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# HORTICULTURE MATTERS

The growing crisis in UK Horticulture that is threatening our economy, environment & food security



A report by partners in the Horticulture industry

**Horticulture is the science, art, technology and business of cultivating ornamental plants, fruit and vegetables for human use.**

**It is practiced at all levels from individuals at home, to the activities of multi-national corporations.**

Horticulture is a diverse industry with many distinct, yet often interrelated sectors, including:

- **Production Horticulture – growth of plants for food (fruits, salad crops, vegetables and herbs) and non-food crops such as ornamental flowers, trees and shrubs, turf-grass, hops and medicinal plants**
- **Landscaping – design, construction and maintenance of hard, soft and interior landscapes**
- **Garden retail – the sale of plants and associated goods**
- **Parks, gardens and green space – planting and maintenance of private gardens through to public parks, open spaces, playing fields, woodlands, allotments, heritage gardens and landscapes**
- **Sports turf and golf green-keeping – the management of turf for the sports and leisure industries, including football pitches, tennis courts and golf courses etc.**
- **Scientific research, plant health and conservation**

It also includes related services in landscape restoration etc<sup>1</sup>.



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Gardeners have the best jobs in the world – growing plants, designing gardens, managing open spaces, feeding the population, looking after historic trees and famous gardens, conducting scientific research into plant breeding, pests and diseases, collecting plants in far-flung parts of the globe, writing and broadcasting about our passion...the list goes on...sixty different areas at least, to my reckoning.

And yet our role is undervalued by Government, by the population and by young people in particular – in every instance because they just do not understand the breadth of what we do and its importance in terms of the wellbeing of the planet and its population.

A survey of one thousand people last year revealed that 70% of 18-year-olds believe horticultural careers should only be considered by people who have “failed academically”, and nearly 50% of under-25s think horticulture is an unskilled career.

If this situation continues, British horticulture will dwindle and become a pale shadow of its former self.

This report highlights the extent of the skills shortage in UK horticulture. Some 200 horticultural businesses were surveyed and over 70% of them said they can't fill skilled vacancies. 90% said horticulture lacks career appeal.

We now have an opportunity to work together to change this perception. We have a chance to demonstrate that those involved in horticulture are not thick, or dull, or unadventurous or simply incapable of doing anything else. We do this because we know – KNOW – that this is the best and most rewarding job in the world.

This year we celebrate the Centenary of the RHS Chelsea Flower Show. The very existence of this shining showcase of the very best of British horticulture is due to those men and women who realise, that horticulture – the cultivation of plants and gardens – is without doubt one of the most important and stimulating careers on earth. Without it we would be hungry, uninspired, artistically stunted, unhealthy house-bound, pale of skin and unsound in body. Our wildlife would be deprived of habitats, birds would go hungry, bees would be short of nectar and frogs would fail to find sufficient places to spawn.

It's time we reconnected young people with apples rather than Apple Macs, plant cells rather than cell phones and raspberries as well as Blackberries. Only by handing on skills and enthusiasm and by firing their imaginations can we be sure that horticulture will continue to thrive and the nation's landscape will be in safe hands.



Alan Titchmarsh

“Plants are essential for life.

Without plants there would be no bees or butterflies, no food, no beauty.

Simply by gardening and growing, we can make such a difference to our world, now and for future generations.

The earth is in all our hands... what are you going to do about it?

With your help, we can make the UK a greener and more beautiful place.”

**Sue Biggs, RHS Life, RHS Chelsea Centenary Show, May 2013**



## Why Horticulture Matters to the UK

We are known as a nation of gardeners. Horticulture touches every aspect of our lives, it:

- **Contributes £9 billion to the UK economy each year as an industry**
- **Employs c. 300,000 people, from crop growers and gardeners to scientists, tree surgeons and turf specialists**
- **Mitigates the consequences of environmental change and helps combat the harmful effects of man's impact on the environment, such as the urban heat-island effect and flooding**
- **Gives us a degree of food security by providing a constant supply of safe and nutritious food**
- **Improves health, well being, community spirit and self esteem.**

Plants are clearly fundamental for life on Earth and play a vital role in our national identity and economy – and yet, despite this, Horticulture is facing a crisis.

