

Article

Labour in the agriculture industry, UK: February 2018

A summary of the available data on agricultural workers and how they can be used to understand labour in the agricultural industry in the UK.

Contact:
Melissa Randall
pop.info@ons.gsi.gov.uk
+44 (0)1329 444661

Release date:
6 February 2018

Next release:
To be announced

Table of contents

1. [Introduction](#)
2. [Main points](#)
3. [Things you need to know about this release](#)
4. [What changes could be made to improve data about the agriculture industry?](#)
5. [What can ONS Labour Force Survey and the Annual Population Survey tell us about labour in the agriculture industry?](#)
6. [What can DEFRA June Survey of Agriculture and Horticulture tell us about labour in the agriculture industry?](#)
7. [What can the National Farmers Union Supply of Seasonal Labour to British Horticulture Farms survey tell us about labour in the agriculture industry?](#)
8. [What can British Growers Association Annual Labour Force Survey tell us about labour in the agriculture industry?](#)
9. [Quality and methodology](#)

1 . Introduction

The agriculture industry relies on a combination of seasonal and permanent workers, many of whom come from EU countries. However, it is difficult to know the size of the agriculture labour market and the role of migrants within it because there are no official data sources designed to understand this particular issue ¹.

Data about the industry are collected in varying degrees of depth by two government departments, the Office for National Statistics (ONS) and the Department for Environment, Food and Rural Affairs (DEFRA). Neither data source is designed to measure migration and so the available data are limited. Official estimates undercount workers in the agricultural industry or don't provide information on characteristics such as nationality. Other organisations also collect data to fill this gap. Data from the National Farmers Union (NFU) and the British Growers Association (BGA) are included in this article. They are not National Statistics and have not been widely reported, but have been shared with ONS as they contain useful indications of what is happening in the agriculture industry.

This article considers the available data that can be used for different purposes to understand labour in the agriculture industry, what the limitations in these data are and what changes could be made to improve data about this industry.

Notes for: Introduction

1. This was noted by the Environment Food and Rural Affairs Committee in the [Feeding the Nation: Labour constraints inquiry](#).

2 . Main points

It is very difficult to estimate how many seasonal workers of which nationality are working in the agricultural sector in the UK, although the data sources in this article give useful indications.

By their nature, seasonal migrants are difficult to estimate. They arrive and leave, and they move jobs. Point-in-time estimates will miss some workers as they may have already left, or be yet to arrive. Estimates that take a longer approach will confuse positions with people.

The Annual Population Survey (APS) can be used indicatively as a minimum size of the number of all workers in the agriculture industry, which for the year to June 2016 was 346,000. It is not possible to estimate seasonal, casual and gang workers from the APS.

The British Growers Association (BGA) survey is the best estimate of "positions filled" by all non-UK seasonal workers in the horticulture sector, for 2016 this was 75,000. However, the BGA survey only enquires about non-UK employees.

The best estimate of the number of seasonal workers (the number of people who fill the positions) that is currently available comes from the Department for Environment, Food and Rural Affairs' (DEFRA's) June Survey of Agriculture and Horticulture. For June 2016, the estimate of seasonal, casual and gang workers was 64,200. This data source estimates seasonal, casual and gang workers but it doesn't provide this estimate by nationality.

The National Farmers Union (NFU) Seasonal Supply of Labour survey, which only looks at seasonal agricultural workers recruited by labour providers, estimates that 99% of seasonal labour is provided by EU workers.

One fundamental question for policy-making is whether seasonal agricultural workers “fly in – fly out” for seasonal jobs, or are longer-term residents of the UK and move within the UK wherever the jobs are. This is not possible to answer from current data sources.

These data sources have different coverage of seasonal workers, different definitions of nationality, and are not all based on the same time period. These differences are detailed in the [Quality and methodology section](#).

3 . Things you need to know about this release

Definitions used in this article

Agriculture, forestry and fishing

The top-level Standard Industrial Classification within which agriculture industry data can be found. When looking at workers or jobs in some standard Office for National Statistics (ONS) publications (for example, [Workforce jobs](#) or [Business Register Employment Survey](#)¹), this includes jobs in forestry and fishing.

Agriculture

Agriculture is the term for the industry that grows fruits, vegetables and flowers, raises animals for meat, dairy or eggs, or grows crops such as wheat. This is the definition used by ONS and the Department for Environment, Food and Rural Affairs (DEFRA) in the data presented in this article.

