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Farming Statistics

Final crop areas, yields, livestock populations and agricultural workforce At June 2018 - United Kingdom

This release contains the final estimates for land use, crop areas, livestock populations, the agricultural workforce on agricultural holdings in the UK and the size of the UK cereals and oilseed rape harvest for 2018. This release has been updated to include revisions to the areas of land use and arable & horticultural crops for England which led to revisions of the UK totals. The revisions in crop areas impact the results for cereal and oilseed production which have also been revised here. All other results for livestock populations and the agricultural workforce remain unchanged since they were published on 20 December 2018. More details on the revisions can be found in the revisions section on page 18.

The key results are given below.

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

The total utilised agricultural area (UAA) in the UK decreased slightly by 0.7% to 17.4 million hectares. This was mainly driven by decreases in the area of total crops and permanent grassland by 1.6% and 0.6% respectively.

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 an 8.6% drop in production, from 14.8 million tonnes in 2017 to 13.6 million tonnes in 2018.

Barley: Winter and spring barley both saw decreased levels of production in 2018. A 7.9% drop in the production of spring barley in 2018 to 3.9 million tonnes and an 11.0% drop in the production of winter barley to 2.6 million tonnes in 2018. 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 rose by 6.3% to 171 thousand hectares. The UK yield decreased by 8.5% to 5.0 tonnes per hectare and this resulted in a small estimated UK production decrease of 2.8% to 0.9 million tonnes in 2018.

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Oilseed Rape: The oilseed rape harvest has shown a decrease of 7.1% to 2.0 million tonnes in 2018. There was an increase of 3.7% in the planted area, however there was a decrease in total oilseed rape yield of 10.5% 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 1.6% to 165 thousand hectares. Vegetables and salad for human consumption make up the majority (70%) of this area and this decreased by 1.0% to 116 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 1.7% compared to 2017, but with fattening pigs increasing by 1.2% to 4.5 million head, the total number of pigs increased by 0.9% and now stands at just over 5.0 million head.

Total sheep and lambs in the UK decreased by 3.0% in 2018, to 33.8 million animals. This was largely due to a 4.1% decrease in the number of lambs, which now stands at 16.6 million.

Total Poultry increased by 3.6% to 188 million birds in 2018. This increase was largely due to the 5.4% rise in broiler numbers (table chickens) to 124 million birds, which accounted for almost two thirds of the total.

Agricultural workforce ([Table 13](#))

The total number of people working on agricultural holdings in the UK in 2018 rose by 0.6% to 477 thousand.

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 large proportional decreases in wheat area, the total decrease in the UK wheat area was just 2.5%. This is largely due to the 2.0% fall in the English area, which accounts for 93% of the total area planted.

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

	UK % change	England % change	Scotland % change	N. Ireland % change	Wales % change
Wheat area	-2.5	-2.0	-8.9	-21.6	3.3
Potatoes area	-3.2	-2.3	-6.6	-11.1	5.3
Pigs	0.9	1.7	-2.8	-2.4	-5.4
Sheep	-3.0	-0.7	-5.6	-2.3	-5.0
Cattle	-1.1	-0.8	-1.5	-2.2	-0.3

Revisions ([Page 18](#))

An explanation on why these revisions were necessary can be found in the revisions section on page 18. Revised results for 2018 are presented in tables 1 to 7.

Data uses, next publications and survey methodology ([Pages 18 - 24](#))

