and related items (such as pots, growing media, plant care products, etc). Another measure that retailers would be likely to take to mitigate risks would be to diversify the business away from plants and towards other ranges, potentially ranges which imply an acceleration of a trend to pave over vegetated areas of gardens.

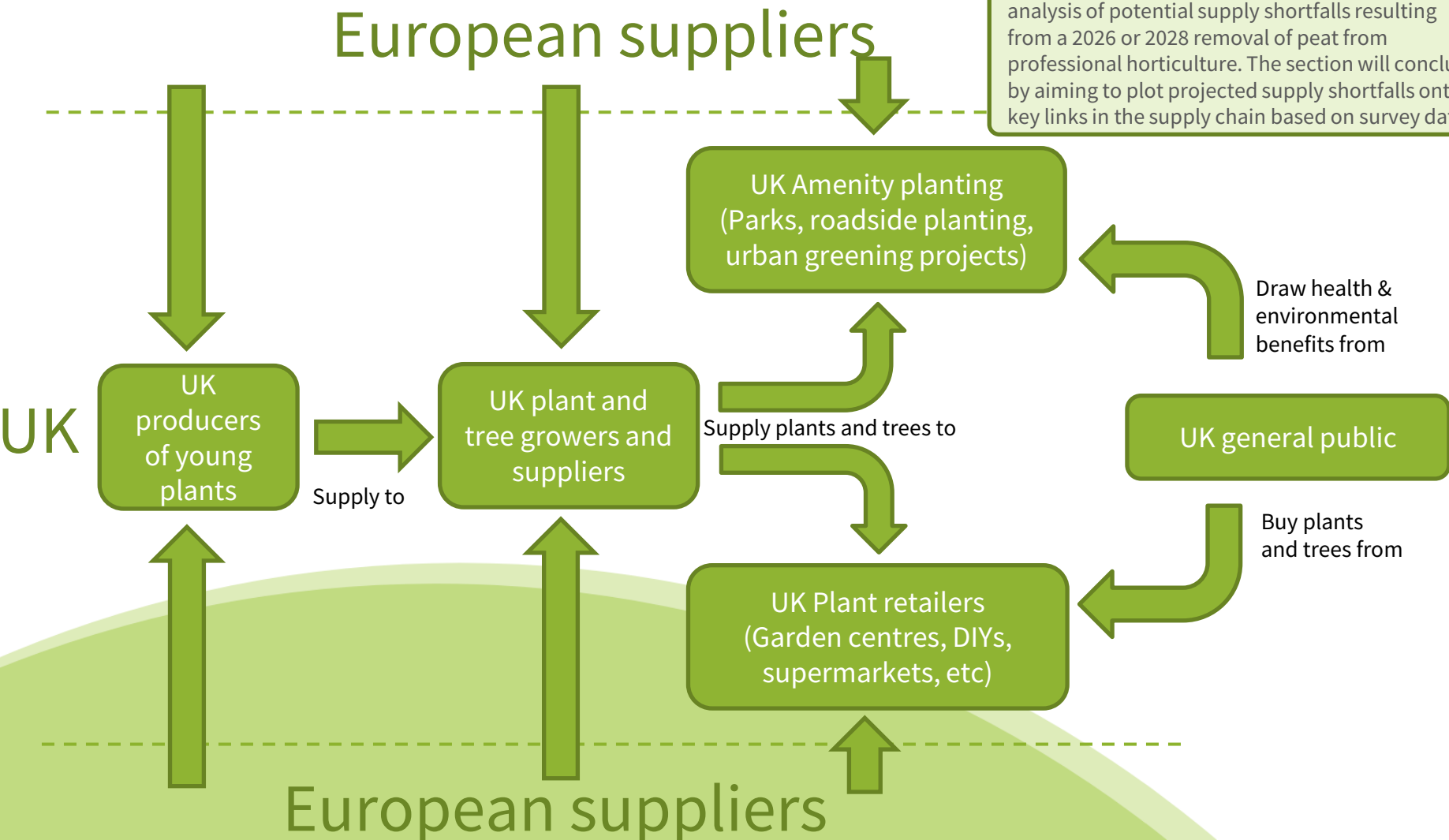
MODELLING THE IMPACT ON SUPPLY OF PEAT REMOVAL

This section assesses the ability of the UK and international supply chain to continue to supply the volume of plants needed to meet demand. An assumption is made that a 2030 deadline should have no or minimal impact on the ability to meet demand, that date having been widely known. Modelling of the impact of peat removal in 2026 and 2028 is performed. From the grower perspective, the supply to different markets is assessed: supply to retail for consumers, and supply to amenity for urban greening projects, parks, public planting schemes, and so forth. From the retailer perspective, the anticipated volumes of product they expect to be able to source of different ‘crops’ is assessed based on their knowledge of their current UK and European suppliers’ readiness and progress toward peat removal in plant production.