Our 'Horticulture Matters' survey of over 200 businesses from crop growers and garden centres to those working in public parks and sports grounds reveals an alarming shortage of the skilled professionals Horticulture needs to help safeguard the UK's future.

The situation is so grave that over 70% of businesses struggle to find the skilled workers they desperately need at every level of the industry.

The current skills deficit even extends to the research scientists and environmentalists vital for protecting the UK's food security and reducing the impact of climate change.

The seriousness of the situation must not be ignored. The main cause of the crisis is the belief that Horticulture is simply a hobby, and not a serious or rewarding career for talented people; this despite the fact that most in the industry are highly skilled and have undergone years of professional training. This misconception is not helped when politicians regularly refer to gardening as an unskilled, manual job. One consequence is that teachers

Horticulture Matters – key findings

200 businesses responded

90% say Horticulture lacks career appeal

83% blame poor perception of Horticulture in schools and colleges

72% can't fill skilled vacancies

67% say career entrants are inadequately prepared for work

19% are forced to recruit overseas

93% demand government action

and career advisers seldom recommend Horticulture to their students and the demand for further and higher education courses is in decline.

All the organisations who are signatories to this report, including the UK's leading Horticultural institutions, are convinced that unless we tackle the skills shortage immediately the UK will face a serious crisis in years to come.

Horticulture is not simply gardening. It is a strategically important industry that can help us mitigate the growing threat to our homes from flash flooding, to our green spaces and countryside from new pests and diseases, and to our food supplies from increasing demand and climate change.

In 2012, the RHS began working with the Institute of Horticulture, Lantra, the Horticultural Trades Association, Landex, British Association of Landscape Industries, English Heritage, Royal Botanic Gardens Kew, Grow and others (see back cover for a full list) to measure the extent of the perceived problem and find solutions that both industry and government could embrace. The key results from this work are summarised in this 'Horticulture Matters' report.

In order to put the crisis in context, our report explores the importance of Horticulture to the UK and explains the survey's key findings. We have identified steps that we must take to close the green skills gap.

We have been fragmented as an industry for too long and now is the

time for us to act together before it is too late and these vital growing skills are lost from the UK forever.

We need the Government, employers and educationalists to match these steps with actions of their own to safeguard the crucial role that Horticulture plays in the UK today and must continue to play in the future.

**Sue Biggs**  
Director General  
Royal Horticultural Society





# 1. Horticulture & the economy

**Today, the UK's Horticulture industry contributes nearly £9 billion to the economy (excluding the contribution to tourism).**

Sales revenues of potatoes, fruit, salad and vegetables, bulbs and cut flowers – known as production Horticulture – accounts for £3.7 billion each year, potentially rising to over £5 billion by 2030<sup>2</sup> if the UK realises the potential of developing export markets.

The UK's garden retail market, including garden centres and market gardens, generates even more revenue with an estimated value of £5 billion. In fact, gardening plays such an important role in our everyday lives, garden products make up 1.7% of all UK retail sales<sup>3</sup>.

### **Green light for local business**

Local economies also benefit from a thriving Horticulture sector. Evidence shows that parks, green spaces and a strong green infrastructure are important factors when it comes to attracting

(and retaining) businesses, residents and customers to an area<sup>4</sup>. This 'green appeal' has been shown to boost business revenues and push up property values<sup>5</sup>.

### **c. 300,000 jobs**

Employment and job creation are two other benefits of a strong Horticulture sector.

In the UK today, c. 300,000 people work in Horticulture<sup>6/7</sup> with production Horticulture being the nation's largest employer in primary food production<sup>8</sup>.

When it comes to career opportunities, the sector provides a huge variety of roles, plant and crop producers, Horticultural scientists, gardeners and landscape architects, all calling for a diverse set of professional and practical skills that go far beyond those needed by the keen amateur gardener.

