Department for Environment Food & Rural Affairs

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Farming Statistics
Provisional crop areas, yields and livestock populations
At June 2018 - United Kingdom

This release contains provisional estimates for land use, crop areas and livestock populations on agricultural holdings in the UK and the size of the UK cereals and oilseed rape harvest for 2018. Results are not yet available for poultry, horses, goats, farmed deer, camelids and labour numbers. These will be published with the final results, provisionally scheduled for 20 December 2018. Wales do not produce provisional results. Therefore, crop areas and livestock numbers for 2017 (with the exception of cattle) have been carried forward for Wales to allow UK totals to be calculated for 2018.

The key results are given below.

Agricultural land and arable crop areas (Tables 1 - 2)

The total utilised agricultural area (UAA) in the UK has increased slightly to almost 17.5 million hectares. The area of total crops and uncropped arable land have also seen increases, helping to offset the 0.6% decrease in permanent grassland.

Crop yields and production (Tables 3 - 4)

The 2018 harvest has been affected by the weather this year (high rainfall in spring and a long dry spell with high temperatures in the summer) causing varying yields across regions of the UK.

Wheat

The decreased wheat yield and minimal change in area resulted in a 5.1% drop in production, from 14.8 million tonnes in 2017 to 14.1 million tonnes in 2018.

Barley

Winter and spring barley both saw decreased levels of production in 2018. A 7.7% drop in the production of spring barley in 2018 to 3.9 million tonnes, in spite of a small 1.1% increase in the area, was caused by an 8.7% fall in the spring barley yield. Winter barley production dropped by 8.0% to 2.7 million tonnes in 2018; this is mostly explained by a fall in the winter barley area of 6.7% to 394 thousand hectares, as well as a slightly lower yield of 6.9 tonnes per hectare in 2018 compared to 7.0 tonnes per hectare in 2017. The combined total yield for barley sits at 5.7 tonnes per hectare for 2018, below the five year average of 6.2 tonnes per hectare.

Oats

The planted area of oats had the largest proportional increase of the major cereal crops rising by 7.8% to 174 thousand hectares. The UK yield decreased by 9.2% to 4.9 tonnes per hectare, caused by a

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decrease in the England yield of 11.6% which was offset by smaller decreases in Scotland and Northern Ireland. This resulted in a small estimated production decrease of 2.1% to 0.9 million tonnes in 2018.

Oilseed Rape

The provisional oilseed rape harvest has shown a decrease of 5.3% to 2.1 million tonnes in 2018. There was an increase of 6.8% in the planted area, however there was a decrease in total oilseed rape yield of 11.4%, from 3.9 tonnes per hectare in 2017 to 3.4 tonnes per hectare in 2018. This is similar to the five year average.

Horticultural crops (Tables 5 - 7)

In 2018 the total area of horticultural crops decreased by 0.3% to 167 thousand hectares. Vegetables and salad for human consumption make up the majority (70%) of this area and remained virtually unchanged at 117 thousand hectares in 2018.

Livestock (Tables 8 - 12)

The total number of cattle and calves in the UK fell by 1.1% in 2018 to 9.9 million. The female breeding herd accounts for over a third of the total cattle and stands at 3.4 million head in 2018.

For pigs, the female breeding herd in 2018 saw a decrease of 1.6% compared to 2017, but with fattening pigs increasing by 1.3% to 4.5 million head, the total number of pigs increased by 1.0% and now stands at just over 5.0 million head.

In 2018, the number of lambs in the UK decreased by 2.3% to 16.9 million and the female breeding flock decreased by 1.0%. This led to a total UK sheep and lamb population of 34.3 million, a decrease of 1.5% compared to 2017.

Estimates for poultry, horses, goats, farmed deer and camelids will be included in the final publication provisionally scheduled for 20 December 2018.

Agricultural workforce (Table 13)

The total number of people working on agricultural holdings will be included in the final publication provisionally scheduled for 20 December 2018.

Key country level changes

Figure 1 shows how the UK percentage change for certain items compares to the country level changes. Although Scotland and Northern Ireland are showing decreases in wheat area, these have been offset by the increase seen in the wheat area in England resulting in the UK total increasing slightly. This is due to the largest proportion of this crop (93%) being grown in England.

Figure 1: Percentage changes between 2017 and 2018 by UK country

	UK % change	England % change	Scotland % change	N. Ireland % change
Wheat area	0.3	1.0	-8.9	-13.2
Potatoes area	-2.1	-0.7	-6.6	-8.8
Pigs	1.0	1.7	-2.8	-1.6
Sheep	-1.5	-0.7	-5.6	-1.6
Cattle	-1.1	-0.8	-1.5	-2.2

Note: Wales do not produce provisional results for crop areas or livestock numbers. Therefore 2017 figures for Wales are used to calculate provisional UK totals for 2018.

Data uses, next publications and survey methodology (pages 18 - 23)

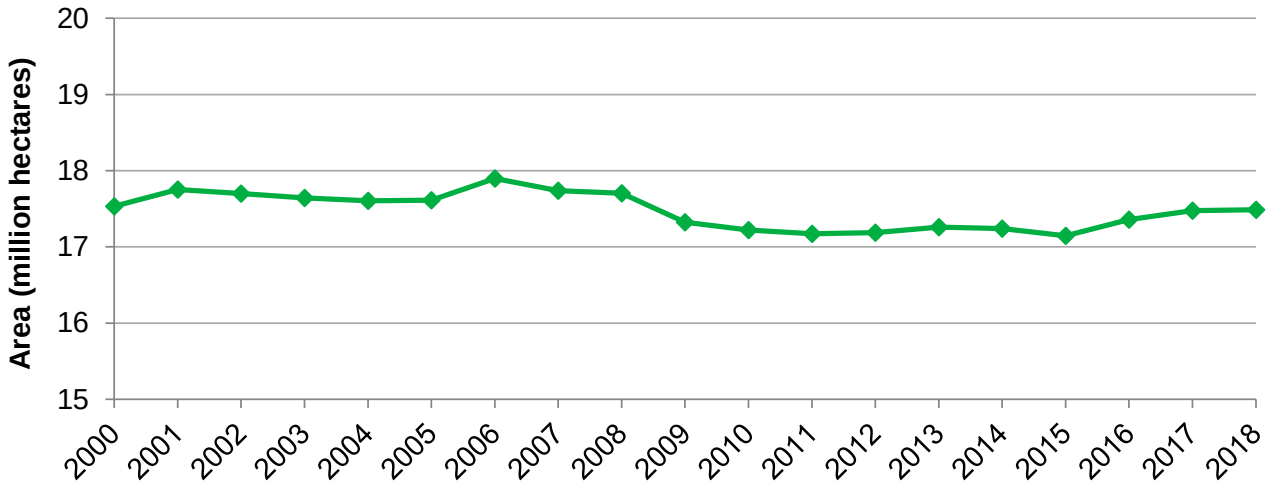
Information on how each of the UK countries run their surveys can be found on pages 18 to 23 along with data uses and upcoming publication dates.