Simplified model of the UK plant and tree supply chain



This simplified model of the UK supply chain of plants and trees is the basis for the subsequent analysis of potential supply shortfalls resulting from a 2026 or 2028 removal of peat from professional horticulture. The section will conclude by aiming to plot projected supply shortfalls onto key links in the supply chain based on survey data.



Impact on grower output of peat removal



Table to show the proportion of current (2022) output value supplied to different markets that growers expect to be able to maintain in the event of peat use being ended at the end of 2026 vs 2028. The data includes that from a small number of respondents who anticipated that their sales would go up as a result of winning share from growers who are trailing behind them in terms of transitioning from peat.

| Market supplied | | 2026 | 2028 | Bases |
|--------------------|------------------------------------|------|------|-------|
| Retail supply | Based on aggregate values reported | 93% | 100% | (37) |
| | Based on mean of all respondents | 94% | 96% | |
| Amenity supply | Based on aggregate values reported | 57%* | 64%* | (16) |
| | Based on mean of all respondents | 84% | 86% | |
| Young plant supply | Based on aggregate values reported | 81% | 96% | (6) |
| | Based on mean of all respondents | 88% | 90% | |

* = more than half of the delta is accounted for by one respondent, and so a more representative reflection of overall impact is likely to be reflected by the mean of all respondents.

Note on analysis: Two approaches are used to estimate the percentage difference between current and projected output. The first sums the value of all respondent's projected output to a market across the sample and therefore allows for the different size of businesses in the sample – e.g. a business reporting £1m of crop value will have more 'weight' in the analysis than a business with £100k. The second takes a straightforward average of the percentage increase/decrease reported by all businesses irrespective of size. The enables an assessment to be made that minimises the risk of the finding being skewed by a small number of businesses in a relatively small sample.

Commentary on the impact on UK growers on crop value output



Overall growers anticipate falls in output value of around 5-10% in supply to retail, and 10-15% in amenity in the event of peat removal in 2026. UK growers anticipate that were peat use to be removed in 2028 that in retail supply levels would be down 0-5%, and in amenity by 10-15%. It is important to note that these figures refer purely to UK supply to these markets, and do not take into account supply to these markets from overseas; the impact of this international dimension on the retail market is explored in the next section. Young plant supply is based on a very small sample, but also reflects a very specialised section of the market with relatively few UK operators. Providers of these plants (which in simple terms are an input to growers of plants for retail and amenity suppliers) anticipate similar levels of supply falls. This would represent an additional risk factor to the UK supply base's capability to maintain supply in the event of a removal of peat. We should note too that in the question put to growers, the proposed exemption for peat in cells less than 150ml was explicitly stated, and can reasonably conclude that the data provided takes into account any benefit from this proposed exemption.

It is clear from the comments that growers are taking into account the critical importance of imports of plants and plant material from Europe, and this is likely to be an explanation of the more pronounced impact anticipated by amenity suppliers. Often amenity procurements specify plants of certain grades and maturity within time-frames that mean they cannot be produced 'from scratch' by UK growers; instead they are traded from Europe where they are typically grown in peat. Producing such 'free stock' carries far less economic risk for European growers than UK growers as the scale of continental amenity demand that is economically accessible is far greater than UK-only demand. Given that European production lags behind the UK in terms of peat removal, a removal of peat in 20206 (and indeed 2028) would pose major problems for amenity suppliers and traders of European plants.

If there is a ban brought in for all plants grown in peat, this would lead to a reduction of around £6.5million to our turnover leading to a loss of 40 staff. The European suppliers have no need or intention to quickly reduce their peat usage, without the option to bring plants grown in peat from Europe the UK landscaping industry would run out of plants by April 2027, leading to ridiculously inflated prices and loss of work for landscape contractors.