**Horticulture – key facts**  
**£9bn to UK economy each year**  
**c. 300,000 people employed**  
**1.7% of all UK retail sales**



## 2. Horticulture & the environment

**Private gardens, public parks and other green spaces are much-loved features and part of the unique heritage of our cities, towns and villages.**

**More importantly, they could help the whole nation mitigate the harmful effects of climate change, including flooding and rising temperatures, and reduce our energy consumption.**

### Green safety net

Over the next 80 years, temperatures in some UK cities, such as Manchester, are expected to rise by as much as 4%. Increasing the amount of green infrastructure (plants and trees, gardens and parks etc.) by as little as 10% in such a city, could entirely compensate for the impact of rising temperatures<sup>9</sup>.

A nationwide planting programme of trees, hedges and other vegetation would provide shelter from cool winds during winter and shade in summer thus cutting our use of energy-wasting central heating and air conditioning<sup>10</sup>.

Furthermore, in areas most at risk from flash flooding, increasing the amount of vegetation will help retain water and significantly reduce peak flow during heavy rain, providing an essential green buffer zone<sup>11</sup>.

Parks, gardens and other green spaces provide invaluable habitats for a broad range of native animals and plants. Many species are no longer common in farmland, and are increasingly reliant on gardens, often in urban areas, for

their survival<sup>12</sup>. This has additional significance in the light of current concerns about the decline in bees and other pollinating insects.

It's for this reason that the RHS encourages over 3,000 communities across the UK to come together to enhance their natural environment through the RHS Britain in Bloom campaign.

### Saving the UK's countryside

The future of the UK's iconic countryside also depends on professional, skilled stewardship of our natural resources. Over 5% of the nation's crop-growing land<sup>13</sup> (an area the size of Shropshire<sup>14</sup>) is managed by Horticultural producers.

By combining high standards of training and professional qualifications with decades of collective knowledge, these individuals can ensure the UK produces vegetables, fruit and other crops in a way that protects and enhances our precious natural resources and environment for future generations.

### Stopping another ash dieback

The recent potentially devastating 'ash dieback' epidemic shows it is imperative that the UK's Horticultural professionals have the knowledge and skills to detect foreign pests and diseases. We need to promote UK Horticulture and reduce our reliance on international trade. We also need to educate the public not to bring back plant material from abroad.

UK heritage and botanic gardens contain unrivalled collections of plants, many of which are of great botanical and heritage significance and are increasingly under threat from plant diseases. Protecting these collections and the unique genetic material for the benefit of future generations is a target of the UN's Global Strategy for plant conservation.



*Cameraria ohridella* (horse chestnut leaf miner)



### 3. Horticulture & food security

**Growing concern over the safety and supply of the food we eat reinforces the need for professional Horticulturists to play their part in supporting and improving the nation's sources of food.**

By 2050, the world's population is expected to rise to 9 billion. This, combined with growing wealth globally, will increase competition for high quality food and the land, water and energy needed to meet that demand.<sup>15</sup>

#### **The UK can't feed itself**

For the UK, this means we will need to improve considerably our self-sufficiency to provide for the nation's tables and take advantage of an expanding export market. In terms of Horticultural foods, we are a long way from that goal.

Today, we are only 63% self-sufficient in vegetables and salads. Sadly, this figure is declining and food scarcity is a real threat. The story for fruit is similar – we are 40% self-sufficient in fruit, though nearly fully self-sufficient for native fruit crops<sup>16</sup>.

#### **£5 billion at risk**

With the right investment in knowledge, skills and technological innovation the potential for growth through sustainable intensification in crop production is enormous. Sales revenues from production Horticulture, today at £3.7bn, could reach £5bn by 2030<sup>17</sup>, or go even further if we realised our potential in the lucrative export market set to develop in coming years.

Capitalising on the demand for high quality foods requires urgent change to the Horticulture industry, according to the *Feeding the Future*<sup>18</sup> report. It called for greater professional training to improve the “effectiveness, sustainability, profitability and management of crops” and to protect the UK's natural resources from challenges such as climate change and food production.