Horticulture

Horticulture is a sub-set of agriculture – it is the growing of fruits, vegetables and flowers. Of all the different agriculture sub-sectors, it is the most labour intensive and employs the most seasonal, casual and gang workers. This is the sub-industry on which the National Farmers Union (NFU) and the British Growers Association (BGA) collect data, that is presented in this article.

Seasonal, casual and gang workers

Seasonal workers work for an organisation on a short-term basis, in jobs that are seasonal – that is, they only require workers for part of the year. Seasonal workers might be directly recruited by the employer, recruited through an employment agency, a labour provider (agencies who recruit in other EU countries) or through a gangmaster, someone who runs a team or “gang” of workers.

All of these are legal employment arrangements, so long as pay and conditions match the regulations of the [Gangmaster and Labour Abuse Authority](#). Seasonal workers can be of any nationality, they are not necessarily migrants.

Notes for: Things you need to know about this release

1. Neither Workforce jobs (WFJ) nor Business Register Employment Survey (BRES) data are used in this article. This is because the WFJ estimates for agriculture are from the Labour Force Survey (LFS), which are included in this article, and the BRES estimates use DEFRA data, which are included in this article.

4 . What changes could be made to improve data about the agriculture industry?

Office for National Statistics (ONS) will work with Government Statistical Service (GSS) colleagues to understand what is possible to do to strengthen existing data sources. For example, it might be possible to enhance existing data sources by adding additional questions to the surveys, such as asking about the nationality of seasonal labourers on the Department for Environment, Food and Rural Affairs (DEFRA) June Survey.

It may also be possible to address this gap in the longer term through making better use of new and existing sources of data across government. In early 2017, we publicly recognised the [need for better evidence on international migration](#) and its impact on the UK, including better evidence on seasonal labour migration and its impact on the UK labour market and economy.

To meet this need, we set out an ambitious [two-year programme](#), in partnership with the GSS, to make better use of new and existing data sources across government. Linking these data sources together and the creation of more timely and comprehensive datasets will help us provide greater insight into migration patterns, such as seasonal working, and also different sectors of the economy such as agriculture. This is, however, dependent upon identifying, accessing and realising the statistical opportunities from existing and new sources of data.

One source currently being investigated, which may offer some insights into agricultural workers, is Pay As You Earn Real Time Information. The plan is continuously under review to stay responsive to changing priorities for evidence on different aspects of international migration.

5 . What can ONS Labour Force Survey and the Annual Population Survey tell us about labour in the agriculture industry?

The Labour Force Survey (LFS) is designed to be a study of the employment circumstances of the UK population. It is the largest household study in the UK and provides the official measures of employment and unemployment. It also underpins further analysis of the labour market, such as [UK and non-UK people in the labour market: November 2017](#). The LFS also receives regional sample boosts, creating the Annual Population Survey (APS). The APS is designed to be representative of the UK population at more detailed levels of geography than the LFS.

The [response rate to the LFS](#) for the period July to September 2017 (the latest period for which this information is available) was 56.7%. The response rate for July to September 2016 was 54.8% and for July to September 2015 was 55.5%.

Neither survey includes communal establishments¹, which means that most accommodation provided by employers on a farm is excluded from the sample. This is likely to affect the estimates of agriculture industry workers where such living arrangements are more common, particularly for seasonal workers. Recent arrivals to the UK – for example, people in hotels or hostels prior to establishing residence in the UK – are also likely to be undercounted in these data. It is also highly unlikely to include anyone living in the UK for a short period of time, such as a short-term migrant.

The survey excludes those living at a temporary address, those who are here only for purposes of recreation, holiday, visits to friends and relatives, business, medical treatment or religious pilgrimage and those whose main home remains abroad. It includes any respondent whose address in the UK is a temporary one whilst they search for permanent accommodation.

LFS and APS estimates are designed to provide estimates of UK residents and their economic activity, by characteristics such as nationality, occupation and sector of main or secondary employment. Neither survey is designed to measure migration, nor fully to reflect the types of people working in each industry.

Table 1 shows the APS estimate of resident workers in the agricultural sector for the year to June 2016 was 346,000. Of these, 18,000 were estimated to be from another European Union country (except Ireland). Data for 2017 are available, but for this article 2016 data are chosen to compare with other sources.