Impact on availability of supply to retailers

Table to show retailers' (mainly garden centres') views of the impact on available volumes of different plant types depending on whether peat use in professional is required to end by the end of 2026 or 2028.



| Crop/plant type retailed | | % of current volumes available for: | | |
|---|---|-------------------------------------|-------------|-----|
| | | 2027 season | 2029 season | |
| Hardy nursery stock (inc. trees) | 23% (% of volume currently imported) | Based on aggregate volumes reported | 38% | 65% |
| | | Based on mean of all respondents | 43% | 52% |
| Bedding plants | 8% (% of volume currently imported) | Based on aggregate volumes reported | 60% | 76% |
| | | Based on mean of all respondents | 43% | 57% |
| Grow your own (e.g. fruit, veg, salads, herbs) | 10% (% of volume currently imported) | Based on aggregate volumes reported | 59% | 72% |
| | | Based on mean of all respondents | 54% | 65% |
| House plants | 87% (% of volume currently imported) | Based on aggregate volumes reported | 29% | 55% |
| | | Based on mean of all respondents | 27% | 44% |

Note on analysis: Two approaches are used to estimate the percentage difference between current and projected output. The first sums the value of all respondent's projected output to a market across the sample and therefore allows for the different size of businesses in the sample – e.g. a business reporting £1m of crop value will have more 'weight' in the analysis than a business with £100k. The second takes a straightforward average of the percentage increase/decrease reported by all businesses irrespective of size. The enables an assessment to be made that minimises the risk of the finding being skewed by a small number of businesses in a relatively small sample.

Commentary on the impact on UK retailers on crop value output



Like growers, UK retailers forecast shortfalls in the available volumes of plants produced in peat-free that they will be able to source. However the most obvious point is that whereas UK growers (depending on crop) anticipate a fall in the value of crop outputs typically in the 10-15% range, retailers are far more pessimistic about their ability to source the current volumes of plants from their suppliers.

One key factor in this is the differences in the reported technical readiness and economic incentive between UK and European suppliers to the UK market. Overall UK growers are highly likely to be further advanced in transitioning to peat free supply than their European competitors as a whole, where government aspirations to end peat use in professional horticulture lag behind the UK. It is noticeable that the higher the proportion of a category that is accounted for by imports (e.g. Houseplants), the greater the anticipated levels of volume shortfall that retailers report. In essence, we would conclude that retailers appear to be taking into account the difficulties faced by both their UK and their European supply networks in their survey responses.

In the survey retailers were also asked about the anticipated impact of peat removal on their plant suppliers. Three key themes emerge from these comments which are:

- A fall in the quality and availability of plants
- Business failures and downsizing among growers
- Increased costs of production

Our interpretation of these comments and the data would be that removal of peat would create additional tension in the supply chain over quality standards (e.g. growers may be more optimistic than retailers about what quality of output may be acceptable/competitive in a scenario where supply shortfalls exist. Retailers may also be more pessimistic than growers about retailers and consumers' willingness/ability to absorb cost increases being faced by growers. Finally, retailers may be more pessimistic about the ability of their UK and European suppliers either to be able to supply the market, or that the steps required to do this in time for the end of 2026 would be commercially viable for them in terms of cost, risk, and return.

Retailers' views on the impact of peat removal by the end of 2026 on their plant suppliers



Volumes ultimately will reduce.

My bedding plant supplier has trialed peat free compost last season, with dreadful results. The entire batch of the trial failed.

Will lack confidence in selling product that they feel is inferior, extra resources needed for watering and feeding

Reduction in plant selection. Probably plant quality will be affected. Cost will go up !!!

Commercial pressures may lead to insolvencies, and / or price increases

Serious complication for a suppliers business and business continuity

Some have already switched, stock arrives ok but degrades quicker than before

Major cost implications having to re-learn how to grow in different medium

Increased production costs, less revenue generation, potential job loses

English growers will not be able to cope with demand for peat free plants, There will be higher crop failure rates leading to price increases. They will have to cut out lines that do not grow well in peat free compost.

Unreasonable expectation without time to invest in alternative so likely some would go out of business.

Lack of quality substrate so higher costs, poor consistency and quality

They may go bankrupt, the prices would be higher, increased need to water, more fertilizer usage which is detrimental to the water courses, loss of revenue, increased costs, redundancies.