## 4. Horticulture & health

**Making sure the food we eat is safe is just one way in which Horticulture protects the nation's health and improves our quality of life. Gardens themselves act as 'green gyms', delivering physical and emotional benefits for the active gardener. Every day of every year, the UK's parks, open spaces and gardens are used by people of all ages to keep active and healthy. From walking the dog to Sunday league football, it is estimated that there are 1.8 billion visits to our parks each year.<sup>19</sup>**

In our towns and cities, open spaces are a valued part of local life with 87% of people using their park, playing field, community garden or other open space in the last year, and 79% using it in the last six months<sup>20</sup>. According to CABE's report 'Urban Green Nation: Building the Evidence Base', the higher the quality of space, the more likely it is that people will use it.

### Saving health & money

Gardening is quite simply good for you. It gets people outside, it gets them talking to their neighbours and it's good exercise too. The power of parks and open spaces to help us improve our mental and physical health is a proven fact<sup>21/22</sup>. Indeed, some local health services invest in local parks to promote exercise. Gardening specifically has also been shown to boost mental and physical health<sup>23/24</sup> and has been suggested as one activity that could help combat our obesity epidemic<sup>25</sup>.

NHS Dudley, for example, has invested in five parks to create 'active family hubs' that it believes will deliver estimated savings to the NHS of between £770 and £4,900 per participant<sup>26</sup>.

Studies by the RHS have also demonstrated that providing children with the opportunity to garden regularly as part of their school week

Activity	Number of Visits
<b>Gardens</b>	<b>33 million</b>
Historic Houses, Stately Homes & Palaces	24 million
Castles & Historic Sites	19 million
Zoos & Safari Parks	14 million
Wildlife & Nature Reserves	17 million

can have a significant impact on behaviour and performance in the classroom<sup>27</sup>, as well as supporting their understanding of healthy eating, from growing their food to cooking it.

### Horticulture & culture

The fact we are often called 'a nation of gardeners' shows how important Horticulture is to the UK's culture and heritage.

Over 87% of UK households have access to a domestic garden<sup>28</sup>, and nearly half of all adults, 49% (around 25 million people), enjoy some form of gardening activity<sup>29</sup>. As well as gardening at home and in allotments and community gardens, people across the country enjoy visiting other gardens that are open to the public. These gardens are so popular that they attract over 33 million visits each year<sup>30</sup>.

In addition, Horticulture benefits other aspects of the tourism industry by helping to attract around 73 million<sup>31</sup> people to our nation's stately homes, nature reserves, historic sites and other places of interest every year.

### 'Sporticulture'

The UK's sports industry, whose top events are broadcast around the world, also depends on Horticulture to perform at its best. Skilled Horticultural professionals are needed to ensure that every Premier League football match, international golf tournament or Wimbledon final has high performance turf that allows competitors to excel.



# Growing crisis: a significant skills shortage

**Horticulture’s importance cannot be underestimated. And yet our ‘Horticulture Matters’ survey shows that the industry cannot meet the growing demands placed on it as the UK struggles to cope in an ever-changing world. The reason? A skills shortage.**



From scientific research to crop growing, every level of the industry is struggling to find the right candidates needed to secure Horticulture’s future at the heart of UK life and as a valuable contributor to the UK economy.

An incredible 72% of respondents said they found it difficult to fill skilled vacancies, especially at senior or management levels.

Moreover, 67% claimed that candidates often lacked basic workplace skills, let alone plant knowledge, practical experience and a willingness to deal with the physical demands of Horticulture.

One result is that businesses are taking longer to fill roles – 10% of vacancies take over a year to fill – and many are looking to recruit abroad, particularly from Eastern Europe.

Almost a fifth of businesses in our survey say they now recruit more skilled workers from overseas than five years ago.

Skills shortage – key findings

- 72% can’t fill skilled vacancies**
- 90% say Horticulture lacks career appeal**
- 67% say career entrants are inadequately prepared for work**
- 19% recruit overseas**
- 93% demand government action**

“College leavers think that because they have a qualification, they know what to do. They need practical experience too.”