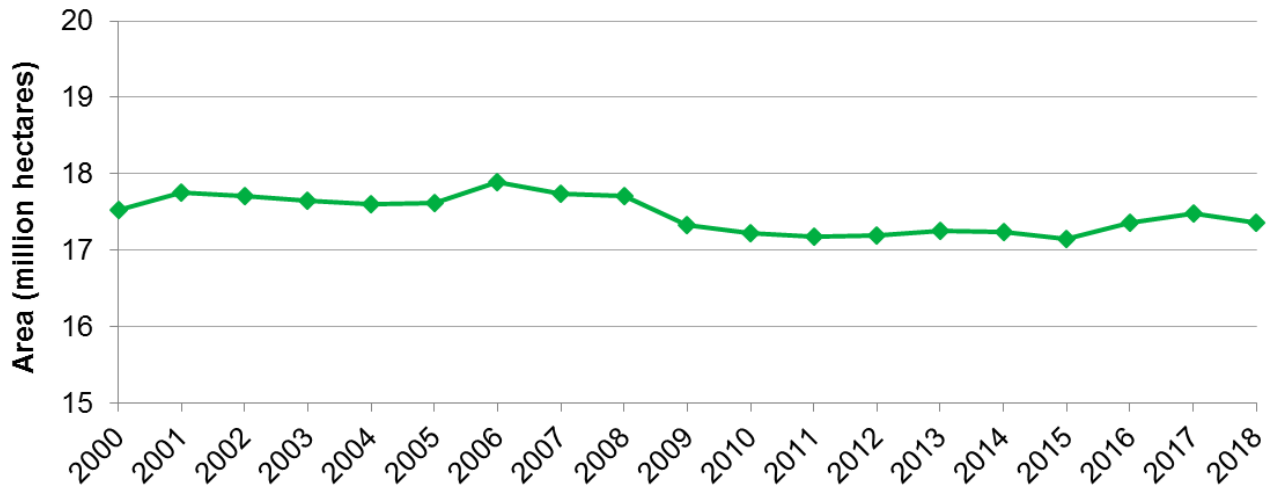
Information on how each of the UK countries run their surveys can be found on pages 18 to 24 along with data uses and upcoming publication dates.

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 17.4 million hectares, covering 71% 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

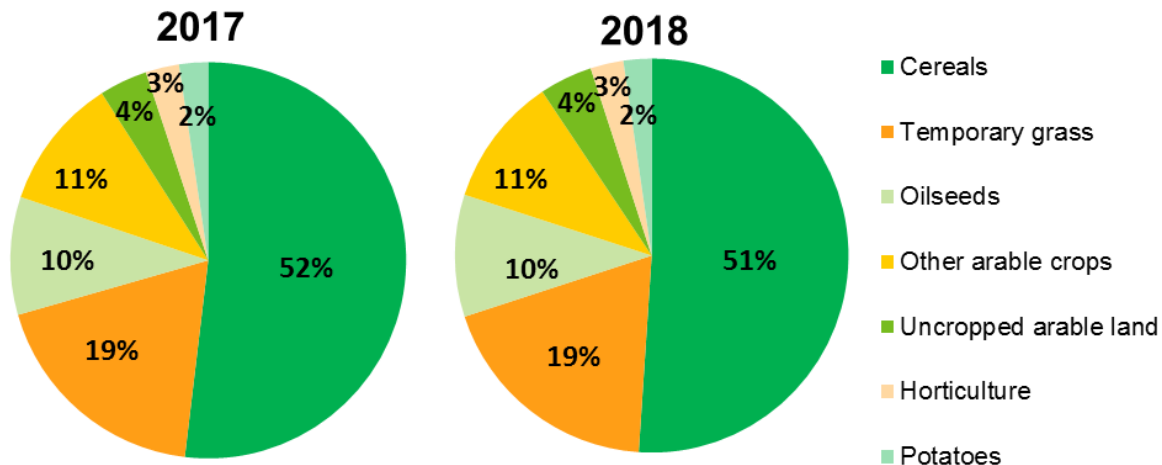


Croppable area

Croppable area consists of cereals, oilseed, potatoes, other arable crops, horticultural crops, uncropped arable land and temporary grass. In 2018, the croppable area decreased by 0.8% to just less than 6.1 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 9.8%, however it still only accounts for 4% of the total croppable area. Potatoes saw the largest decrease of 3.2%.