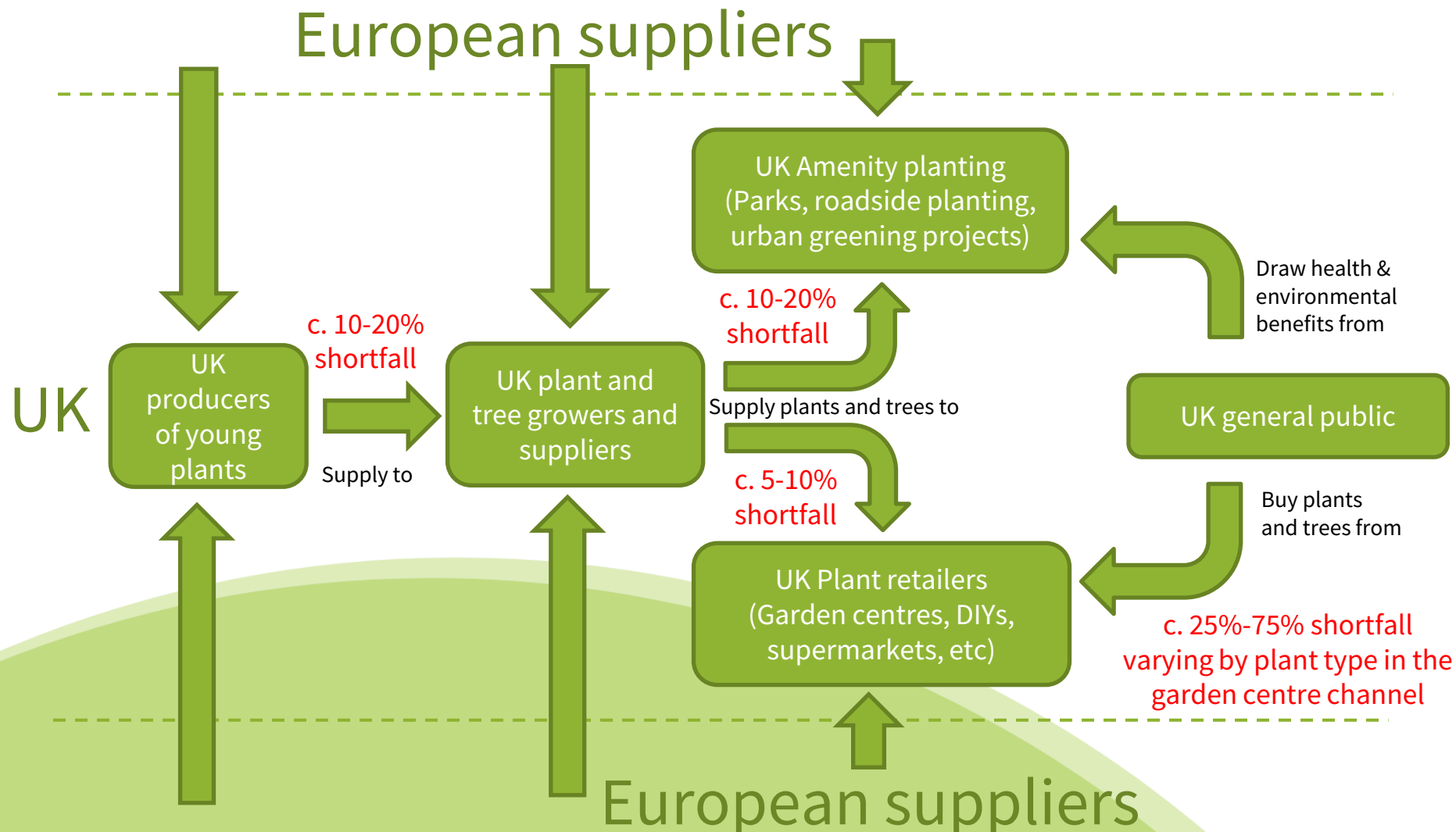
Viability of suppliers should they have to try and grow reduced volumes due to lack of young plant availability

I imagine many will go out of business, plants wont make the standard, waste will go up

This depends on the variety and type of plants grown but the biggest issue will be sourcing a consistent quality of peat free growing media that will perform in the same way long term. you cant keep changing to different products and get the same results every time. this will lead to low availability on some lines and inevitably increased costs. some growers may decide that they cant make the investment in new equipment to cope with these changes and stop growing altogether.