“20 years ago we had 20-30 applicants for a post. Today, we’re lucky to get three.”

“The sector is dynamic, the environment it works within is dynamic – it needs to attract and retain dynamic well educated and motivated staff if it is to be optimised for the benefit of UK plc.”

## Skills shortage: causes

**Over 90% of businesses blame the current skills shortage on Horticulture's poor image.**



Businesses believe the industry is seen as a low-paid, low-skill option for people who lack the drive and academic skills to pursue more demanding careers. As one respondent put it, Horticulture is viewed as a “dumping ground for the disadvantaged”.

According to our survey, the top 3 deterrents to people choosing Horticulture as a career were as follows:

- **83% Poor perception of the industry in schools, colleges and higher education institutions and from careers advisors**
- **78% Poor public perception of the industry**
- **77% Poor perception of pay levels**

Poor image is only one problem facing Horticulture.

In recent years, there has been a major decline in the number of Horticulture-related courses (and components of broader subjects within the sciences) run by the UK's higher education

institutions, particularly in areas such as botany and plant pathology<sup>32</sup>. Funding for adults following Horticultural courses in further education is also under threat.

Whilst there has been an increase in the total volume of further and higher education Horticulture courses on offer overall, there has been a drop in both the number of courses available and the funding for Horticultural research in the UK's higher education institutions.

In workplace training, despite there being a renewed emphasis on apprenticeships, the numbers of people completing Horticultural apprenticeships remains worryingly low. In 2010/11 of the over 200,000 apprenticeships completed in the UK, only 1,060 were in Horticulture and only ten of these in production Horticulture<sup>33</sup>.

Together, these factors mean that the numbers of qualified Horticultural scientists and practitioners is now so low the industry has reached a crisis point.

“Schools don't understand what Horticulture offers. It can take you round the world from job to job.”

“There is a developing problem in the specialist science skills which support the industry due to lack of opportunities for degrees and/or lack of take up. Where are our botanists, entomologists, geneticists (conventional) mycologists, soil scientists, virologists of the future?”

## What happens if the UK doesn't invest in Horticulture?

**If the skills shortage identified by our survey is not tackled immediately, we believe the future for Horticulture in the UK will be bleak, and beautiful vistas like the one below will be lost. However we can pull back from the brink if we act now. The threat is substantial but it is not irreversible.**



In fact, some experts argue that the industry needs to attract thousands of new recruits between now and 2020<sup>34/35</sup>, to avoid permanent damage to UK Horticulture. Professionals are needed across the skills scale including at least 2,000 at undergraduate and 1,000 at postgraduate level.

The value of the Horticulture sector has not been understood, and has therefore received minimal investment. This is despite previous reports from within the sector highlighting the importance of Horticulture, and the growing skills deficit<sup>36/37</sup>. As a result, the UK is now at a tipping point, soon we will not have sufficient skilled labour to sustain the Horticulture industry. The absence of the next generation of skilled Horticulturists will have very real economic, social and environmental consequences.

- **Key roles in UK Horticultural businesses will be filled from overseas because of the lack of interested and trained candidates from the UK.**
- **As competition for skilled Horticultural labour intensifies at an international level our Horticultural businesses will struggle to grow, due to a**

**shortage of labour. The UK Horticultural industry will shrink, reducing future job opportunities. We will therefore miss a real opportunity to create economic growth and new jobs, as we will not have the breadth and depth of skills needed amongst home grown talent, to be a thriving, internationally competitive industry.**

- **The volume of imports of food and plants will accelerate, increasing our dependency on products from abroad, threatening domestic food security and increasing risks to plant health.**
- **The quality and quantity of public and private green spaces in the UK will decline with the resulting negative impact on health, community pride and social cohesion.**
- **The UK wildlife population will decline as their garden and managed green space habitats shrink. The instances of negative impacts of climate change, such as flash flooding, will be more pronounced, increasingly impacting on our daily lives.**