Detailed results

Utilised agricultural area

The utilised agricultural area is made up of all arable and horticultural crops, uncropped arable land, land used for outdoor pigs, temporary and permanent grassland and common rough grazing. In June 2018 the total utilised agricultural area in the UK was almost 17.5 million hectares, covering 72% of the UK land area. Figure 2 shows that the total utilised agricultural area has remained between 17 and 18 million hectares since 2000.

Figure 2: Total utilised agricultural area at 1 June 2000 to 2018

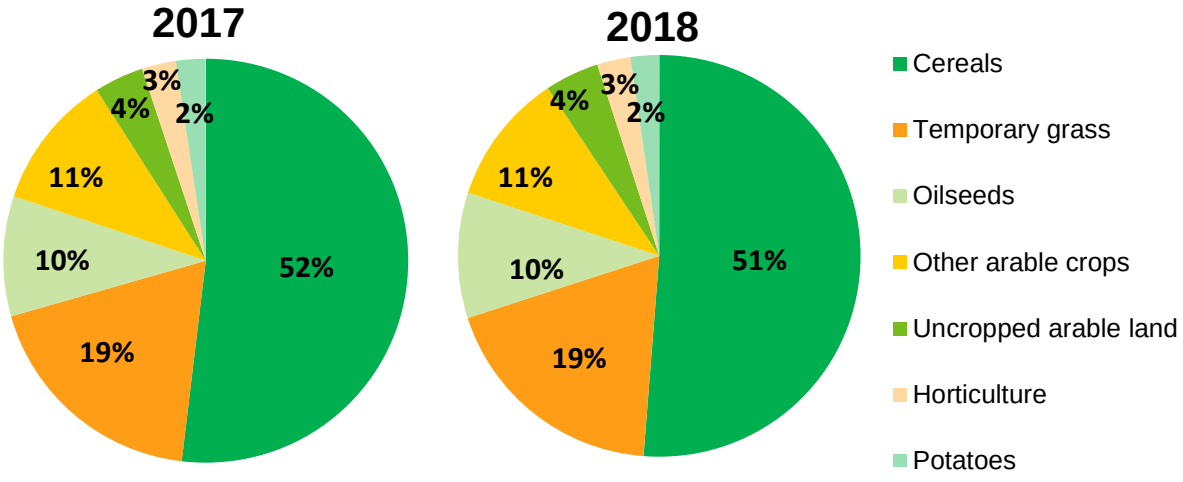


Croppable area

Croppable area consists of cereals, oilseed, potatoes, other arable crops, horticultural crops, uncropped arable land and temporary grass. In 2018, the croppable area rose by 1.2% to 6.2 million hectares. This represents over a third of the UK utilised agricultural area.

Figure 3 shows that on the whole the proportion of croppable land used for each purpose remained similar between 2017 and 2018, however some categories did see large value changes (Table 1). The largest proportional change in area was uncropped arable land which increased by 11.5%, however it still only accounts for 4% of the total croppable area. Potatoes saw the largest decrease of 2.1%.

Figure 3: Breakdown of croppable area at 1 June 2018 compared to 2017



Cereals and oilseeds

Figure 4: Crop areas in the UK between 1984 and 2018

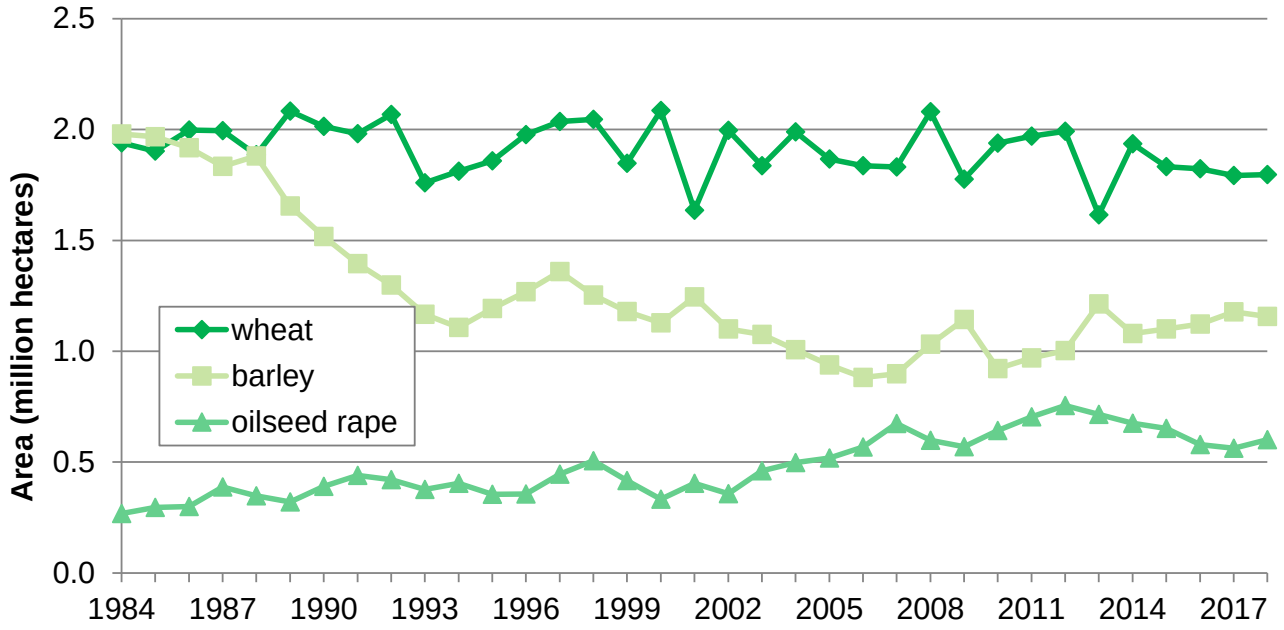
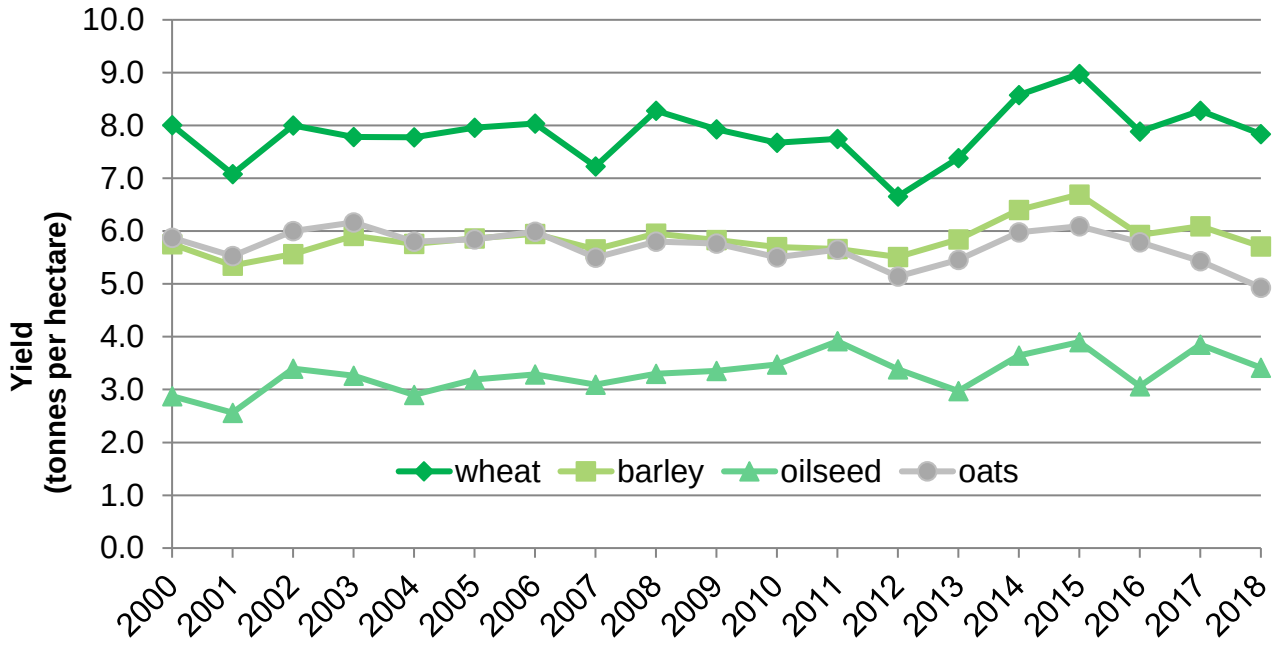