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

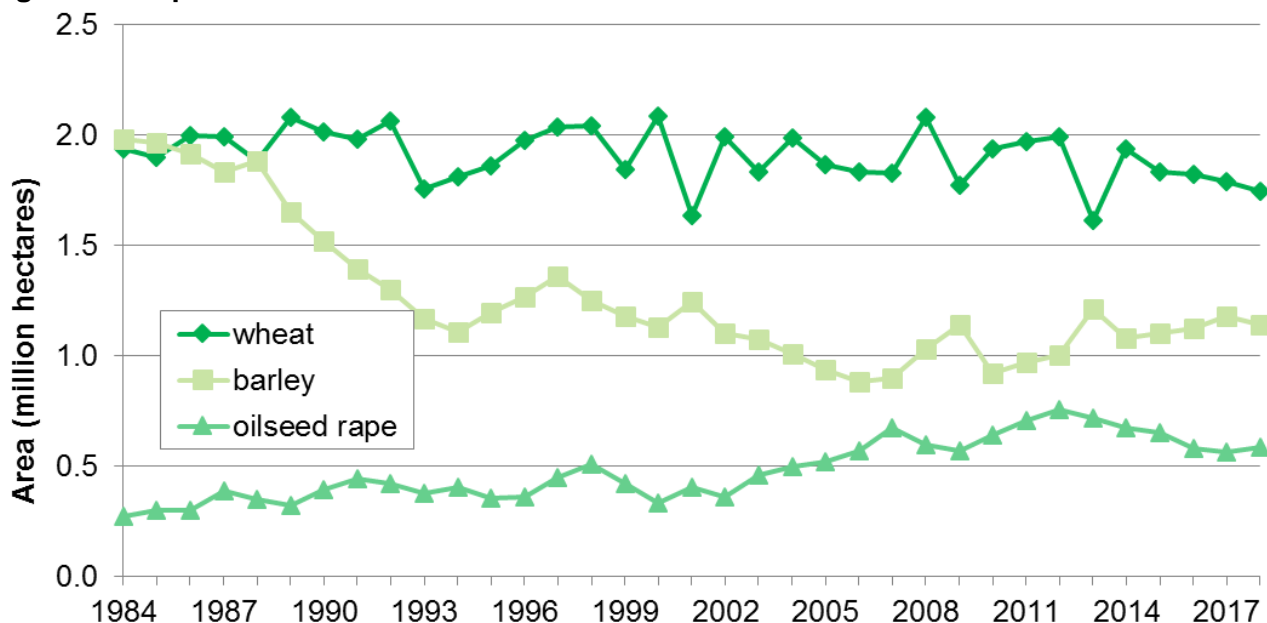
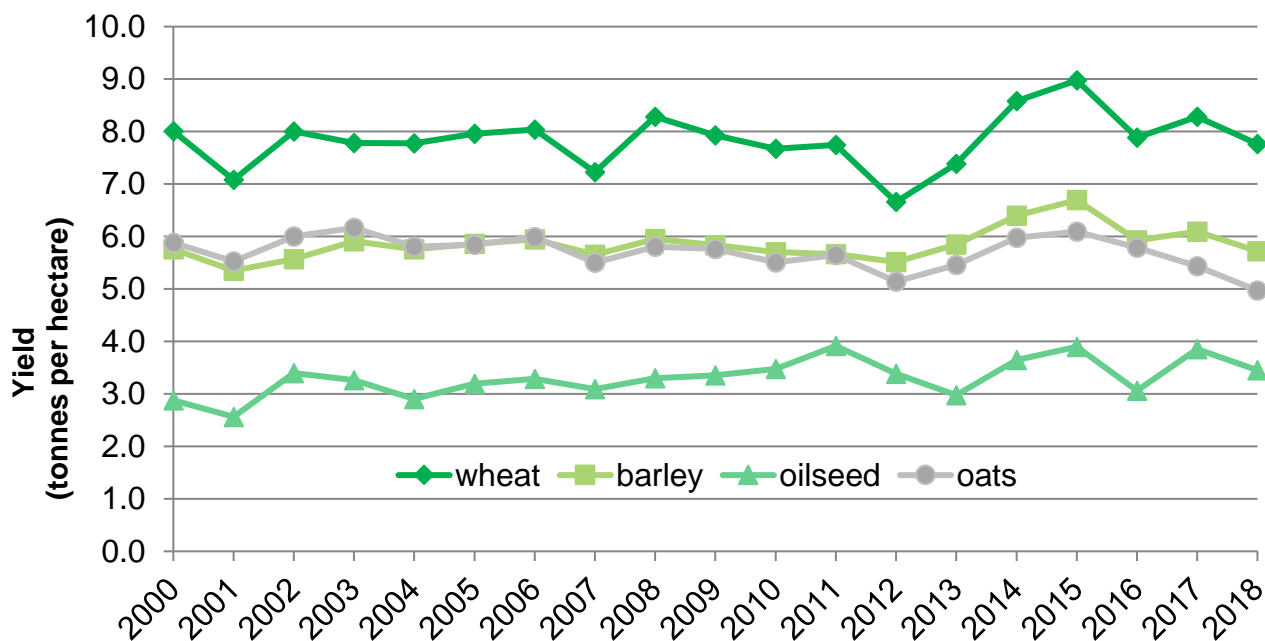