- **Our iconic heritage gardens and major tourist attractions will also suffer, impacting on visitor numbers and industry revenues, as well as degrading their botanical and cultural heritage significance.**
- **Take-up of Horticultural qualifications will continue to reduce, leading to course closures in further and higher education institutions and reduced infrastructure to train professionals for the future.**



## Immediate actions to save UK Horticulture

**We believe urgent action must be taken by our industry and government to stop the crisis in Horticulture threatening the UK's future.**

We want to go further than just averting a crisis and believe we should all be aiming for UK Horticulture to realise its full potential, and be recognised for its contribution to our economy, society, culture, wealth, food supply and environment.

Overleaf we set out how we (the Horticulture industry) and government can work together to address the challenges we face.

These are only the first steps in what we know will need to be a sustained campaign of action if we are to attract people to careers in Horticulture, ensure there are opportunities for them throughout their career, and sustain future generations of professional Horticulturists.

We have sought to be realistic and pragmatic in our immediate ambitions – this first phase of activity is just the beginning. Beyond this, we plan to work together as an industry to secure real, long term positive change for Horticulture.

Our survey respondents told us that their top priorities for action were:

- **Increased support for vocational and/or work-based training**
- **An increased focus on Horticulture and Horticultural skills across the school curriculum**
- **A better understanding amongst teachers, lecturers and careers staff of the breadth of Horticultural careers**

“We need to show how important Horticulture is to society as we know it today. Horticulture is not just vocational. It's essential.”

“It is vital that practical skills are professionally handed down to up-and-coming, keen, young Horticulturists. With a large proportion of the skilled workforce nearing retirement, the opportunity for skills transfer is being reduced year-on-year.”

## 1. Improving the perception of Horticulture

The public have a poor view of what a career in Horticulture can offer. We want all potential career entrants to know that Horticulture is an exciting, rewarding career to be proud of.

### Our promise:

- 1 Industry Ambassadors will be recruited from all ages, areas and backgrounds to inspire potential career entrants and increase awareness of the range of Horticultural career opportunities available. This will build on initiatives like the Horticultural Trades Association's 'Pathfinders' Group of individuals who are influential in their own business and are choosing to focus on promoting and supporting Horticultural careers. Drawn from all levels within organisations from across the sector, individuals will be supported to work in schools and other locations to tell their career stories.
- 2 Industry will deliver a programme of "Horticulture Test Drives" e.g. 100 school students will visit RHS Chelsea Flower Show to see world class Horticulture first hand; others will spend a day with nursery professionals seeing how plants are bred and grown, or with gardeners in RHS gardens and parks.
- 3 The existing Grow website will be renamed Grow Careers and will be further invested in by the industry to become the number one online destination for anyone considering a career in Horticulture. Relevant and engaging interactive web content will be produced, including videos. Social media will be used to drive interest in Horticultural careers and traffic to the site. Grow Careers will link and have a presence on other websites and platforms to attract interest in the sector. All Horticultural businesses will be encouraged to display material and advertise job opportunities.
- 4 "Grow Careers" days will be delivered, aimed at young people, and those who influence their career choice, to raise the profile, understanding and perception of Horticultural careers.

### Our ask of Government:

- 1 To improve the image and prospects for Horticulture, it needs to be recognised and promoted as a valuable means of achieving key policy goals across government. This should be clearly reflected in the language used by government and articulated in future policy developments. We would welcome the opportunity to meet with ministers and key civil servants to identify how action to support Horticulture would also support the delivery of policy objectives.

## 2. Horticulture in the National Curriculum

We are encouraged that Horticulture has been included in the proposed National Curriculum for England.

Work through initiatives like the RHS Campaign for School Gardening, and evidence published in the Defra supported Food Growing in Schools Taskforce has shown how valuable Horticulture in schools can be for learning and skills development, particularly in science and cookery.

There is also strong evidence for improvements in health and well-being outcomes for children, young people and their families in food growing schools, most commonly manifested in improved dietary attitudes and behaviours<sup>38</sup>.