Figure 4 shows the area of the three most popular crops grown in the UK; wheat, barley and oilseed rape. Since 1984 the wheat area has fluctuated between approximately 1.6 and 2.1 million hectares. The area of barley has declined considerably over the years. However, there has been a modest increase over the last 4 years and the total barley area now stands at 1.2 million hectares. The oilseed rape area increased from 269 thousand hectares in 1984, reaching a peak of 756 thousand hectares in 2012. However since then the area has decreased every year followed by a small increase in 2018, which means the area now stands at 601 thousand hectares.

As a whole, yields for all cereal crops are still down from the peak of 2015. In addition, the overall yield for total cereals is showing a 5.4% decrease from 7.2 tonnes per hectare in 2017 to 6.8 tonnes per hectare in 2018. The 2018 harvest has been affected by the weather this year (high rainfall in spring and a long dry spell with high temperatures in the summer) causing varying yields across regions of the UK. As a result of the decrease in yield, total cereal production has decreased by 5.5% to 21.7 million tonnes.

As expected the yields for individual crops differ greatly (Figure 5). The UK wheat yield reached a peak in 2015 of 9.0 tonnes per hectare, the highest it has been in the past 25 years. The provisional 2018 estimate is a wheat yield of 7.8 tonnes per hectare, a decrease of 5.3% on the 2017 level and below the five year average. The UK barley yield also peaked in 2015 at 6.7 tonnes per hectare. Since then it has dropped to an estimated 5.7 tonnes per hectare. Yields for oilseed rape show a decrease of 11.4% on the 2017 level of 3.9 tonnes per hectare to now stand at an estimated 3.4 tonnes per hectare, which is fairly similar to the five year average.

Figure 5: UK crop yields between 2000 and 2018



Wheat
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Barley
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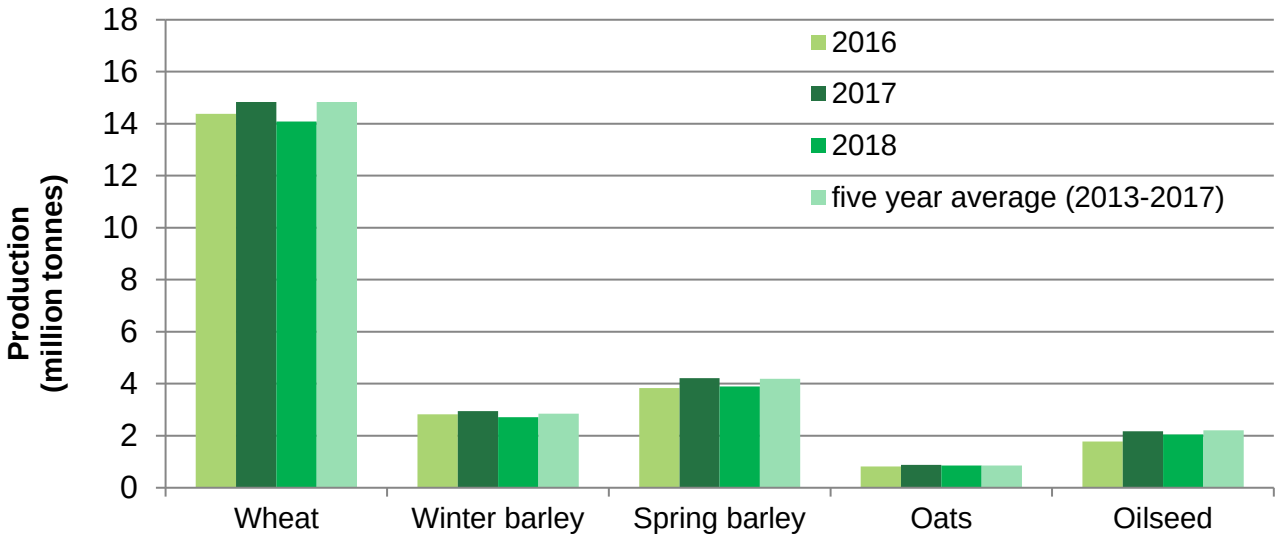
Oats
The planted area of oats had the largest proportional increase of the major cereal crops rising by 7.8% to 174 thousand hectares. The UK yield decreased by 9.2% to 4.9 tonnes per hectare, caused by a decrease in the England yield of 11.6% which was offset by smaller decreases in Scotland and Northern Ireland. This resulted in a small estimated production decrease of 2.1% to 0.9 million tonnes in 2018.

The combined effect of changes in areas planted and the achieved yields can be seen in the production estimates in figure 6 and table 4.

Figure 6: Estimates of crop production in the UK: 2016 to 2018



Oilseed Rape

The provisional oilseed rape harvest has shown a decrease of 5.3% to 2.1 million tonnes in 2018. There was an increase of 6.8% in the planted area, however there was a decrease in total oilseed rape yield of 11.4%, from 3.9 tonnes per hectare in 2017 to 3.4 tonnes per hectare in 2018. This is similar to the five year average.

