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# 2019 Horticulture Sector Skills Survey – Sub-Sector Report: Public Gardens

*A report for the Ornamental Horticulture Roundtable  
Group*

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### 1. Introduction

The Public Gardens, botanical, heritage, education and destination gardens sector (Public Gardens) supported the employment of 32,000 people in 2017, making Public Gardens one of the largest ornamental horticulture sub-sectors. The sub-sector added £2.9bn to the UK economy in 2017 as well as £724m in taxes and NICs, according to Oxford Economics<sup>1</sup>. The research for this report on the sub-sector of Landscaping was carried out as part of the wider research conducted by Pye Tait Consulting across the entire ornamental horticulture sector in 2019. The wider survey comprised 1,101 businesses in the ornamental horticulture sector.

The skills survey was based on the following research objectives and this mini-report has been so structured:

1. Define the ornamental horticulture sector, including all relevant sub-sectors, and estimate current and anticipated future UK workforce numbers, including additional and replacement demand
2. Understand the drivers of change affecting ornamental horticulture (including opportunities and constraints to growth) and how these are influencing employers' skills needs
3. Establish the profile of the horticulture workforce, including demographic information, ethnicity, qualifications attainment and working patterns
4. Quantify the prevalence of skills shortage and recruitment difficulties at all levels (including hard-to-fill vacancies) and reasons why these are being experienced
5. Quantify current skill levels and the future importance of those skills (using a skills-scoring approach), to determine future critical skills gaps and priority training needs
6. Identify the organisations that employers are using to provide training and highlight any gaps in training provision that can be identified by employers
7. Explore attitude, approaches and barriers to training.

The bespoke skills survey consortium supporting this work comprised the following organisations:

- Agriculture and Horticulture Development Board (AHDB),
- Arboricultural Association (AA),
- British Association of Landscape Industries (BALI),
- Chartered Institute of Horticulture (CIH),
- Horticultural Trades Association (HTA),
- Land Based Colleges & Universities Aspiring to Excellence (Landex),
- National Farmers' Union (NFU) and
- Royal Horticultural Society (RHS)

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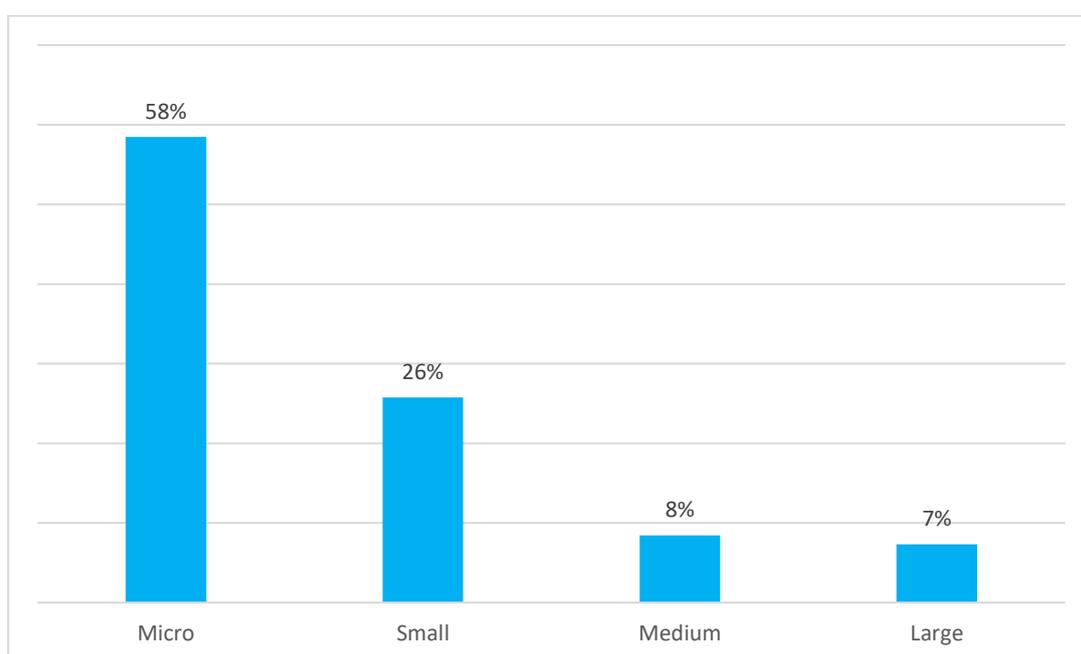
<sup>1</sup> Oxford Economics (2018), *The economic impact of ornamental horticulture in the UK*

## 1.1 Overview of Survey Participants – business size

The 268 businesses surveyed confirmed employing 18,881 workers, representing approximately 31% of the overall workforce (32,000) cited in the Oxford Economics report.

Of the 260 businesses<sup>2</sup> responding to this question, the majority (84%) are micro and small businesses-which is not unexpected given the main Ornamental Horticulture (OH) OH report shows that approximately 88% of business are micro or small. This figure is based on the definition of large businesses having 100+ employees.

Figure 1: Business size (large defined as 100+ employees)