Figure 4 shows the area of the three most popular crops grown in the UK; wheat, barley and oilseed rape. Since 1984 the wheat area has fluctuated between approximately 1.6 and 2.1 million hectares. The area of barley has declined considerably over the years and the total barley area now stands at 1.1 million hectares. The oilseed rape area increased from 269 thousand hectares in 1984, reaching a peak of 756 thousand hectares in 2012. Since then the area has decreased each year until 2018 when the area saw an increase of 3.7% to 583 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 5.9% 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 8.3% to 21.1 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 2018 estimate is a wheat yield of 7.8 tonnes per hectare, a decrease of 6.2% 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 in 2018. Yields for oilseed rape show a decrease of 10.4% on the 2017 figure and now stands at an estimated 3.5 tonnes per hectare, which is fairly similar to the five year average.

Figure 5: UK crop yields between 2000 and 2018



Wheat

The decreased wheat yield and minimal change in area resulted in an 8.6% drop in production, from 14.8 million tonnes in 2017 to 13.6 million tonnes in 2018.

Barley

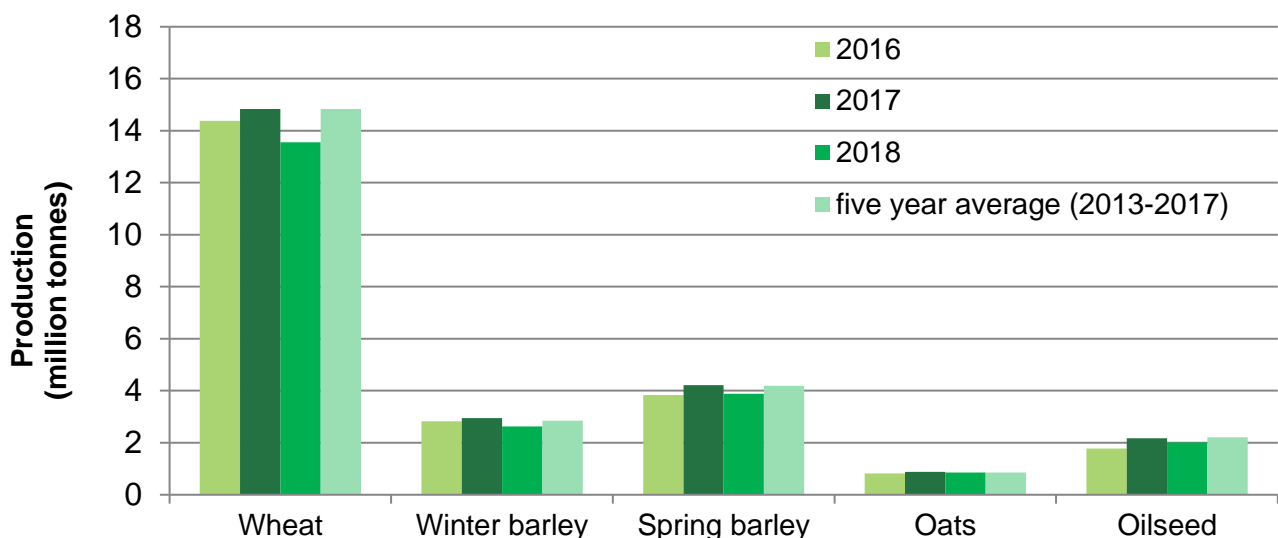
Winter and spring barley both saw decreased levels of production in 2018. A 7.9% drop in the production of spring barley in 2018 to 3.9 million tonnes was caused by a 7.6% fall in the spring barley yield from 5.6 tonnes per hectare in 2017 to 5.2 tonnes per hectare in 2018 and a small 0.3% decrease in the planted area of spring barley. Winter barley production dropped by 11.0% to 2.6 million tonnes in 2018; this is mostly explained by a fall in the winter barley area of 8.6% to 387 thousand hectares, as well as a slightly lower yield of 6.8 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 6.3% to 171 thousand hectares. The UK yield decreased by 8.5% to 5.0 tonnes per hectare, caused by a decrease in the England yield of 10.2%. This resulted in a small estimated production decrease of 2.8% 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 oilseed rape harvest has shown a decrease of 7.1% to 2.0 million tonnes in 2018. There was an increase of 3.7% in the planted area, however there was a decrease in total oilseed rape yield of 10.5%, from 3.9 tonnes per hectare in 2017 to 3.4 tonnes per hectare in 2018. This is similar to the five year average.