We are therefore disappointed that Horticulture has been confined to one subject area, and are not convinced that the full scope of learning outcomes has been understood or reflected in the proposed curriculum, particularly its potential for supporting science learning at Key Stage 4 level.

### Our promise:

- 5 Industry experts will support the delivery of Horticulture in the National Curriculum at a national and local level.
- 6 We will develop and make available guidance and content for schools to support them to develop and deliver the Horticulture curriculum.
- 7 We will facilitate Horticultural businesses and organisations to work together with schools at a local level to provide rich curriculum content and learning opportunities for children and young people.

### Our ask of Government:

- 2 The next stage of the National Curriculum review should take account of the concerns raised here, and in our organisational responses to the government consultation, specifically:
  - Horticulture should be embedded across the curriculum in Key Stages 1 to 4.
  - Horticultural learning within the design and technology curriculum should include practical, fundamental principles of Horticulture, but must go beyond this to cover Horticultural technology and innovation.
  - We would welcome the opportunity to provide content experts to work with the Department for Education to develop further guidance on Horticulture within the National Curriculum.

## 3. Supporting Horticulture in further and higher education

Horticultural employers have told us about the value of work-based and further and higher education qualifications. We are concerned that there is not sufficient emphasis on Horticultural training opportunities. We need to drive the take-up and completion of such qualifications if we are to meet the growing demands of the sector, and the nation.

### Our promise:

- 8 We will promote apprenticeship opportunities to Horticultural businesses and potential apprentices through our networks and communications. In 2013 the RHS will create a new scheme for 15 apprenticeships; other Horticultural organisations will be encouraged to increase their commitment to apprenticeship schemes.
- 9 We will partner successful Horticultural apprentice employers with other Horticultural businesses, particularly SMEs to support the creation of apprenticeship opportunities across the sector.
- 10 Our industry's promise to promote Horticultural careers will help drive take-up of Horticultural courses within further and higher education institutions. We will continue to work to ensure Horticultural courses offered in FE institutions, as well as being attractive to potential career entrants, equip learners with the balance of knowledge and practical experience Horticultural employers need. The RHS undertakes to review their qualifications in 2013 to ensure their on-going relevance to the workplace.

### Our ask of Government:

- 3 Ensure that there is sufficient funding and support available to enable businesses in the Horticulture sector to take on apprentices, and that apprenticeships in Horticulture are more widely promoted in communications about apprenticeships.
- 4 Promote and support Horticultural learning in the further and higher education sectors. Government should also ensure that there is sufficient funding available through the Education Funding Agency and the Skills Funding Agency, to support Horticultural learning and skills development in further education institutions across the country. Funding settlements for FE Horticulture courses should reflect the needs of the Horticulture industry and employers within it, to enable us to develop the breadth and depth of skills we will need for the future of the industry.
- 5 Encourage Higher Education Funding Council for England to recognise horticulture as a 'strategically important and vulnerable subject'.

## 4. Safeguarding UK Horticulture

It is vital that we have the skilled professionals we need to safeguard our food and environmental security. We need them to manage and mitigate the impact of immediate and future threats of climate change and pests and diseases, and to increase our capacity to feed ourselves.

Furthermore, as the government has recognised, climate change also presents an opportunity to our food and plant producers<sup>39</sup>, our industry could and should grow, and contribute to the nation's economic growth. We will not be able to exploit this opportunity if we do not have the people we need with the skills, knowledge and ability to create and utilise the most innovative Horticultural practices and technologies.

### Our promise:

- 11 We will ensure that in-house training and development, across food crops and ornamental plants, includes specific content on the theory and practice of identifying and managing pests and diseases.
- 12 We will work with schools, further and higher education institutions to make the direct link between science subjects and Horticultural careers, and encourage course developers to include content on pests and diseases.
- 13 We will work together, and with higher education institutions, to encourage the retention of existing, and development of additional, Horticultural courses, as well as Horticultural components of courses such as biology, agriculture etc. at BSc and MSc level.
- 14 We will deliver a public information campaign regarding the dangers of bringing plant material from abroad into the UK.
- 15 We will continue to act swiftly to notify government and its key agencies of emerging threats.