This estimate includes those whose main or second job is in agriculture, including unpaid family members.

Industry is determined by the interviewer from the question “What does the firm/organisation you work for mainly make or do?” Industry sector does not always reflect job content – for example, people working in the agricultural industry could occupy a variety of jobs such as managerial, actuarial, cleaning and development.

APS does not collect information on whether a worker is seasonal, casual or a gang worker. This information is available for those working in the agriculture industry from the Department for Environment, Food and Rural Affairs’ (DEFRA’s) June Survey.

Table 1: Estimated number of workers whose main or second job is in the agricultural industry, UK, July 2015 to June 2016

	Annual Population Survey, July 2015 to June 2016 (UK)	
	All workers	EU workers (excluding UK and Ireland)
Number of workers in agriculture sector	346,000 (confidence interval 320,000 – 372,000)	18,000 (confidence interval 11,000 – 25,000)
...of which, number of part-time workers	82,000 (confidence interval 69,000 – 95,000)	Unavailable due to small sample size
...of which, number of seasonal/casual /gang workers	Not available	Not available

Source: Annual Population Survey, July 2015 to June 2016, Office for National Statistics

Notes:

1. Confidence interval: A 95% confidence interval is a range within which the true population would fall for 95% of the times the sample survey was repeated. It is a standard way of expressing the statistical accuracy of a survey-based estimate. If an estimate has a high error level, the corresponding confidence interval will be very wide.

2. Data for Ireland and migrants who are not from the EU are not available due to disclosure control. Even grouped together, estimates of these groups are very small.

Consideration was given to comparing APS for 2011 with the census in the same year, because census data would include information on those living in communal establishments. However, census data are collected in March and seasonal workers are mostly needed in the summer months.

Notes for: What can ONS Labour Force Survey and the Annual Population Survey tell us about labour in the agriculture industry?

1. A person's usual residence can be categorised as being in either a private household or a communal establishment. Types of communal establishments include: hospitals, care homes, prisons, defence bases, boarding schools, student halls of residence and on-farm accommodation.

6 . What can DEFRA June Survey of Agriculture and Horticulture tell us about labour in the agriculture industry?

The Department for Environment, Food and Rural Affairs (DEFRA) June Survey of Agriculture and Horticulture surveys a representative sample of farms in England. DEFRA brings together similar surveys from Northern Ireland, Scotland and Wales to form a UK estimate. The data are designed to measure the changing structures of British farms. It is a compulsory survey that collects detailed information about land use, livestock numbers and the agricultural workforce.

The [detailed methodology](#) of the survey explains that response rates are relatively high, at 70%. The survey asks each farmer about employees on the farm.

Table 2 shows the DEFRA June Survey estimates that there were 466,200 workers in the agricultural sector in June 2016. Of those, the survey estimates that 14% or 64,200 were seasonal, casual or gang workers. Data for 2017 are available, but for this article 2016 data are chosen to compare with other sources.

The estimate of seasonal, casual and gang workers is a point-in-time estimate. As such, it would not reflect those who had worked only between January and May, or those who begin work after June. However, because June is the peak month for seasonal horticultural employment, and the average length of a seasonal workers' employment is five months¹, the June Survey should capture the majority of horticultural workers. Other sub-sectors of the agriculture industry employ very few seasonal workers, because the demand for dairy and meat is year-round. The significant exception is the poultry industry.

The poultry industry estimates that it employs around 13,000 seasonal workers⁵ with the majority being non-British nationals. This is mostly for the farming of turkeys and geese for the Christmas season in November and December, so these workers are probably missed by the June survey. Therefore, the highest estimate of all seasonal workers, combining these two sources, would be around 77,000, if none of the summer fruit workers went on to work in the poultry sector over Christmas.