Price increases and supply problems. If no peat alternatives available in production cause huge supply issues and no doubt price increases

Approximate potential shortfalls in the supply chain if peat removal is forced in 2026



CONCLUSIONS

This section draws together the key points from the analysis and draws conclusions from the data as to the impact of a removal of peat from professional horticulture by the end of 2026

Conclusions (1 of 3)



The data as a whole suggests that the removal of peat from professional horticulture at the end of 2026 is likely to result in severe supply chain shortages of plants and trees. This is set to be most pronounced in UK supply to amenity markets such as urban planting schemes, parks and public green spaces. In retail, garden centres (which account for the biggest share of consumer spending on plants and trees) anticipate far higher levels of shortfall based on their knowledge not only of the difficulties facing UK growers, but also of the lack of readiness of European suppliers to be able to supply peat-free plants.

It is important to note that the retailer data does not contain data from businesses in the DIY and supermarket channels, and it may be that their superior buying power would mitigate the impact of shortages of plants in these channels compared with garden centres. However, this in itself highlights the potential for Defra's position to distort competition in the market in favour of larger businesses with greater buying power over limited supplies of plants produced in peat-free growing media at the expense of smaller businesses.

Conclusions (2 of 3)



Growers and retailers alike express concern at not only the availability of plants, but also potential unintended economic and environmental consequences such as increased water and nutrient use as growers learn how to manage these inputs in a greatly reduced time frame. Both growers and retailers also raise concerns over the quality and consistency of plants and trees which will be able to be produced, and the potential for additional wastage in the supply chain either as plants require more care and maintenance as they pass through the supply chain, or as more fail to make the required standards of quality for their end-markets.

Whilst this survey did not collect data from European growers directly, the comments from the survey received from UK growers and retailers show major concern at the ability of European growers to transition their production for peat-free for the UK market in time for the 2026 (or indeed a 2028) deadline. We conclude from these comments and the knowledge that peat removal in European production behind the UK, that European providers would have shortfalls in availability of peat-free plants that far exceed those anticipated in this research by UK growers. This introduces a significant catch 22 situation: a scenario in which imports of plants produced in peat are banned would result in huge shortfalls of plants, and losses to UK GDP and employment; but a scenario in which the import of plants produced in peat are allowed whilst domestic use of peat in plant production is banned would result in a severe competitive disadvantage for UK growers compared with European growers. Ironically this second scenario would be likely to see an increase in the volumes of peat supplied to the UK market through plant production as overseas providers took market share from UK growers.

Conclusions (3 of 3)



Defra value the output of UK ornamentals growers at approximately £1.6b per annum. Based on the data in this survey, we would assess the impact of an approximate 10% fall in UK output would equate to a loss in output value of around £160m per year along with the employment that this supports in the rural economy where UK ornamentals growers are mostly based.

We estimate based on nationally representative consumer surveys that the retail value of outdoor plants purchased by consumers in the UK is c. £1.8 billion per annum (ex VAT), with garden centres accounting for 45-50% of this value. Even were the supermarket and DIY channels to be completely unaffected by removing peat from professional use in 2026 (and our case study research shows this is not the case), the lost sales in the UK garden centre channel would equate to lost sales of approximately £330m to garden centres should their assessments of approximately 40% stock shortages prove to be correct. This excludes any impact on link-sale items such as plant pots, containers, plant-food and growing media which depend on sales of plants. Even were we to assume that retailers are dramatically over-estimating the impact of peat removal on their supply chains and instead estimated a 20% shortfall, then the loss in garden centre sales would equate to over £150m per annum plus link-sales. This excludes houseplants, where based on consumer surveys we estimate that 43% of (c. 22m) GB adults purchased a houseplant in 2022. Should shortfalls of houseplants be at c. 75% of current levels, this would likely result in millions of people being unable to source the houseplants they need once any ban came into effect.

However, as noted in the report, the impacts on supply seem most pronounced on supply to the amenity market which includes the provisioning the UK's public green spaces with the plants and trees they need. In addition to the economic impacts of shortfalls in supply to this market, the environmental and social impact of a fall of between 10% and 20% in availability of plants for public planting projects would likely be substantial, and impact seriously on the government's aspirations for urban greening projects and its national tree planting targets.



**Member surveys on Defra proposals for
peat removal in professional
horticulture**