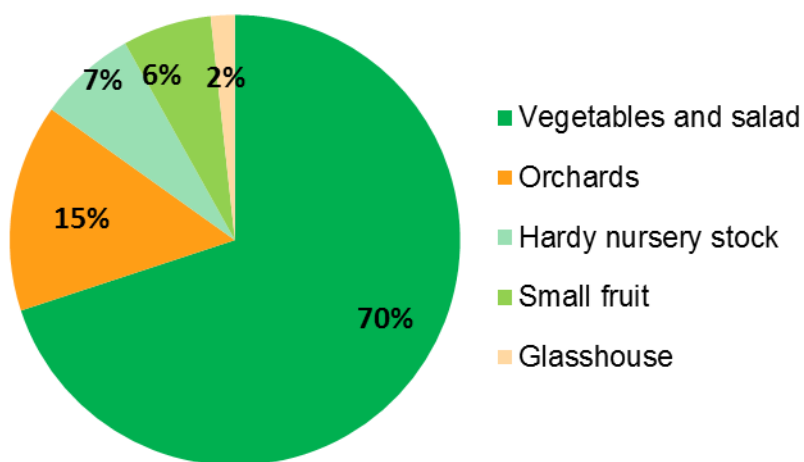
Minor cereal crops

Grain production from the minor cereal crops (rye, mixed corn and triticale) comprises 0.8% of the UK total cereal estimate, 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 1.6% between 2017 and 2018 and now stands at 165 thousand hectares.

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

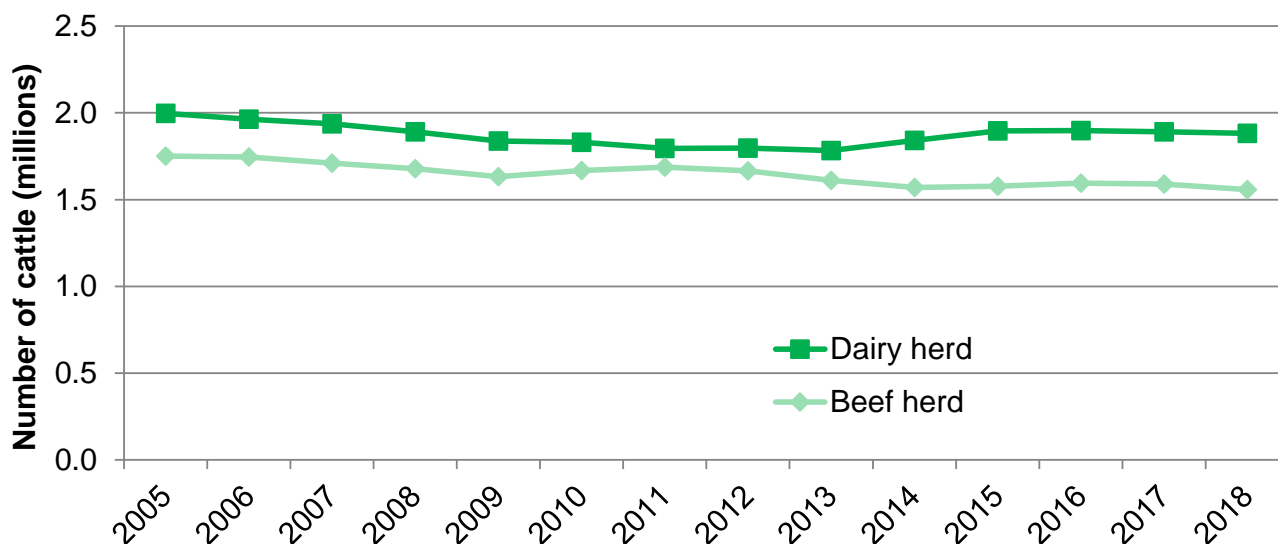


The area of vegetables and salad for human consumption saw a small decrease of 1.0% between 2017 and 2018 and accounts for 70% of the total horticultural area (see Figure 7). Orchards and small fruit together account for a further 21% of the horticultural area with hardy nursery stock and glasshouse accounting for the remaining 7% and 2% respectively.