Base: 260 respondents, single choice question

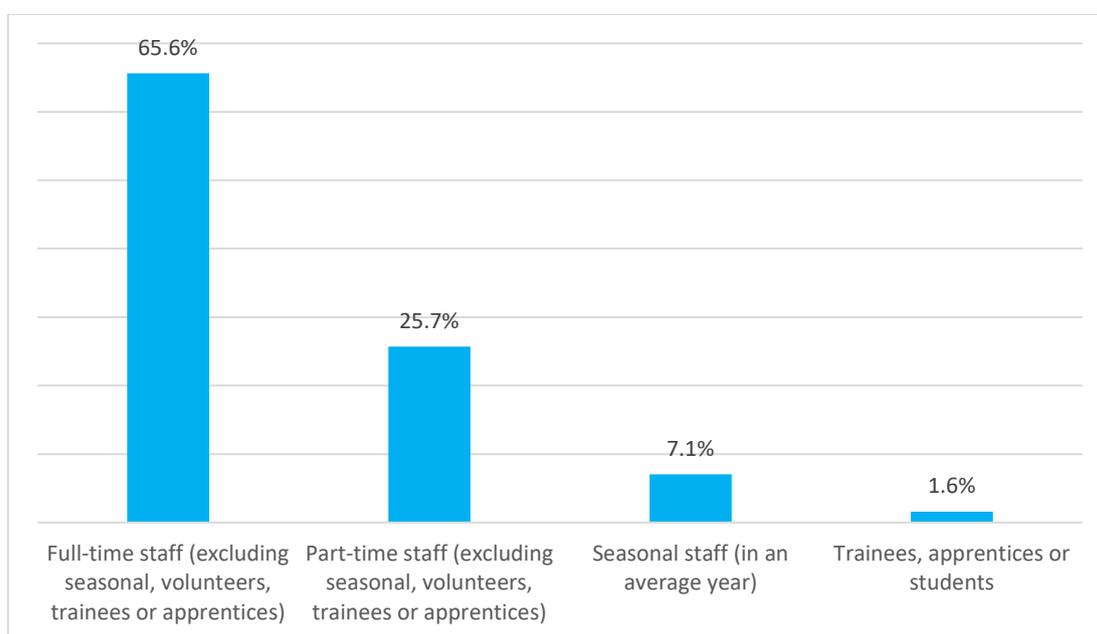
<sup>2</sup> It should be noted that not all businesses were able to answer each question or each in question in full detail. The base numbers for the survey responses and respondents may therefore vary from question to question.

## 2. Workforce

### 2.1 Workforce overview

Of the staff employed, a large majority (91%) work part-time or full-time. The proportion of seasonal staff is modest. Apprentices and trainees constitute a small part of the workforce. Nevertheless, the average number of apprentices per business was 2.2 in the last three years and is predicted to increase to 2.7 (by 19%) in the next three years. The responding businesses also reported 11,313 volunteers working in their businesses.

Figure 2: Working modes



Base: 261 respondents; 7498 responses, multiple choice question

#### 2.1.1 Workforce age, residency, ethnicity, gender

##### Residency

Of the sector’s employees, 92% are UK residents, 5% are EU residents (non-UK) and 3% are non-EU residents. These figures include seasonal workers.

##### Ethnicity

In terms of ethnic origin, the workforce is predominantly of British origin (97%), and other white (1%) backgrounds. These figures include seasonal workers.

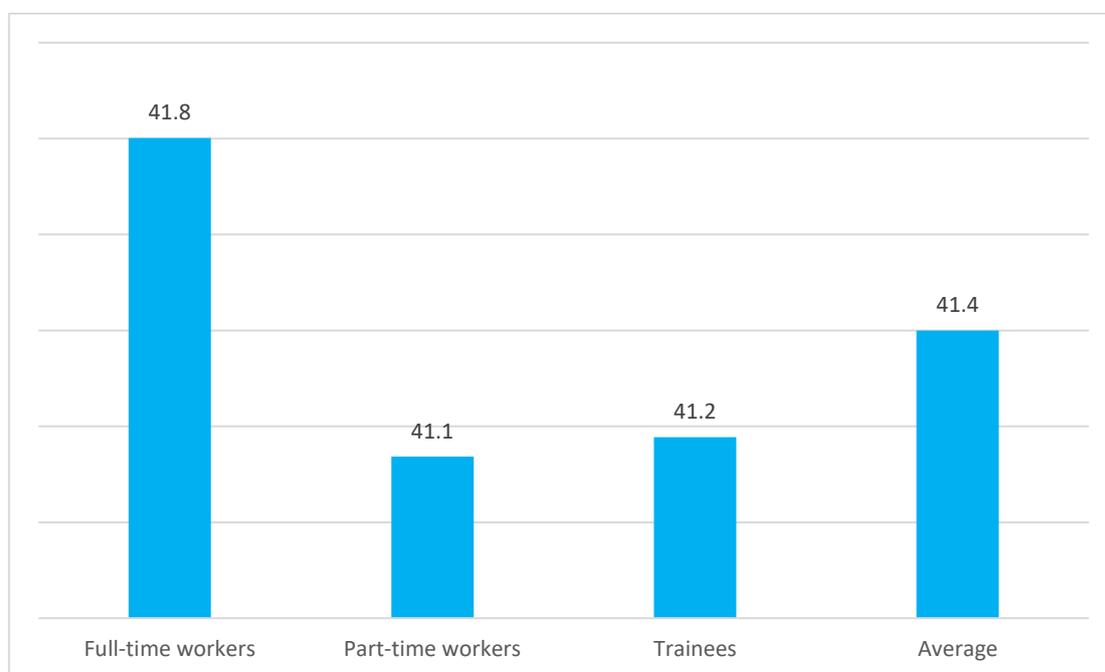
Gender

Regarding gender, the sector is nearly balanced between male (56%) and female (44%) employees. These figures include seasonal workers.

Age

As the figure below shows, the average age of the workforce is 41.4 years old. This figure excludes seasonal workers. Compared to the UK national average of 41.5 years, the workforce on the sector may not be seen as ageing. What has to be emphasised in this context, however, is the physical nature of many tasks and jobs in the sector. It is therefore evident, that the sector’s highly skilled workforce is ageing. Notably, the relatively high average age of trainees may indicate a high proportion of career changers.

Figure 3: Age of workforce (excluding seasonal workers)