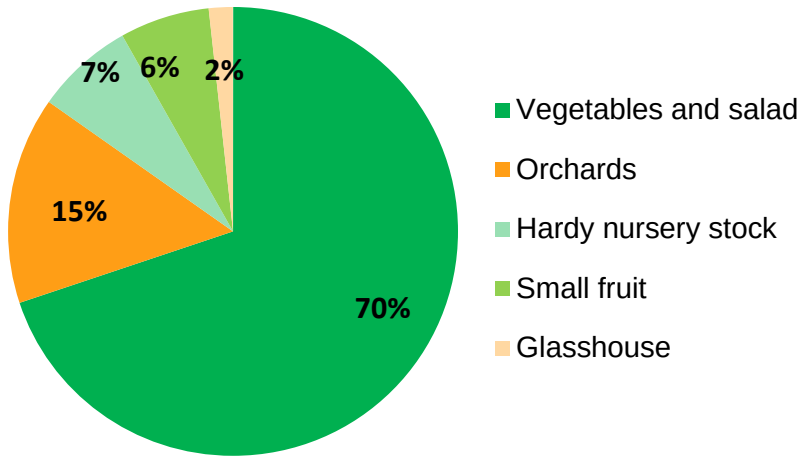
Minor cereal crops

Grain production from the minor cereal crops (rye, mixed corn and triticale) usually comprises between 0.5% and 0.6% of the UK total cereal estimate. Provisional estimates for the 2018 harvest fit into this range, however, minor crop estimates are not considered as reliable as the other surveyed crops as outlined in the methodology.

Horticultural crops

The total area of horticultural crops saw a decrease of 0.3% between 2017 and 2018 and now stands at 167 thousand hectares.

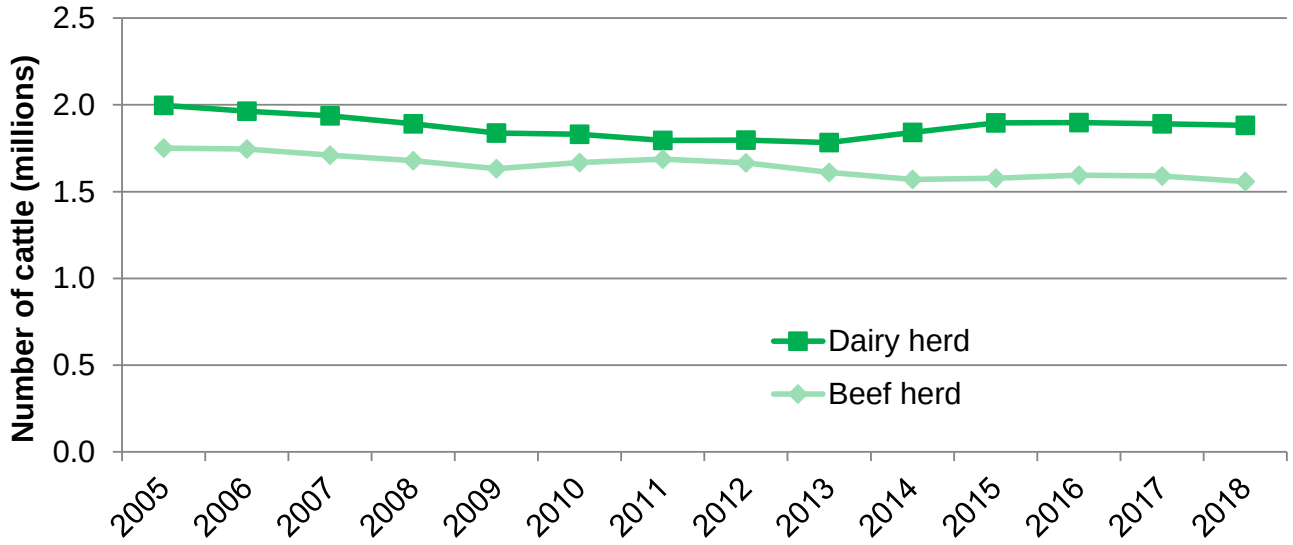
Figure 7: Breakdown of total horticultural area at 1 June 2018



The area of vegetables and salad for human consumption remained virtually unchanged between 2017 and 2018 and accounts for 70% of the total horticultural area (see Figure 7). Orchards and small fruit together account for a further 21% of the horticultural area with hardy nursery stock and glasshouse accounting for the remaining 7% and 2% respectively.

Cattle

Figure 8: Dairy and beef herd numbers at June 2005 to 2018



In 2018, the total number of cattle and calves in the UK is 9.9 million head. The breeding herd accounts for over a third of total cattle and fell by 1.1% to 3.4 million in 2018. The beef and dairy herds have remained largely unchanged in recent years at approximately 1.6 and 1.9 million animals respectively (Figure 8).

Pigs

The total number of pigs in the UK increased by 1.0% in 2018 and now stands at just over 5 million animals. The main reason for this was the 1.3% increase in fattening pigs, largely due to the 2.2% increase in the England figures which account for 80% of the UK fatteners.

Sheep

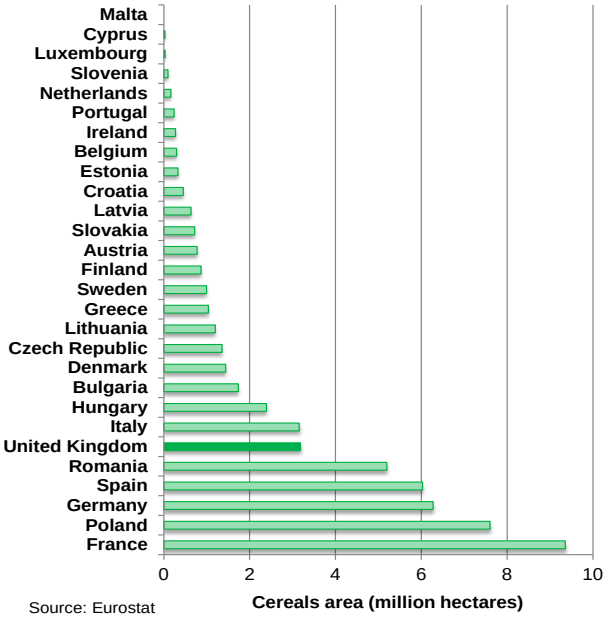
In 2018, the number of lambs in the UK decreased by 2.3% to 16.9 million and the female breeding flock decreased by 1.0%. This led to a total UK sheep and lamb population of 34.3 million, a decrease of 1.5% compared to 2017.

Comparisons to other EU countries

Data on livestock populations are collected each year under EU Regulation 1165/2008 (cattle, pigs and sheep) and 543/2009 (crops and land). Therefore, results can be compared across EU Member States. Data are available to search and download on the Eurostat website at http://ec.europa.eu/eurostat/web/agriculture/data/main-tables

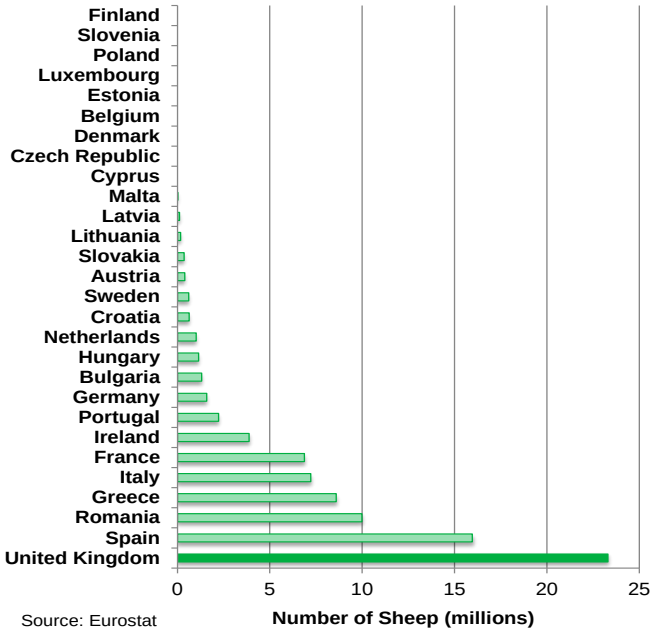
According to the data from 2017, the UK is the 6th largest cereal producer, the largest producer of sheep and the 3rd largest producer of cattle of the EU 28 Member States. Figures 9 to 11 below show the comparison of these activities across all Member States.