Cattle

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).

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



Pigs

The total number of pigs in the UK increased by 0.9% in 2018 and now stands at just over 5 million animals. The main reason for this was the 1.2% increase in fattening pigs, largely due to the 2.2% increase in the England figures which account for 81% of the UK fatteners.

Sheep

In 2018, the number of lambs in the UK decreased by 4.1% to 16.6 million and the female breeding flock decreased by 2.3%. This led to a total UK sheep and lamb population of 33.8 million, a decrease of 3.0% compared to 2017.

Poultry

The total number of poultry in the UK increased by 3.6% to 188 million birds in 2018 compared to 182 million in 2017. Laying and breeding fowl saw an increase of 1.3%, whilst table chickens increased by 5.4% to 124 million birds.

Other livestock

The number of goats and farmed deer in the UK increased between 2017 and 2018, rising by 3.2% and 8.3% respectively. The number of horses on agricultural holdings decreased by 3.3% and now stands at 250 thousand animals.

Agricultural workforce

The total labour force on agricultural holdings in the UK increased by 0.6% to 477 thousand in 2018. Farmers, business partners, directors and spouses account for the majority (62%) of the total labour force and increased by 0.9% to 296 thousand.

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

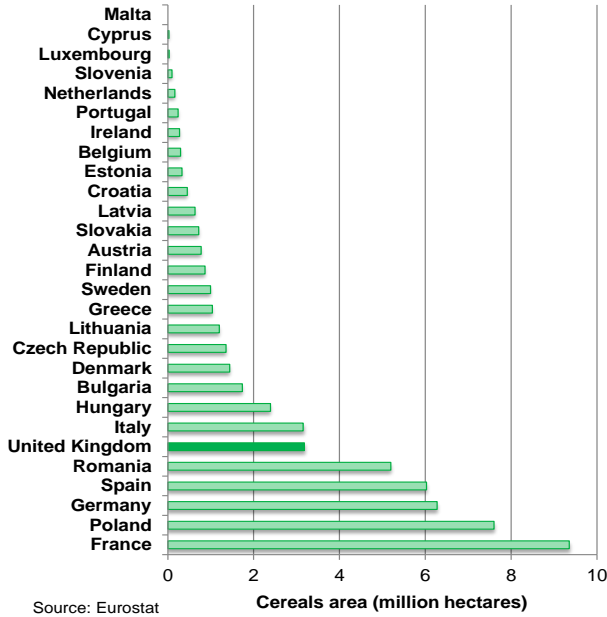
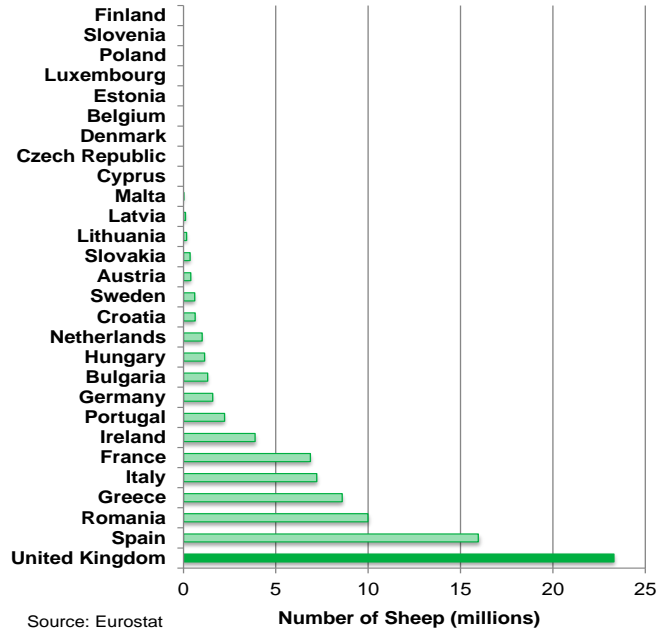
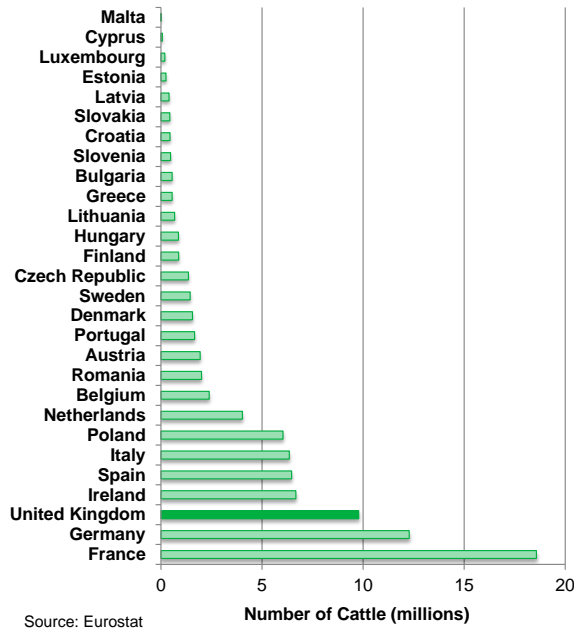