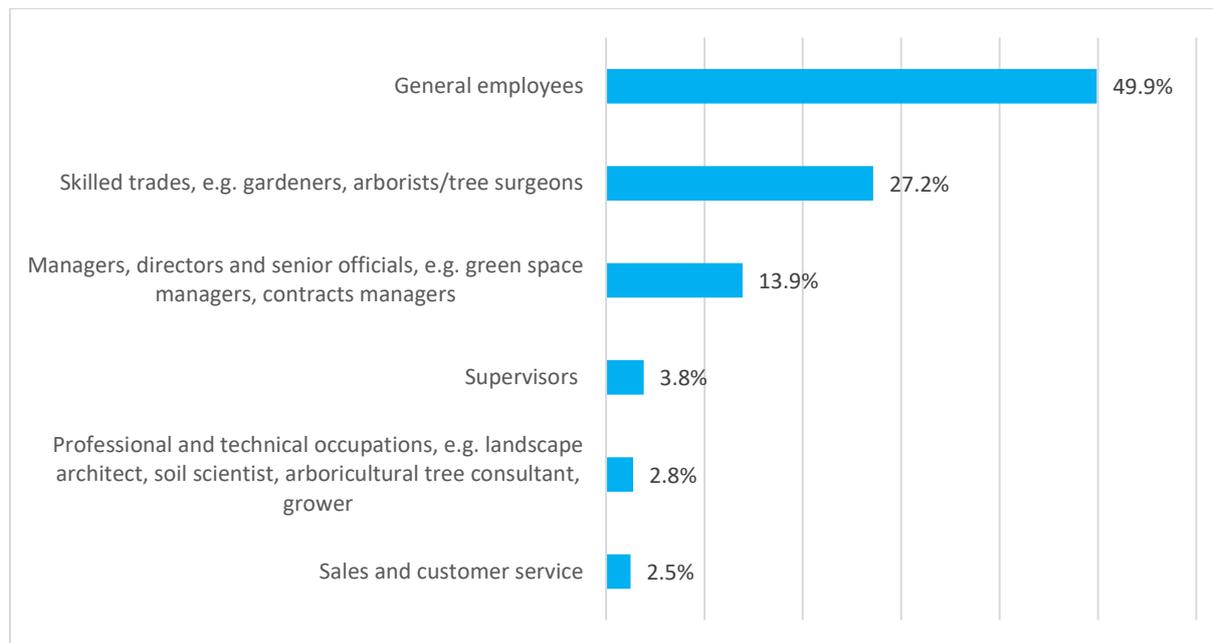


Base: 204 respondents; 3466 responses, multiple choice question

### 2.1.2 Workforce - Job roles (current and next two years)

Respondents were asked to provide estimates of their current and future numbers of staff including managerial roles, skilled trades or general employees whose work and jobs tasks could be associated with landscaping skills and knowledge. We asked about direct employment, but did not distinguish between seasonal, full-time and part-time staff. As can be seen from the figure below, the landscaping sub-sector, employs a relatively high proportion of workers in skilled trades (27%) and 50% as general employees. The relatively high proportion of managers (14%) may be attributed to the large number of micro and small businesses in the sector (combined 91%).

Figure 4: Current Workforce by job role

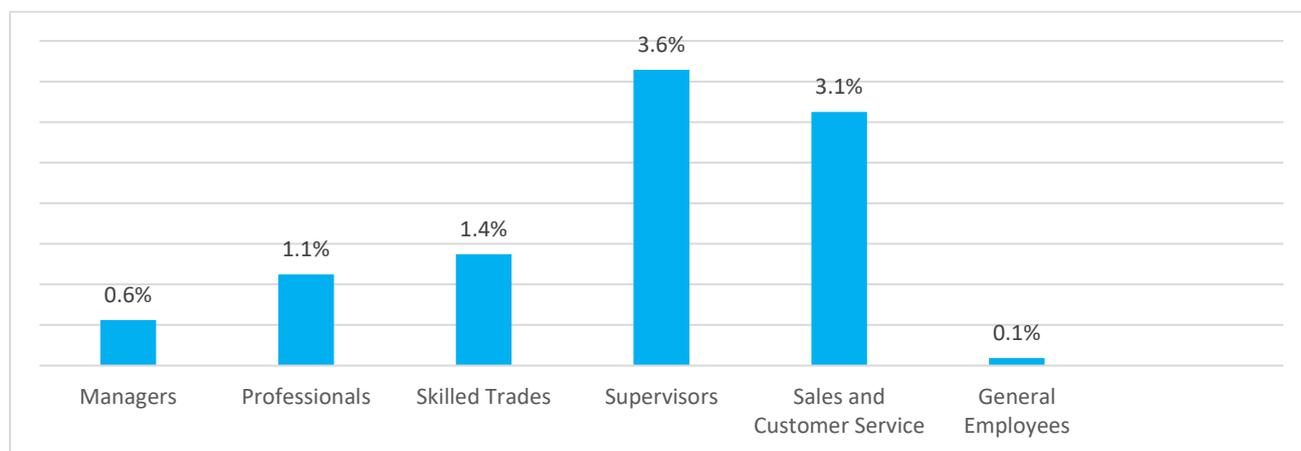


Base: 254 respondents; 6442 responses, multiple choice question (“other excluded”)

The 267 Public Gardens that answered this question, confirmed employing a total of 18881 staff (including seasonal workers and volunteers), an average workforce per business of 72.1 employees (significantly higher than across the OH sector, for which the average is around 25 employees).

In the next two years, Public Gardens predict that average numbers in all staff groups will increase, though all of these will be relatively modest. What stands out here is that the highest increases are predicted for supervisors (3.6%) and sales and customer service roles (3.1%). It should be noted, however, that 94 businesses did not report any increases or decreases in staff and that increases were concentrated in a modest number of medium and large-sized businesses.