Table 2: Estimated number of workers in the agricultural industry, Department for Environment, Food and Rural Affairs June Survey of Agriculture and Horticulture, 2016, UK

	England	Scotland	Wales	Northern Ireland	UK
Total number of workers in agriculture sector	301,500	63,500	53,500	47,700	466,200
Number of farmers, business partners, directors and spouses	173,100	40,700	39,900	36,200	289,900
...of which, full-time	88,800	13,400	18,600	18,000	138,900
...of which, part-time	84,300	27,200	21,300	18,200	151,000
Number of regular employees, salaried managers and casual workers	128,400	22,800	13,600	11,500	176,300
...of which, number of regular, full-time workers	54,900	10,400	3,800 ¹	2,300	71,400
...of which, number of regular, part-time workers	29,600	6,100	3,700 ¹	1,500	40,900
...of which, number of seasonal/casual/gang workers	43,900	6,400	6,200 ¹	7,700	64,200

Source: Structure of the agricultural industry in England and the UK at June, 2016, Department for Environment, Food and Rural Affairs

Notes:

1. There are no Welsh data on full-time, part-time and seasonal workers available for 2016. These data were last collected in Wales in 2015, so for this one-off article, these proportions have been applied for these categories. Totals may not sum due to rounding.

A comparison of Table 1 and Table 2 can be undertaken with some caution and shows:

- a farmer describes all workers in June for the DEFRA survey, whilst ONS's Labour Force Survey and Annual Population Survey run throughout the year; it could be that someone who has a first job and helps family on a farm from time to time does not mention this in the ONS survey, but is counted in the DEFRA survey
- the DEFRA June Survey does not measure nationality of the workforce

The DEFRA estimate of non-seasonal labour (that is, all farmers, business partners, directors and spouses, and regular worker, either full-time or part-time) for June 2016 is 402,000.

Notes for: What can DEFRA June Survey of Agriculture and Horticulture tell us about labour in the agriculture industry?

1. According to management information from Concordia, one of the largest seasonal labour recruiters in the UK.
2. National Farmers Union – estimate from survey of NFU poultry producers.

7 . What can the National Farmers Union Supply of Seasonal Labour to British Horticulture Farms survey tell us about labour in the agriculture industry?

Following the abolition of the Seasonal Agriculture Worker's Scheme (SAWS) in December 2013¹, the National Farmers Union (NFU) established a labour monitoring tool to gather evidence on the supply and demand of seasonal workers. This survey provides monthly information of seasonal labour recruitment experiences direct from recruitment agencies and labour providers.

The survey is sent to agencies on the first day of each month and the respondents are given two weeks to respond. Data have been collected on a month-by-month basis since January 2016. The survey collects data from all the major agriculture labour providers. The data reported are only from providers who respond – there is no information on non-responders, which would allow an estimate to be created.

Respondents are predominantly recruiters and agencies licensed under the previous SAWS scheme, supplying seasonal labour to all sectors of horticulture across the UK. It is not known how many seasonal workers are recruited by an agency or labour provider and how many are recruited directly by farms.

The Supply of Seasonal Labour survey does not collect information on permanent workers. It also does not cover seasonal labour in the pig industry, dairy cattle industry or in the poultry and meat industry. The use of seasonal labour in the pig and dairy cattle industry is relatively rare. As noted previously, it is used in the poultry industry specifically around Christmas. However, none of these industries are as dependent on seasonal labour as horticulture.

Data are on vacant positions and filled positions across the year². As such, it does not estimate people, as one person might fill a position in one season and in the next season fill a different position. For this reason, it is on a different basis to the DEFRA statistics, which estimate the number of people.

The data in Table 3 should be considered a minimum estimate of workers recruited by labour providers. The estimates do not include those who are directly recruited through businesses, there are some who do not respond to the survey and some smaller labour providers are not invited to complete the survey. It is therefore likely that the true value for the number of positions is higher than the 30,600 estimated for 2017.

Table 3: Minimum estimate of the number of horticulture industry positions filled by recruiters, January to December 2017, UK

	2017
Number of horticulture industry positions filled by responding recruiters, January to September	30,600
Number of horticulture industry positions advertised by responding recruiters, January to September	35,000

Source: Supply of Seasonal Labour to British Horticulture Farms, NFU, 2017

NFU's Supply of Seasonal Labour data is the only data source that identifies the nationality of seasonal agricultural workers. It does this by asking recruiters where their seasonal workers are recruited from.

Of the agency-sourced seasonal labour that the horticultural industry used in 2017, 99% were EU nationals. The December 2017 NFU's seasonal labour survey analysis estimates that over two-thirds (67%) of the seasonal labour force are EU2 nationals (Romanians and Bulgarians). Nearly one-third (32%) are EU8 nationals (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovenia and Slovakia).

UK citizens account for less than 1% of the horticultural seasonal workforce when employed through an agency or labour provider. It is likely that the true proportion recruited from the UK is slightly underestimated by this survey as Labour providers predominantly recruit from Europe.