Figure 10: Number of sheep in 2017 by EU Member State



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

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



Results Tables

Revised results for 2018 are presented in tables 1 to 7. The original results as published in December 2018 and the scale of the revisions are shown in grey text in the final two columns of the tables.

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

	Thousand hectares				
	2017	Revised 2018	% change Revised 2018-17	Original 2018 area	% Scale of revision
Utilised agricultural area ^(a)	17 476	17 361	-0.7	17 521	-0.9
Total agricultural land (including common rough grazing)	18 835	18 703	-0.7	18 872	-0.9
Common rough grazing	1 198	1 195	-0.3	1 195	0.0
Total area on agricultural holdings	17 637	17 509	-0.7	17 677	-1.0
Total croppable area	6 131	6 084	-0.8	6 206	-2.0
Total crops	4 745	4 667	-1.6	4 772	-2.2
Arable crops	4 577	4 502	-1.6	4 606	-2.2
Cereals	3 181	3 106	-2.4	3 178	-2.3
Oilseeds	590	609	3.4	627	-2.9
Potatoes	145	140	-3.2	142	-1.2
Other arable crops	661	647	-2.2	658	-1.7
Horticultural crops	168	165	-1.6	167	-1.2
Uncropped arable land ^(b)	241	265	9.8	270	-1.7
Temporary grass under 5 years old	1 144	1 152	0.7	1 164	-1.0
Permanent grassland (incl. rough grazing)	10 138	10 072	-0.6	10 110	-0.4
Grass over 5 years old	6 135	6 178	0.7	6 214	-0.6
Sole right rough grazing ^(c)	4 003	3 895	-2.7	3 896	0.0
Other land on agricultural holdings	1 368	1 353	-1.2	1 362	-0.7
Woodland	1 037	1 016	-2.0	1 020	-0.4
Land used for outdoor pigs	10	10	1.4	11	-2.9
All other non-agricultural land	321	326	1.5	331	-1.5

(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				
	2017	Revised 2018	% change Revised 2018-17	Original 2018 area	% Scale of revision
Total arable crops	4 577	4 502	-1.6	4 606	-2.2
Cereals	3 181	3 106	-2.4	3 178	-2.3
Wheat	1 792	1 748	-2.5	1 797	-2.8
Barley	1 177	1 138	-3.3	1 157	-1.6
winter	423	387	-8.6	394	-1.9
spring	754	751	-0.3	763	-1.5
Oats	161	171	6.3	173	-1.1
Minor cereals ^(a)	52	49	-5.5	51	-4.4
Oilseed crops	590	609	3.4	627	-2.9
Oilseed rape	562	583	3.7	601	-3.0
winter	554	575	3.9	593	-3.0
spring	9	8	-7.2	8	-1.1
Linseed	26	25	-6.8	25	-0.6
Borage	1	2	82.9	2	0.0
Potatoes	145	140	-3.2	142	-1.2
Other (non-horticultural) crops	661	647	-2.2	658	-1.7
Sugar beet (not for stock feeding)	111	114	2.6	116	-1.8
Field beans	193	155	-19.8	158	-1.9
Peas for harvesting dry	40	38	-4.9	41	-6.0
Maize (incl. fodder and grain maize)	197	221	12.0	224	-1.3
Root crops, brassicas and fodder beet for stock feeding	42	45	6.4	45	-1.1
Other crops for stock feeding ^(b)	39	41	3.3	41	0.0
All other arable crops ^(c)	39	33	-13.4	34	-1.0