Figure 5: Predicted change in staff numbers



Base: 134 respondents, 4740 responses, multiple choice question

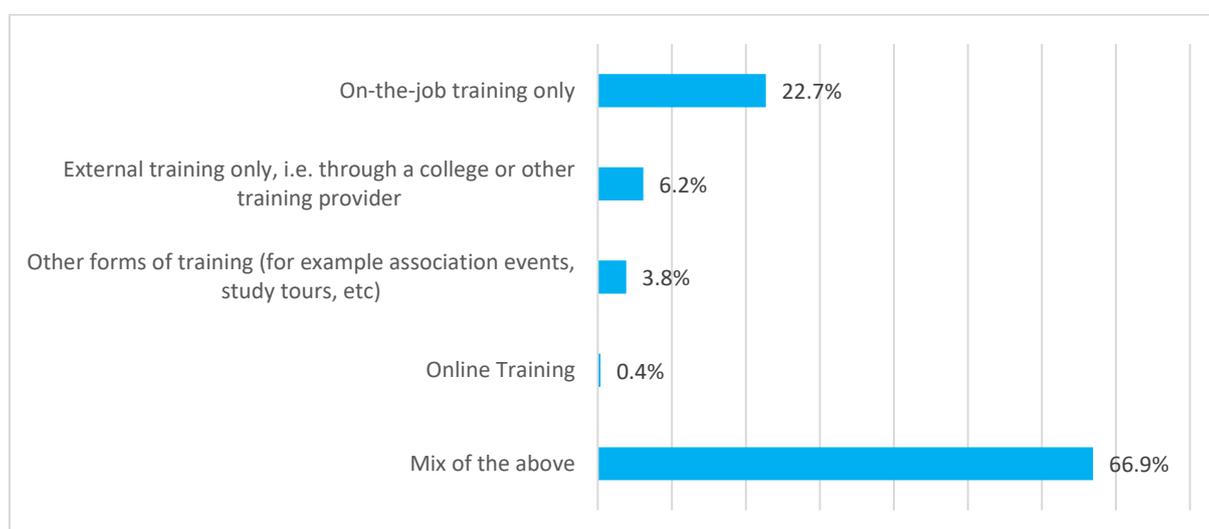
### 3. Training and Development

#### 3.1 Training modes

We asked the sub-sector what they typically did when it comes to training.

The use of mixed training methods is approximately 10% higher than the OH sector’s average (56%), while on the job training only is around 12% lower and the exclusive use of external training is roughly on the same level.

Figure 6: Training modes



Base 260 respondents – single choice question

#### 3.2 Specific training needs

According to the survey, identified horticulture training needs include: plant knowledge, lawn trimming, cut flowers training, orchid and wildflower training, propagation, tree health and biosecurity. In addition, chainsaw training and the use of trailers was mentioned. Leadership, supervisory and management training also featured prominently. Distinguishing the public garden sector from the other sub-sectors were references to training in mental health and special needs, including therapeutic horticulture.

##### External Training

External training, as can be seen above, is not often used exclusively, this may be down to the lack of availability as mentioned or that they simply feel that it is not necessary. When asked separately about accessing funding to help with external training, however, a significant majority (59.4%) of Public Gardens said that they do not do this, while 32.5% confirmed using funding “always” or at

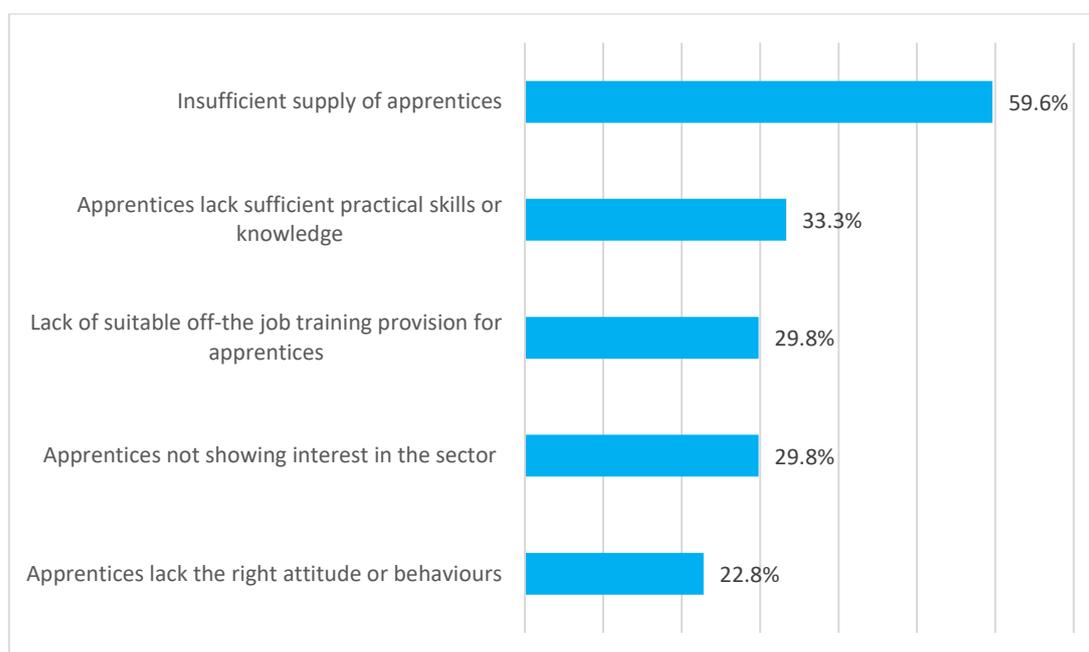
least “sometimes”. In this context, however, it should be highlighted that businesses may benefit from indirect funding for training and therefore may not need to apply for this. On the other hand, the relatively low number of apprentices in the sector, while the highest of all the surveyed sub-sectors (average of 2.2 per business) may be an additional reason for the relatively low use of external training related funding resources.

### 3.3. Apprenticeships and Trailblazers

Given the relatively low average numbers of apprentices in the Public Gardens sector (2.2 per business), which is predicted to increase to 2.7 per business in the next three years, it is worth assessing relevant barriers for employers in recruiting apprentices.

Among these, an insufficient supply of apprentices, a lack of skills and difficulties in accessing suitable external training feature as prominent reasons hampering the employment of apprentices.

Figure 7: Barriers to recruiting apprentices



Base: 107 respondents, 194 responses, multiple-choice question

## 4. The skills challenge

### 4.1 Vacancies/Hard to Fill Vacancies

Respondents were asked how many vacancies they had had in each staff category over the last three years and how many of these still remained open. The average number of vacancies associated with each firm in the Public Gardens sector over the last three years was 7.3, based on 1,421 reported vacancies from 196 businesses. This represents a vacancy rate of just over 7.5% or 7.5 per 100

employees over the three-year period. In this context, however, it should be noted that not all of the reported vacancies reflect the creation of new jobs, but could also be related to staff replacements.

By comparison, the UK national average of vacancies (date) is 2.8 per 100 employees for the economy as a whole<sup>3</sup>. The sectors with the highest reported vacancy rate are information and communication (4.1 vacancies) and accommodation and food services (4.0). The vacancy rate in the sector is thus higher than the national average<sup>4</sup>. The table below breaks the number of vacancies per job role and indicates the job roles, where hard to fill vacancies are most prevalent.