Figure 9: Cereal areas in 2017 by EU Member State



Source: Eurostat

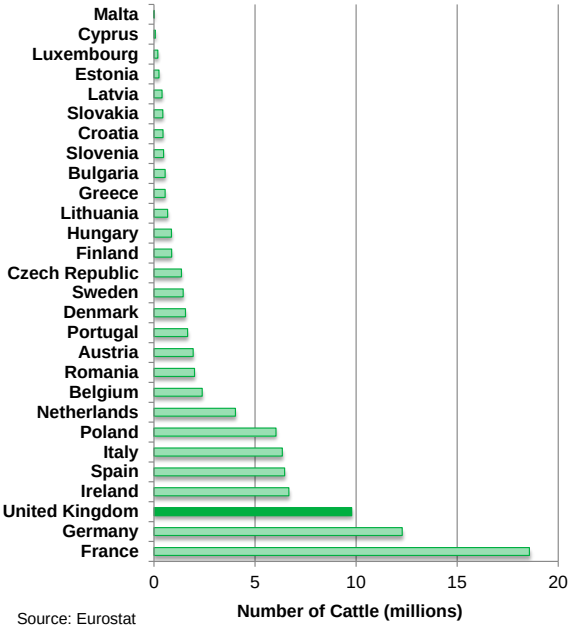
Figure 10: Number of sheep in 2017 by EU Member State



Source: Eurostat

(data in figures 10 and 11 refer to December 2017, not June 2017)

Figure 11: Number of cattle in 2017 by EU Member State



Source: Eurostat

Results Tables

Table 1: Summary of land use on agricultural holdings on 1 June

Thousand hectares

	2016	2017	2018	% change 2018-17
Utilised agricultural area [a]	**17 360**	**17 476**	**17 487**	**0.1**
Total agricultural land (including common rough grazing)	**18 662**	**18 835**	**18 834**	**0.0**
Common rough grazing	**1 199**	**1 198**	**1 193**	**-0.4**
Total area on agricultural holdings	**17 463**	**17 637**	**17 641**	**0.0**
Total croppable area	**6 073**	**6 131**	**6 203**	**1.2**
Total crops	**4 667**	**4 745**	**4 771**	**0.5**
Arable crops	4 505	4 577	4 604	0.6
Cereals	3 132	3 181	3 178	-0.1
Oilseeds	608	590	627	6.4
Potatoes	139	145	142	-2.1
Other arable crops	627	661	656	-0.8
Horticultural crops	162	168	167	-0.3
Uncropped arable land [b]	**262**	**241**	**269**	**11.5**
Temporary grass under 5 years old	**1 144**	**1 144**	**1 163**	**1.6**
Permanent grassland (incl. rough grazing)	**10 079**	**10 138**	**10 080**	**-0.6**
Grass over 5 years old	6 118	6 135	6 187	0.8
Sole right rough grazing [c]	3 961	4 003	3 894	-2.7
Other land on agricultural holdings	**1 312**	**1 368**	**1 358**	**-0.8**
Woodland	978	1 037	1 017	-2.0
Land used for outdoor pigs	10	10	11	4.4
All other non-agricultural land	323	321	331	3.1

(a) Includes all arable and horticultural crops, uncropped arable land, common rough grazing, temporary and permanent grassland and land used for outdoor pigs (excludes woodland and other non-agricultural land).

(b) Includes all arable land not in production, including GAEC12 land, game strips, wild bird cover and game cover.

(c) Classified as mountains, hills, heathland or moorland.

Table 2: Area of arable crops on agricultural holdings on 1 June

Thousand hectares

	2016	2017	2018	% change 2018-17
Total arable crops	**4 505**	**4 577**	**4 604**	**0.6**
Cereals	**3 132**	**3 181**	**3 178**	**-0.1**
Wheat	1 823	1 792	1 797	0.3%
Barley	1 122	1 177	1 157	-1.7%
winter	439	423	394	-6.7%
spring	683	754	762	1.1%
Oats	141	161	174	7.8%
Minor cereals [(a)]	45	52	51	-1.8%
Oilseed crops	**608**	**590**	**627**	**6.4**
Oilseed rape	579	562	601	6.8
winter	570	554	593	7.0
spring	9	9	8	-6.1
Linseed	27	26	25	-6.2
Borage	1	1	2	82.9
Potatoes	**139**	**145**	**142**	**-2.1**
Other (non-horticultural) crops	**627**	**661**	**656**	**-0.8**
Sugar beet (not for stock feeding)	86	111	116	4.5
Field beans	177	193	158	-18.0
Peas for harvesting dry	51	40	41	1.4
Maize (incl. fodder and grain maize)	194	197	224	13.3
Root crops, brassicas and fodder beet for stock feeding	44	42	44	5.1
Other crops for stock feeding [(b)]	36	39	40	1.1
All other arable crops [(c)]	40	39	34	-12.4

(a) Minor cereals are a total of rye, mixed corn and triticale.

(b) Includes leguminous forage crops.

(c) Includes short rotation coppice, miscanthus and crops for aromatic or medicinal use.

Table 3: Yield of cereals and oilseed rape on agricultural holdings

Tonnes per hectare

	2014	2015	2016	2017	2018	% change 2018-17
Cereals[a]	**7.7**	**8.0**	**7.0**	**7.2**	**6.8**	**-5.4**
Wheat	8.6	9.0	7.9	8.3	7.8	-5.3
Barley	6.4	6.7	5.9	6.1	5.7	-6.3
winter	7.2	7.7	6.4	7.0	6.9	-1.4
spring	5.9	6.0	5.6	5.6	5.1	-8.7
Oats	6.0	6.1	5.8	5.4	4.9	-9.2
Minor cereals [b]	5.0	3.5	2.7	2.3	3.8	65.5
Oilseed rape[c]	**3.6**	**3.9**	**3.1**	**3.9**	**3.4**	**-11.4**

(a) All cereal production estimates have been standardised to 14.5% moisture content.
(b) Minor cereals are a total of rye, mixed corn and triticale.
(c) Oilseed rape production estimates have been standardised to 9% moisture content.