Notes for: What can the National Farmers Union Supply of Seasonal Labour to British Horticulture Farms survey tell us about labour in the agriculture industry?

1. SAWS had been a quota-based scheme to recruit foreign workers to fill labour market demands. In 2008 only Romanians and Bulgarians were eligible under the scheme and it closed in December 2013 when transitional controls for Romanian and Bulgarian citizens ended in January 2014.
2. Note that the ONS Vacancy Survey produces monthly estimates of job vacancies across the whole economy, except for agriculture, forestry and fishing (because of the disproportionate costs involved as these industries mainly consist of very small businesses with few vacancies).

8 . What can British Growers Association Annual Labour Force Survey tell us about labour in the agriculture industry?

Like the NFU, the British Growers Association (BGA) has created an annual survey to measure the non-UK seasonal labour force to monitor the supply of seasonal and permanent labour because of a lack of other data sources.

The BGA surveys its members, all of whom are in the horticulture industry, about the number of non-UK nationals¹ employed during the year 2016. The survey achieved 248 responses, reporting over 59,000 workers, thereby accounting for a significant proportion of the sector.

From the survey results, the BGA have created an estimate for the whole industry. This is calculated by firstly separating horticultural establishments into different specialities, as identified by the farm, (because soft fruits, for example, require more seasonal labour than root crops). Then the measured ratio of people employed to the size of the farm is applied to the whole sub-sector (for example, soft fruits). Total size of farms in each sub-sector is available from the Department for Environment, Food and Rural Affairs (DEFRA) farm structure survey.

The result is an estimate of all non-UK seasonal positions, regardless of whether they are recruited directly or by labour providers. The data on employees, including recorded nationality, is considered robust because a majority of farms use an employee management system required by SEDEX² to prove an ethical supply chain. It is possible that the same people may be counted in two sub-sectors (for example, soft fruit and apples and pears, where one season finishes and the next begins immediately). For this reason, this estimate should be considered as the number of positions.

The survey estimates that 75,000 non-UK horticultural seasonal labourers were employed in 2016. Note this estimate is for horticulture only and would not include the estimated 13,000 of poultry sector Christmas positions.

This figure of 75,000 horticultural positions can be compared with caution to the 64,200 estimated seasonal workers in agriculture as a whole from the 2016 June survey by DEFRA. NFU Supply of Seasonal Labour data show that increases in recruitment around the start of every new horticulture season are smaller than the number of positions required for that season, so it is likely that one worker fills more than one position during the year – the two estimates are therefore not contradictory.

Notes for: What can British Growers Association Annual Labour Force Survey tell us about labour in the agriculture industry?

1. Non-UK is reported by the employer, answering “How many non-UK seasonal workers are employed?”
2. [SEDEX](#) is a non-profit membership organisation that provides management information tools, for example, on labour, to allow members to show they abide by labour legislation and to help corporations be sure that, for example, the workforce across their whole supply chain is treated fairly.

9 . Quality and methodology

Table 4: Comparison of data sources in this article

	Coverage of seasonal agricultural workers	Definition of industry	Definition of nationality	Timing of survey
Labour Force Survey (LFS) / Annual Population Survey (APS)	Sampled from UK population living in households, and respond for themselves, but likely to be missing because of probability of i) not living in households and ii) those living at an address for a short period of time being unlikely to be captured in the survey.	'Agriculture' is determined by the interviewer according to a set of questions about what the firm /organisation the respondent works for 'mainly make or do'	Self-reported in answer to question 'What nationality do you hold?'	Average for a year – counts all in the year, with no duplication of people
DEFRA	Sampled from farms and responded for by employer	All considered agricultural workers	Not available	Point in time (June) – misses other parts of the year, with no duplication of people
NFU	Sampled from agencies recruiting horticulture workers and responded for by the agency	All considered horticultural workers	How many of the seasonal horticultural workers that you recruited were sourced directly from the following areas? UK, A2 nationals, A8 nationals, other, unknown	All positions advertised and filled in the year, counts positions rather than people
BGA	Sampled from horticultural farms and responded for by employer	All considered horticultural workers	Reported by employer (How many non-UK seasonal workers are employed?)	Number of those employed in the year, counts positions rather than people

Source: Office for National Statistics