Table 1: Hard to fill vacancies<sup>5</sup>

Job Role	Past 3 yrs	Remain open	% Remaining open
Managers/Directors	20	2	10
Professional/Technical	56	2	3.6
Skilled trades	538	75	13.9
Supervisors	60	7	11.7
Sales/Customer service	12	-	0
General employees	858	14	1
Others	8	2	10
<b>Total</b>	<b>1,552</b>	<b>102</b>	<b>6.5</b>

Base: 291 respondents; 2736 responses, multiple choice question

The results provide a broad indication of which job roles are most difficult to fill at present. Leaving aside the unknowns in the “Other” category the proportion of vacancies remaining open is highest for supervisors, Professional/Technical, and skilled trades, followed by general employees, though the average of vacancies (excluding “others”) for general employees is quite high (56%), while the number of vacancies remaining open is low. By comparison, 35% of vacancies (excluding “others”) are for skilled trades, but of these, 13.9% remain open. This indicates that the sector has been able to tackle the growing need for staff in the general employees’ category (potentially lower skilled and/or seasonal workers) but has faced challenges regarding recruitment in skilled trades. Nevertheless, this does not necessarily mean that the staff hired meet all the qualifications required.

<sup>3</sup> Office for National Statistics (2019): *Jobs and vacancies in the UK: March 2019*

<sup>4</sup> Office for National Statistics (2019): *Jobs and vacancies in the UK: March 2019*

<sup>5</sup> It should be noted that the total number of vacancies (1552) in Table 1 diverges from the 1421 overall reported vacancies. This is because more businesses responded to the related question.

### 4.2 Skills Scoring

As a key component of the skills survey, respondents from all sub-sectors were asked to score the current level of skills for a selection of job-role groups such as managers or skilled trades on a scale from 1-10 – where one is the lowest score and ten the highest.

Respondents were asked to assess the future importance of the skill from 1-10, with “5” meaning that the importance of the skill will stay the same.

These rankings were then analysed for this report using skills scoring methods. The following diagrams and tables show the results of the skills scoring exercise. Overall, each group (aligned to different job role levels) of soft and technical skills is set to increase in importance, sometimes significantly.

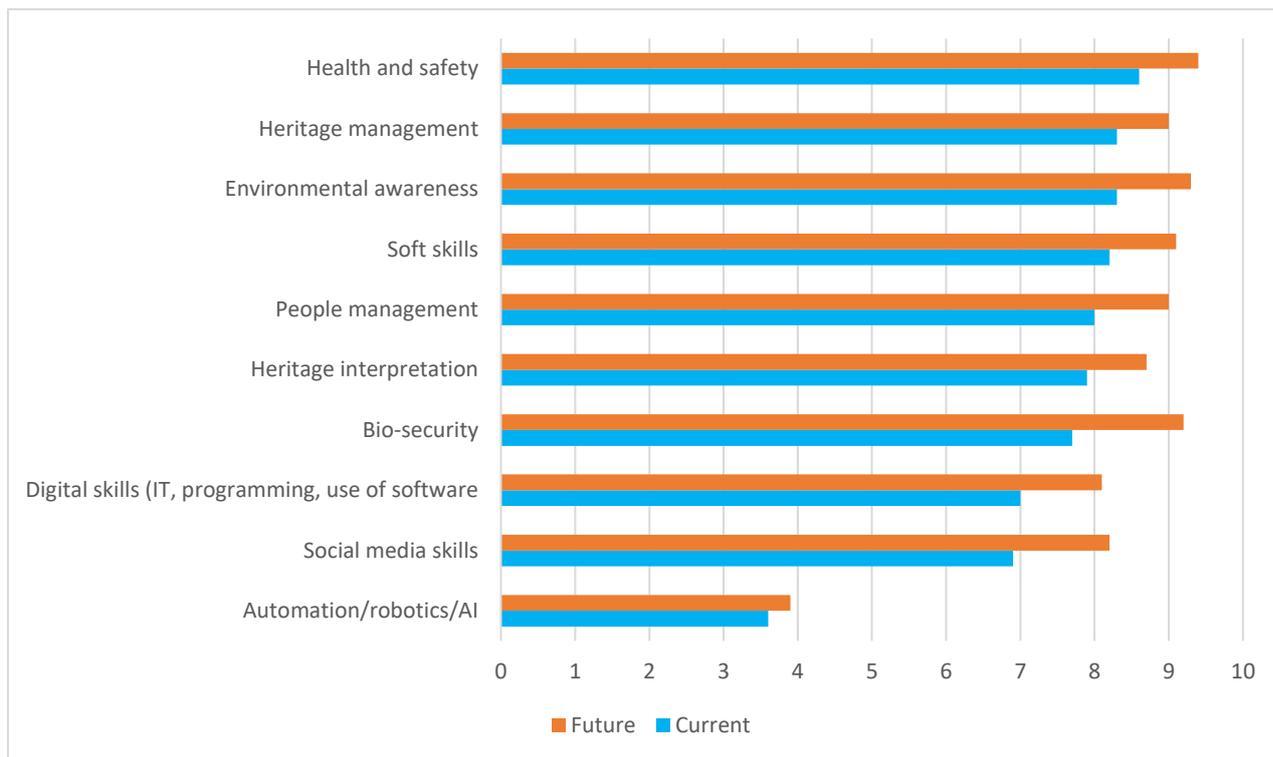
The results of both exercises, that is scoring of the current importance of skills and predictions of future importance in the next 3-5 years, were entirely based on employers’ perceptions of both.