### Our ask of Government:

- 6 Place a greater emphasis on Horticulture within Government research funding streams. Without this, there will not be sufficient incentive to universities to offer the graduate and post-graduate courses vital to the future of the industry, particularly in areas such as plant pathology.
- 7 Horticulture should also be more significantly represented within the pool of funding available for agricultural research. Funding should be available across fundamental and applied research areas, and to support technology transfer.

# Timetable for change

Activity Area	Pledge/ask	Measures	Target Date
<b>1. Improving the Perception of Horticulture</b>	Government language and policies	1. Meetings with ministers and civil servants on relevant policy issues 2. Positive references to Horticulture, Horticultural skills and Horticultural careers in government speeches 3. Specific reference to Horticulture in relevant policy documents across government	April 2014 April 2014 April 2014
	Grow Careers	4. Number of views of Horticultural careers video 5. Number of Horticulture jobs posted 6. Registration/downloads of "I Grow Careers" logo 7. Number of "Grow Careers" days, number of participants, (businesses and young people)	Oct 2013 & April 2014 April 2014 April 2014 April 2014
	Creation of Horticulture ambassadors	8. Number of on-line sign-ups of individual Horticulture ambassadors 9. Increase in participation in HTA "Pathfinders Group" 10. Public/young people's perceptions of Horticultural careers survey	April 2014 April 2014 Benchmark survey (spring / summer 2013) and follow up April 2014
<b>2. Horticulture in the National Curriculum</b>	Development of guidance for schools regarding inclusion in DT curriculum	11. Cross sector development of guidance for delivery of Horticulture in DT curriculum 12. Number of local partnerships between Horticulture businesses/ organisations and schools	October 2013 April 2014
	Horticulture embedded across curriculum	13. Horticulture embedded across the national curriculum in Key Stages 1-4 14. Design and technology curriculum includes Horticultural technology and innovation	October 2013 October 2013
<b>3. Supporting Horticulture in Further and Higher Education</b>	Sector promotion of apprenticeships to young people and businesses	15. Increase in take-up of Horticultural apprenticeships 16. Number of additional apprenticeships created by RHS and other partner organisations	April 2014 April 2014
	Business-to-business mentoring	17. Number of business-to-business apprenticeship mentoring partnerships created	April 2014
	Government promotion of support for Horticultural apprenticeships	18. Specific reference to the needs of the Horticulture industry when promoting and discussing apprenticeships 19. The Department of Business, Innovation & Skills (BIS)-Horticulture Industry meeting to discuss specific challenges related to Horticultural apprenticeships and how these can be resolved. Actions on these discussions. 20. Horticulture recognised as a 'strategically important and vulnerable subject'.	April 2014 April 2014 April 2014
	Encouraging take-up of Horticultural qualifications offered in FE institutions	21. % increase in enrolment on Horticultural FE courses 22. Positive feedback from course participants, businesses and colleges on quality and appropriateness of course content, availability and affordability of courses	October 2014 October 2015
<b>4. Safeguarding UK Horticulture</b>	In-house pests and diseases training	23. Content/information sheets collated, agreed and disseminated to Horticultural employers	April 2014
	Collaboration to promote Horticultural science in science subjects	24. Strategy in place, developed in collaboration with key stakeholders from education sector	April 2014
	Availability of Horticultural science within Higher Education Institutions	25. Number of Horticulture courses (BSc and MSc), PhD opportunities 26. Number of BSc and MSc courses that include Horticultural component	October 2015 October 2015
	Educating the public	27. Public information campaign about pests and diseases and bringing home plant material from abroad designed and delivered	April 2014
	Notifying government of threats	28. Further mechanisms in place within industry to gather and disseminate pests and diseases information	April 2014
	Research funding	29. Prioritisation of Horticultural research within Research Council and other government research funding areas	April 2014 and on release of new strategies in 2015

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