Table 4: Production of cereals and oilseed rape on agricultural holdings

Thousand tonnes

	2014	2015	2016	2017	2018	% change 2018-17
Cereals[a]	**24 468**	**24 734**	**21 967**	**22 999**	**21 742**	**-5.5**
Wheat	16 606	16 444	14 383	14 837	14 086	-5.1
Barley	6 911	7 370	6 655	7 169	6 606	-7.9
winter	3 094	3 382	2 823	2 948	2 711	-8.0
spring	3 817	3 988	3 832	4 220	3 895	-7.7
Oats	820	799	816	875	857	-2.1
Minor cereals [b]	131	122	110	119	194	62.5
Oilseed rape[c]	**2 460**	**2 542**	**1 775**	**2 167**	**2 051**	**-5.3**

(a) All cereal production estimates have been standardised to 14.5% moisture content.
(b) Minor cereals are a total of rye, mixed corn and triticale.
(c) Oilseed rape production estimates have been standardised to 9% moisture content.

Table 5: Area of fruit and vegetables grown in the open on agricultural holdings on 1 June

Thousand hectares

	2016	2017	2018	% change 2018-17
Total fruit and vegetables	**148**	**152**	**152**	**0.0**
Orchards [(a)]	**25.1**	**24.4**	**24.2**	**-1.0**
Small fruit [(b) (c)]	**10.0**	**10.7**	**10.8**	**0.5**
Strawberries	3.4	3.1	3.1	-3.0
Other small fruit (incl. gooseberries and blackberries)	6.6	7.6	7.8	2.0
Vegetables and salad for human consumption[(b)(d)]	**113**	**117**	**117**	**0.2**
Peas and beans	37	39	39	1.1
All other vegetables and salad	75	78	78	-0.3

(a) Includes both commercial and non-commercial. Commercial orchards are those from which growers intend to sell fruit.

(b) Due to the small areas grown, some UK countries do not collect data on individual crops in this category. For these countries the areas are included in this total estimate only. Therefore the total estimate does not always sum to the component parts.

(c) Small fruit includes crops grown in Spanish tunnels.

(d) These figures relate to land usage on 1 June and are not necessarily good indicators of annual production as more than one crop may be obtained in each season, a crop may overlap two seasons, or may be planted after 1 June.

Table 6: Area of hardy nursery stock on agricultural holdings on 1 June

Thousand hectares

	2016	2017	2018	% change 2018-17
Total hardy nursery stock, bulbs and flowers [(a)]	**11.5**	**12.5**	**11.9**	**-5.1**
Hardy nursery stock	5.3	5.0	4.6	-7.5
Bulbs and flowers grown in the open	5.8	7.1	6.8	-3.7

(a) Due to the small areas grown, some UK countries do not collect data on individual crops in this category. For these countries the areas are included in this total estimate only. Therefore the total estimate does not always sum to the component parts.

Table 7: Area of glasshouses and protected crops on agricultural holdings on 1 June [(a) (b)]

Hectares

	2016	2017	2018	% change 2018-17
Total glasshouse area on 1 June [(c)]	**2 747**	**2 807**	**2 900**	**3.3**
Vegetables, salad and fruit	2 055	2 098	2 244	7.0
Flowers, foliage and other plants	522	546	475	-13.0
Not in use on 1 June	141	136	154	13.6

(a) These figures relate to land usage on 1 June and are not necessarily good indicators of annual production as more than one crop may be obtained in each season, a crop may overlap two seasons, or may be planted after 1 June.

(b) 'Glasshouse' includes any fixed or mobile structure high enough to walk through, which is glazed or clad with film, rigid plastics or other glass substitutes. It excludes lights, low plastic tunnels, French and Spanish tunnels. These are reported as crops grown in the open (table 5).

(c) Due to the small areas grown, some UK countries do not collect data on individual crops in this category. For these countries the areas are included in this total estimate only. Therefore the total estimate does not always sum to the component parts.

Table 8: Cattle and calves on agricultural holdings on 1 June [(a)]

Thousands

	2016	2017	2018	% change 2018-17
Total cattle and calves	**10 033**	**10 004**	**9 891**	**-1.1**
All female cattle	**7 250**	**7 240**	**7 167**	**-1.0**
Aged 2 years or more	**4 204**	**4 193**	**4 149**	**-1.0**
Total breeding herd	3 493	3 481	3 441	-1.1
- Beef herd	1 596	1 589	1 558	-1.9
- Dairy herd	1 897	1 891	1 883	-0.5
Other female cattle	712	712	708	-0.6
- Beef	365	366	378	3.3
- Dairy	346	346	330	-4.7
Aged between 1 and 2 years	**1 442**	**1 464**	**1 443**	**-1.5**
- Beef	872	898	921	2.7
- Dairy	570	567	522	-8.0
Less than 1 year	**1 603**	**1 583**	**1 575**	**-0.5**
- Beef	1 015	1 040	1 032	-0.8
- Dairy	588	543	543	0.1
All male cattle	**2 783**	**2 763**	**2 723**	**-1.4**
Aged 2 years or more	364	355	355	0.1
Aged between 1 and 2 years	1 032	1 051	1 035	-1.5
Less than 1 year	1 386	1 357	1 333	-1.8

(a) These figures have been sourced from the Cattle Tracing System (CTS) in England, Wales and Scotland and the equivalent APHIS system in Northern Ireland.

Table 9: Pigs on agricultural holdings on 1 June

Thousands

	2016	2017	2018	% change 2018-17
Total pigs	**4 866**	**4 969**	**5 018**	**1.0**
Breeding pigs	**509**	**512**	**504**	**-1.4**
Female breeding herd	**415**	**417**	**410**	**-1.6**
Sows in pig	295	297	289	-2.7
Gilts in pig	55	55	58	4.6
Other sows [(a)]	65	64	63	-2.3
Other breeding pigs	**94**	**95**	**95**	**-0.4**
Boars being used for service	15	14	13	-5.8
Gilts intended for first time breeding	79	81	82	0.5
Fattening pigs (incl. barren sows)	**4 356**	**4 457**	**4 514**	**1.3**

(a) Either being suckled or dry sows being kept for further breeding.

Table 10: Sheep and lambs on agricultural holdings on 1 June

Thousands

	2016	2017	2018	% change 2018-17
Total sheep and lambs	**33 943**	**34 832**	**34 302**	**-1.5**
Female breeding flock	**16 304**	**16 669**	**16 497**	**-1.0**
Ewes intended for further breeding or for slaughter	13 460	13 762	13 720	-0.3
Ewes intended for first time breeding	2 844	2 907	2 778	-4.5
Other sheep and lambs	**17 639**	**18 163**	**17 805**	**-2.0**
Lambs under 1 year old	16 840	17 340	16 936	-2.3
Rams	409	417	416	-0.2
Other sheep 1 year and over	389	405	453	11.7

Table 11: Poultry on agricultural holdings on 1 June [(a)]

Thousands

	2016	2017	2018	% change 2018-17
Total poultry	**172 607**	**181 818**	**tba**	
Total breeding and laying fowl	**50 798**	**52 939**	**tba**	
Hens and pullets laying eggs for eating	38 058	39 510	tba	
Breeding flock	12 740	13 429	tba	
Table chickens (broilers)	**110 639**	**117 619**	**tba**	
Other poultry	**11 170**	**11 260**	**tba**	
Ducks	1 993	2 301	tba	
Geese	152	160	tba	
Turkeys	4 228	4 149	tba	
All other poultry	4 798	4 651	tba	

tba: to be announced. Estimates for poultry numbers will be published with the final results provisionally scheduled for 20 December 2018. The table has been included here to show historic results only.