The staff categories surveyed included:

- (1) Directors, managers and senior officials,
- (2) Professional and technical occupations,
- (3) Skilled trades and
- (4) General employees

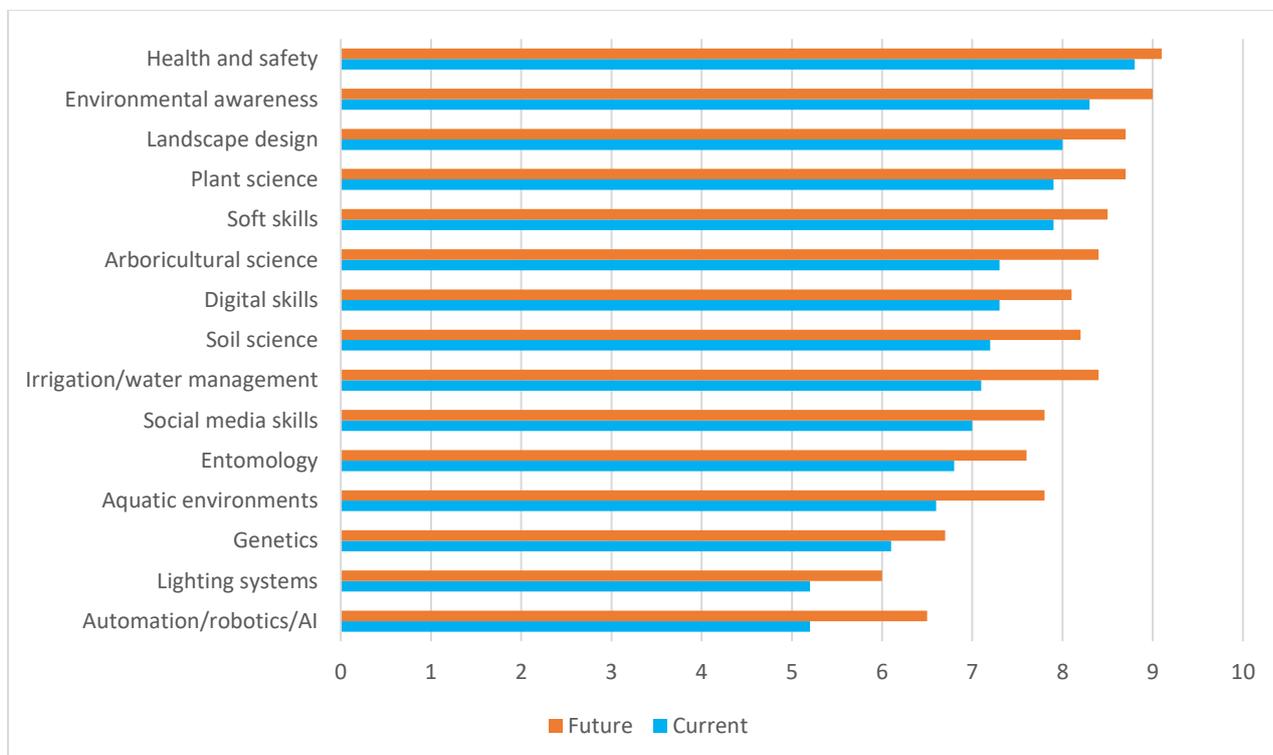
Thus, skills surveyed for scoring were not sub-divided by each ornamental horticulture sub-sector, but by staff category. Therefore, where appropriate, certain sets of skills not relevant to a particular sub-sector were removed in the following figures below (8 to 11) which show the current skill level in terms of how well these job roles perform these skills, the future equivalent importance of the skills surveyed and the change between current and future in percent terms. This is shown in the following charts for managers, professional and technical occupations, skilled trades and general employees. In this context, please note the term “general employees” was not further defined and could therefore include seasonal workers.

Figure 8: Current and predicted future importance of managerial level skills



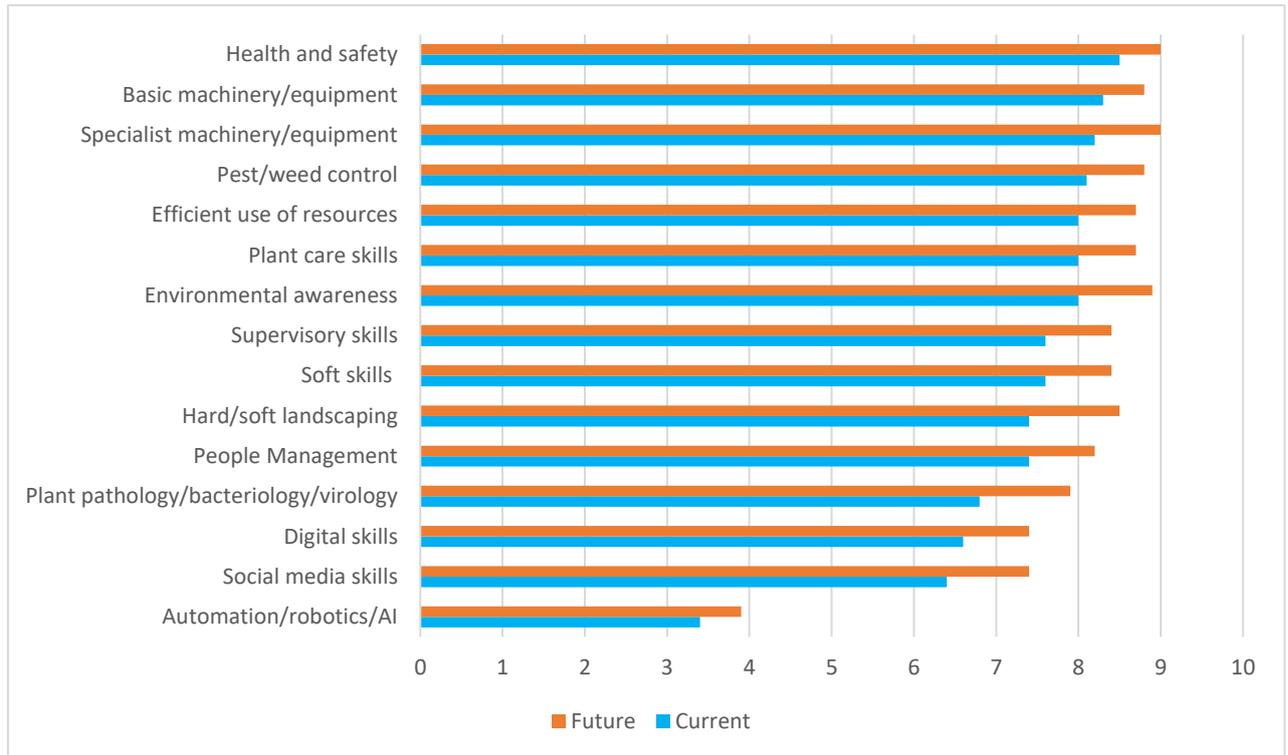
Base: 266 respondents, multiple responses, ranging from 26 to 1,901