(a) Due to production cycles, subgroups within the poultry population are often volatile as the 'point in time' nature of the June Survey can lead to large variations in the numbers in each category.

Table 12: All other livestock on agricultural holdings on 1 June

Thousands

	2016	2017	2018	% change 2018-17
Total other livestock	**426**	**422**	**tba**	
Goats	104	105	tba	
Farmed deer	31	31	tba	
Horses	268	258	tba	
Any livestock not recorded elsewhere [(a)]	24	27	tba	
- of which alpacas	12	13	tba	
- of which llamas	2	2	tba	

tba: to be announced. Estimates for poultry numbers will be published with the final results provisionally scheduled for 20 December 2018. The table has been included here to show historic results only.

(a) Includes camelids, donkeys and mules.

Table 13: Number of people working on agricultural holdings on 1 June

Number of people (thousands)

	2016	2017	2018	% change 2018-17
Total number of people working on agricultural holdings	**466**	**474**	**tba**	
Farmers, partners, directors and spouses	**290**	**294**	**tba**	
Full time	139	141	tba	
Part time[(c)]	151	153	tba	
Regular employees, salaried managers and casual workers	**176**	**180**	**tba**	
Regular employees[(a)(b)]	na	na	na	
- Full time	na	na	na	
- Part time[(c)]	na	na	na	
Casual workers[(b)]	na	na	na	

tba: to be announced. Estimates for poultry numbers will be published with the final results provisionally scheduled for 20 December 2018. The table has been included here to show historic results only.

(a) Not all UK countries collect separate estimates for salaried managers. These figures are included with regular employees.

(b) From 2016 Wales no longer provide a breakdown for these categories, for more information please see their publication: http://gov.wales/statistics-and-research/survey-agricultural-horticulture/?lang=en

(c) Part time is defined as working less than 39 hours per week.

Data uses and users

Land

- Data on crop areas (both arable and horticultural) help us monitor the long term trends in cropping. Amongst many other things, this helps us assess the impacts of the abolition of formal set-aside.
- The data will enable us to assess how land areas vary across the UK regions and in different geographic areas (such as the Uplands, National Parks, and River Basin Districts).
- The cereals and oilseed rape harvest estimates are heavily used by the cereals industry to monitor the availability of grain throughout the year.
- Any changes in the agricultural sector also affect people. For many, it is their livelihood and a way of life.

Livestock

- Data from the June Survey help us monitor changes in livestock populations over time and the effects of e.g. CAP reform on the industry.
- The numbers are also used to make forecasts of meat and milk production to inform industry of the availability of supply which affects prices.
- Livestock distributions across the UK help assess the risk of veterinary disease and to control outbreaks.
- The data are also used heavily in calculations of the greenhouse gas and ammonia emissions inventories.

Results from the England June Survey of Agriculture and Horticulture also have a wide range of uses and users with requests for data being made on a daily basis. A document providing information of specific uses and users can be found via the following link: https://www.gov.uk/government/statistical-data-sets/structure-of-the-agricultural-industry-in-england-and-the-uk-at-june.

Other survey results and publications

Results from all the Defra farming surveys can be viewed on the Defra website via the following link: https://www.gov.uk/government/publications?publication_filter_option=statistics. This also contains details of future publication dates.

The next Farming Statistics publications due from the June Survey of Agriculture and the Cereal and Oilseed Rape Production Survey are shown below. Please note that the publication dates are provisional and subject to change.

England Publications

- 25 October 2018: Farming Statistics final land use, livestock populations and agricultural workforce at 1 June 2018 – England.

UK Publications

- 20 December 2018: Farming Statistics final crop areas, yields, livestock populations and agricultural workforce at 1 June 2018 – United Kingdom.

More detailed results from the June Survey can be found at: https://www.gov.uk/government/statistical-data-sets/structure-of-the-agricultural-industry-in-england-and-the-uk-at-june. This includes various time series of crop areas and livestock numbers dating back as early as 1866 and detailed geographical breakdowns of the results.

Methodology: June Survey of Agriculture and Horticulture

Data on crop areas and livestock populations are collected in the June Survey of Agriculture and Horticulture carried out by each of the UK agriculture departments. The methodology adopted by each country is below.

England

England results are the final results from the June Survey of Agriculture and Horticulture in 2018. The June Survey of Agriculture and Horticulture was historically a postal survey run annually. However from 2011 onwards, the survey has been run predominantly online with an option for farmers to complete a paper form if they preferred.

Approximately 25 thousand 'commercial' holdings were asked to complete the survey in 2018. Commercial holdings are defined as those with significant levels of farming activity, i.e. holdings with more than five hectares of agricultural land, one hectare of orchards, 0.5 hectares of vegetables or 0.1 hectares of protected crops, or more than 10 cows, 50 pigs, 20 sheep, 20 goats or 1,000 poultry.

Checks were carried out to ensure the sample was representative across farm size. The size of a farm is determined by its Standard Labour Requirement (SLR). In the SLR system, each livestock type and land-use has a theoretical amount of labour required each year. This value is multiplied by the land area or livestock numbers and then summed to give the SLR for the holding. The SLR represents the typical number of full time workers required on the holding.

The small farms (those with low SLRs) were sampled at a lower rate and the sampling rate increased with farm size as in table 14 below. This method minimises the burden on farmers whilst maximising the coverage. To improve the coverage of the pig and poultry sectors, a special data collection exercise was run to collect data from a central point for some of the largest companies.

Table 14: June 2018 sample design

Stratum	Description	Sampling rate (%)	Population size
1	SLR < 0.5	10%	48 926
2	SLR >= 0.5 and < 1	15%	16 686
3	SLR >= 1 and < 2	25%	14 682
4	SLR >= 2 and < 3	37%	7 810
5	SLR >= 3 and < 5	54%	7 648
6	SLR >= 5	66%	7 900
10	SLR unknown	46%	3 501
All		**23%**	**107 153**

The results in this statistical release are based on responses from almost 15 thousand commercial holdings, representing a response rate of 59%.

The data are subject to rigorous validation checks which identify inconsistencies within the data or large year-on-year changes. Any records that have not been cleaned by the results production stage are excluded from the analysis.

Population totals are estimated for each question on the survey to account for the non-sampled and non-responding holdings. This survey uses the technique known as ratio raising, in which the trend between the sample data and base data (previous year's data) is calculated for each stratum. The calculated ratio is then applied to the previous year's population data to give England level estimates.

For holdings where we do not have base data (new holdings or long-term non-responders) the sample estimates are raised according to the inverse sampling fraction.

Cattle results are sourced from the Cattle Tracing System (CTS). The data include returns from all holdings with cattle so are not subject to survey error. More information on the use of this administrative data can be found on the "survey notes and guidance" web page via the following link: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/182225/defra-stats-foodfarm-landuselivestock-june-results-BovineRegisters.pdf

Final crop areas and cattle, sheep and pig populations from the England 2018 June Survey were published on 13 September 2018 and can be viewed on our website via the following link: https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs/series/structure-of-the-agricultural-industry.

More details on the June Survey methodology can be found at: https://www.gov.uk/structure-of-the-agricultural-industry-survey-notes-and-guidance.

Scotland

Data collection

The June Agricultural Census is conducted annually by the Scottish Government's Rural & Environment Science & Analytical Services (RESAS). Data for the June Census is collected from three sources:

- Land data extracted from the Single Application Form (SAF) database for around 22,900 holdings that were claiming Support Payments. These data are accurate as farmers can face penalties for supplying incorrect data. A cut-down survey form is sent to those holdings that completed a SAF in the previous year (as that year's SAF data were unavailable at the time census forms were issued) so that additional data on livestock and labour could be collected.
- From the remaining holdings who didn't complete a SAF in the previous year (around 28,300 holdings), a sample of over 40 per cent of these holdings were sent a full census form covering land, livestock and labour.
- Cattle data for the census were obtained through the Cattle Tracing System (CTS), an administrative data source held by the British Cattle Movement Service (BCMS) which records cattle movements across Great Britain.

In terms of area, returns are received for around 88 per cent of land-use data, 100 per cent of cattle data, and 64 per cent of other data. Final June 2018 results for Scotland were published on 9 October 2018 by the Scottish Government Rural and Environment Science and Analytical Services (RESAS) division.

Contact details - Saughton House (Q Spur), Broomhouse Drive, Edinburgh, EH11 3XD (telephone: 0300 244 9709, email: agric.stats@scotland.gsi.gov.uk).

Wales

Wales do not produce provisional results for crop areas and livestock numbers so 2017 figures for Wales have been carried forward to allow UK totals to be calculated for 2018. Final results for Wales will be published by the Welsh Government in November 2018 at: www.wales.gov.uk/statistics. The publication date has not been finalised. For further details contact Agricultural Statistics, Welsh Government, Cathays Park, Cardiff, CF10 3NQ (telephone: 03000 252244).

Northern Ireland

In 2018 the Northern Ireland Agricultural and Horticultural Survey was conducted as a sample survey. A total of 20,200 forms were issued with provisional results based on 10,000 returned forms. Data for the cattle section is a complete census as it is extracted from the APHIS cattle tracing database. Data for the pig and poultry sections are also complete censuses extracted from the NI Annual Inventory of Pigs and Update of NI Bird Register respectively. Provisional results were published on 30 August 2018 by the Department of Agriculture, Environment and Rural Affairs for Northern Ireland, Dundonald House, Belfast, BT4 3SB (telephone: Belfast (028) 905 25450) and are available on the internet at: www.daera-ni.gov.uk/topics/statistics/statistical-bulletins. Final results will be published on 29 November 2018.

Methodology: Cereal and Oilseed Rape Production Survey

England

Results are based on provisional results from the Cereal and Oilseed Rape Production Survey, a representative sample of cereal and oilseed rape growers across English regions and farm sizes. These provisional results are based on responses from 1,153 farms (29% response rate) across the country (see table 15).

Table 15: Provisional response rate for Cereal and Oilseed Rape Production Survey 2018 by region

English region	Number sampled	Number of responses	Response rate (%)
North East	195	51	26
North West and Merseyside	259	75	29
Yorkshire and the Humber	610	180	30
East Midlands	623	190	30
West Midlands	360	103	29
Eastern	812	231	28
South East and London	427	122	29
South West	714	201	28
Total	4000	1153	29

The Cereal and Oilseed Rape Production Survey gathers data on production tonnages and moisture content for the various cereal and oilseed rape crops and seeks confirmation of the planted areas for these crops gathered from the June Survey of Agriculture and Horticulture. All moisture contents are standardised to ensure production estimates are comparable. Cereal production estimates are standardised to 14.5% moisture content and oilseed rape to 9% moisture content, with production tonnages being adjusted accordingly. These data are then used to calculate regional yield estimates for each crop type. Yield estimates are applied to regional June crop areas to derive England production estimates for each of the cereal and oilseed rape crops.

Wales

Wales do not produce provisional yield estimates for cereal and oilseed rape crops so 2017 figures for Wales have been carried forward to allow UK totals to be calculated for 2018. Final results for Wales will be published by the Welsh Government in November 2018 at: www.wales.gov.uk/statistics. The publication date has not been finalised. For further details contact Agricultural Statistics, Welsh Government, Cathays Park, Cardiff, CF10 3NQ (telephone: 03000 252244).

Scotland

The 2018 estimates of production are based on provisional crop areas from the 2018 June Survey of Agriculture and Horticulture, along with crop yield estimates from discussions between Scottish Government analysts, industry experts and trade organisations
.http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubCerealHarvest

Northern Ireland

Areas are based on provisional estimates from the 2018 June Survey of Agriculture and Horticulture. Production figures are based on yield estimates from the Northern Ireland Department of Agriculture, Environment and Rural Affairs.

Minor crops
The England cereals and oilseed production survey collects the same elements for rye as it does for the main cereal crops. Mixed corn and triticale are included in the minor cereals estimates of yield and production in tables 3 and 4. Mixed corn and triticale estimates are not derived from survey returns. The proportionate change in English winter barley yield from 2017 to 2018 is applied to the 2017 estimate of mixed corn yield. Correspondingly the proportionate change in English wheat yield is applied to the 2017 estimate of triticale. The derived yields are applied to the areas of mixed corn and triticale that have been estimated from England June survey returns.

England survey forms were sent to 100 holdings that reported a rye area in their June survey return. To date, useable returns have been received from 22 holdings; a response rate of 22% which is lower than the response rate of the survey as a whole of 29% at the time of processing the results for the provisional estimate.

Of these 22 returns 11 reported some cereal production from their rye crop. In the remaining 11 holdings all the rye was harvested wholecrop. Based on this small sample an England estimate of yield and production for rye is included in the minor cereals category in this release. Not unexpectedly the confidence intervals around these estimates are much larger than the main cereal crops.

Scotland estimate areas for triticale, mixed corn and rye but do not estimate forecast yields due to the very small areas grown. Estimated England yields are applied.

Northern Ireland estimate areas for mixed corn and triticale but do not estimate forecast yields due to the very small areas grown. Estimated England yields are applied. Rye is not included.

Wales include the minor crops in their “other combinable cereals” category.

Data notes
The cereal production (tonnage) figures include tail corn, cereals still to be harvested for grain, grain to be crimped and cereals intended for seed production. The figures exclude crops which have become unfit for harvesting, carry over stocks from the 2017 harvest, bought in grain and crops harvested as wholecrop for silage.