Figure 9: Current and predicted future importance of professionals and technical skills



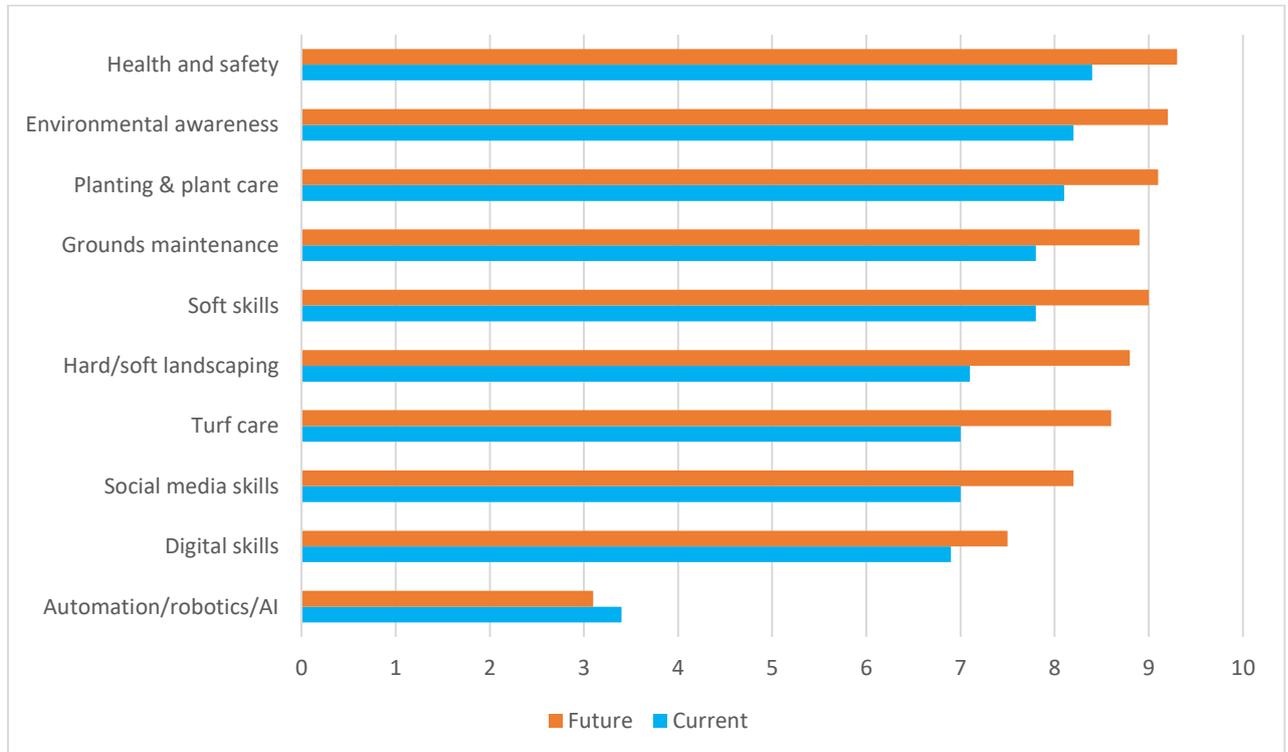
Base: 266 respondents, multiple responses, ranging from 26 to 1,901

Figure 10 Current and predicted future importance of skilled trades skills



Base: 266 respondents, multiple responses, ranging from 26 to 1,901

Figure 11: Current and predicted future importance of general employee skills



Base: 357 respondents, multiple responses, ranging from 26 to 1,901

### 4.3 Skills Gaps

Figure 12: Reasons for skill gaps



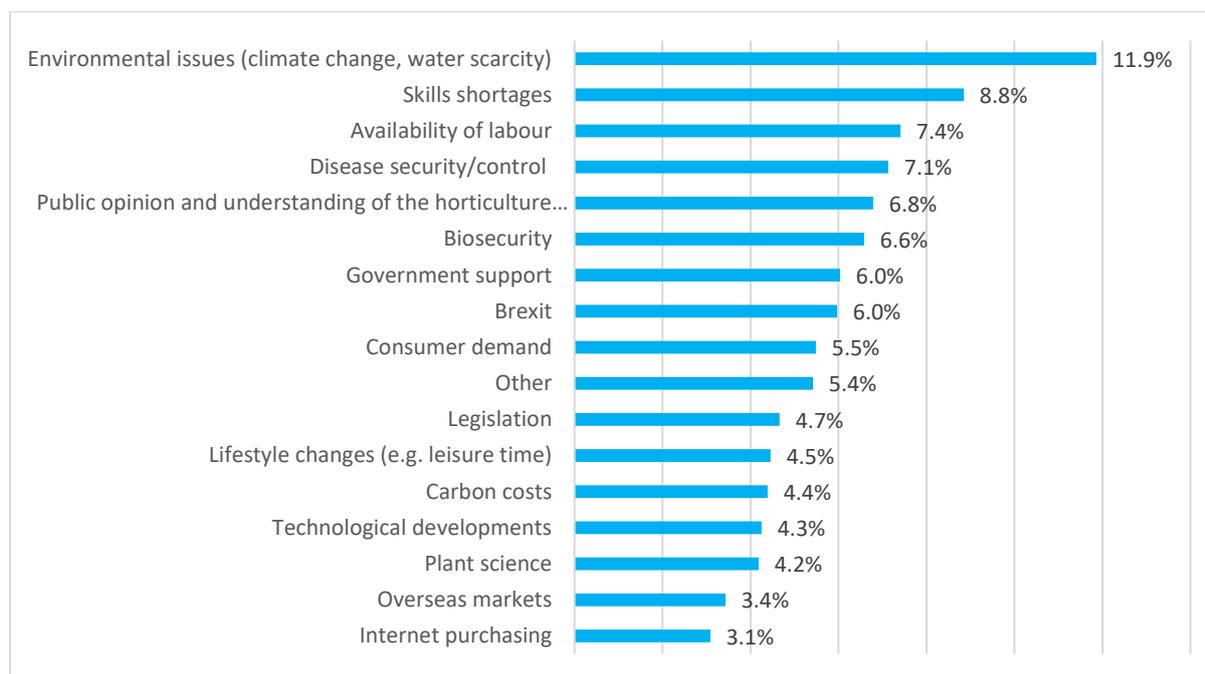
Base: 110 respondents; 216 responses, multiple choice; Respondent could also select the option “other”. Examples of this include difficulties in recruiting soft landscapers, tree surgeons and machine maintenance specialists. In addition, lack of training such as in therapeutic horticulture was mentioned.

## 5. Drivers of future change

To provide information on their future outlook of the Public Gardens sector, businesses were asked to name the most important drivers of future change from their perspective.

Top of the table are environmental issues, skills shortages and availability of labour. This is very similar to the results for the overall ornamental horticulture sector. On the other hand, Brexit ranks significantly lower.

Figure 13: Drivers of Future Change



Base: 261 respondents; 1458 responses

## 6. Conclusions and additional information relating to the Public Gardens sector

According to NOMIS<sup>6</sup>, the OH sector has over 32,000 businesses – largely as defined by the remit of the Ornamental Horticulture Roundtable Group<sup>7</sup>. The Oxford Economics report (2018) estimates that the wider sector supports the employment of 335,200 people. The wider sector comprises just under 92% micro and small businesses but contributes near on £12m to GDP (2017). An important sector that has wider impacts than is immediately perceived, and as the Oxford Economics report suggests, its full/wider economic contribution extends well beyond the estimates given in their and this report. The public garden sector has around 820 businesses and supports the employment of 32,000 people, according to NOMIS and the same Oxford Economics report.

1. Skills and labour issues are of key concern for this sub-sector in the near to medium term. There are significant skills issues (skills gaps and shortages) which were highlighted by the sub-sector through the survey and workshops and which need to be addressed for both the sector as a whole and for this sub-sector. These skills challenges include:
  - Difficulties in recruitment of people with the right skills and/or attitudes was selected by 38% as the top reason for skills gaps;
  - A relatively high proportion of vacancies in supervisors remaining open after three years (12%) (see Table 1);
  - This is compounded by the fact that the number of jobs in supervisory positions is set to increase by 3.6% (see figure 5), a major indicator of for business expansion in the sector;
  - While the predicted increase in skilled trades (1.4%) may seem modest, it should be reiterated that skilled trades constitute 27% of the current workforce and that hard to fill vacancies in skilled trades rank highest (14%) and represent the largest absolute number of hard to fill vacancies in the sector. This strongly indicates a growing demand for workers in this professional group as well as related recruitment difficulties;
  - An ageing full-time, part-time and trainee workforce, combined with the strong physical demands of tasks in the sector;
  - Apprentices represent a low proportion of the workforce (1.6%), while the modest average number of apprentices per business (2.2), predicted to increase to 2.7 in the next three years. It should be noted that average of apprentices in the sector is higher than in any other sub-sector surveyed.

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<sup>6</sup> is an online database run by the Office of National Statistics (ONS) that contains up to date UK labour market statistics.

<sup>7</sup> although it includes silviculture which is broader than the definition focussed on here for arboriculture.

- In this context, an insufficient supply of apprentices, apprentices lacking key skills and a lack of suitable external training were identified as the top-three apprentice recruitment barriers;
  - Skills shortages and availability of labour rank among top-three drivers of future change in the sector.
2. Thirty percent of businesses (that answered the question) anticipated increases in the sector's staff numbers over the next two years, although at a rather modest level. Nevertheless, this was noted at a time when, due to there being almost full employment in the UK, there is a challenging labour pool for employers. Due to hard to fill vacancies remaining open for skilled labour (14%) of for supervisors (12%) and professional/technical occupations (4%), it is important to note that the 30% (current number of businesses anticipating increased in staff numbers) could easily become much even higher in the short-medium term as skills deficiencies in the sector begin to bite further.
  3. It is reported that recruits to the sector often lack basic practical skills – for example 33% selected this as a barrier to the recruitment of Apprentices. A higher number of businesses (59%) confirmed that there is an insufficient supply of apprentices. T-levels could help in guiding more young people into the sector, but 85% of businesses in the wider sector are virtually unaware of them. Perceived low wages/salaries in the sector, according to workshop participants and some surveyed businesses, exacerbates this recruitment and skills issue.
  4. The average age of workers (41.4 years) is very slightly lower than the UK average (41.5 years). Nevertheless, there are strong perceptions among employers that the workforce is ageing (from workshop feedback and some survey open answers) and while this survey did not have questions permitting the necessary degree of disaggregation there are possible reasons why there may be a serious “ageing” problem including a low number of apprentices in the sector, the ageing of key job roles (managers, supervisors, technical staff etc.), and the effects of the physically demanding nature of work related to ornamental horticulture. There is a clear and pressing need for more detailed research into this matter.
  5. Whilst the vacancy rate at approximately 7.5% over the last three years seems relatively moderate, this likely hides concerns experienced by businesses of a lack of skilled people and subsequent ‘make-do’ activities such as a greater use of volunteers. The sector may need to undertake a gradual increasing use of flexible working as a result, to accommodate the growing atypical workforce structures being experienced<sup>8</sup>. The Taylor Review (2017) noted that *‘Full-time, permanent work remains the norm, but other ‘atypical’ arrangements are usually chosen and valued by the individuals concerned.’*

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<sup>8</sup> Good Work, the Taylor Review, 2017

6. All skillsets which were queried in the survey are perceived by employers as increasing in importance over the next 3-5 years. Of focus are health and safety, heritage management, landscape design, basic machinery and equipment and planting/plant care.
7. The relatively low average number of apprentices in the sector and the cited perception of the low quality of apprentices in terms of behaviour and skills indicate that talent pipelines into the sector need to be improved. The survey indicates that the average number of apprentices in a business will from 2.2 to 2.7 over the next three years– bearing in mind margins of error. This also suggests that employers need help with understanding the apprentice model and the benefits to their business. The new Apprenticeship trailblazer standard is relatively new to the sector and the time-lag in this bedding in reinforces the need for great understanding.
8. The high use of in-house training and the lack of awareness of resources are additional indications (in addition to low apprenticeship applicant numbers) of a low take-up of “new” initiatives like Apprenticeship trailblazers.