(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

	2016	2017	2018	% change 2018-17	Original 2018 yield	% Scale of revision
Cereals^(a)	7.0	7.2	6.8	-5.9	6.8	-0.2
Wheat	7.9	8.3	7.8	-6.2	7.8	-0.1
Barley	5.9	6.1	5.7	-6.1	5.7	-0.1
winter	6.4	7.0	6.8	-2.7	6.8	0.0
spring	5.6	5.6	5.2	-7.6	5.2	0.0
Oats	5.8	5.4	5.0	-8.5	5.0	0.0
Minor cereals ^(b)	2.7	2.3	3.5	50.6	3.5	0.3
Oilseed rape^(c)	3.1	3.9	3.4	-10.4	3.5	0.0

(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

	2016	2017	Revised 2018	% change Revised 2018-17	Original 2018 production	% Scale of revision
Cereals^(a)	21 967	22 999	21 085	-8.3	21 611	-2.4
Wheat	14 383	14 837	13 555	-8.6	13 953	-2.9
Barley	6 655	7 169	6 510	-9.2	6 621	-1.7
winter	2 823	2 948	2 623	-11.0	2 676	-2.0
spring	3 832	4 220	3 887	-7.9	3 945	-1.5
Oats	816	875	850	-2.8	860	-1.2
Minor cereals ^(b)	110	119	169	42.2	177	-4.1
Oilseed rape^(c)	1 775	2 167	2 012	-7.1	2 074	-3.0

(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

	2017	Revised 2018	% change revised 2018-17	Original 2018 area	% Scale of revision
Total fruit and vegetables	152	150	-1.2	152	-1.2
Orchards ^(a)	24.4	23.9	-2.1	24.2	-1.2
Small fruit ^{(b)(c)}	10.7	10.6	-1.7	10.7	-1.6
Strawberries	3.1	3.0	-4.4	3.1	-1.5
Other small fruit (incl. gooseberries and blackberries)	7.6	7.6	-0.6	7.7	-1.7
Vegetables and salad for human consumption ^{(b)(d)}	117	116	-1.0	117	-1.1
Peas and beans	39	39	-0.4	39	-1.4
All other vegetables and salad	78	77	-1.3	78	-1.0

(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				
	2017	Revised 2018	% change revised 2018-17	Original 2018 area	% Scale of revision
Total hardy nursery stock, bulbs and flowers ^(a)	12.5	11.7	-6.7	11.8	-1.2
Hardy nursery stock	5.0	4.6	-8.3	4.6	-1.0
Bulbs and flowers grown in the open	7.1	6.7	-5.4	6.8	-1.5

(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				
	2017	Revised 2018	% change revised 2018-17	Original 2018 area	% Scale of revision
Total glasshouse area on 1 June ^(c)	2 807	2 867	2.1	2 894	-1.0
Vegetables, salad and fruit ^(d)	2 098	2 225	6.1	2 242	-0.7
Flowers, foliage and other plants	546	465	-14.9	475	-2.1
Not in use on 1 June	136	153	12.7	154	-0.8

(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.

(d) In 2018 there was not enough response data to produce robust estimates for mushrooms separately in England. The area of mushrooms is included with the area for vegetables, fruit and salad and therefore this area is not directly comparable with previous years.

The data in tables 8 to 13 is unaffected by the revisions and therefore the figures remain unchanged since they were first published on 20 December 2018.

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	5 012	0.9
Breeding pigs	509	512	504	-1.6
Female breeding herd	415	417	409	-1.7
Sows in pig	295	297	289	-2.6
Gilts in pig	55	55	58	4.3
Other sows ^(a)	65	64	63	-2.8
Other breeding pigs	94	95	94	-0.9
Boars being used for service	15	14	13	-6.2
Gilts intended for first time breeding	79	81	81	0.0
Fattening pigs (incl. barren sows)	4 356	4 457	4 509	1.2

(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	33 781	-3.0
Female breeding flock	16 304	16 669	16 286	-2.3
Ewes intended for further breeding or for slaughter	13 460	13 762	13 572	-1.4
Ewes intended for first time breeding	2 844	2 907	2 714	-6.7
Other sheep and lambs	17 639	18 163	17 495	-3.7
Lambs under 1 year old	16 840	17 340	16 621	-4.1
Rams	409	417	407	-2.3
Other sheep 1 year and over	389	405	467	15.2

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

	Thousands			
	2016	2017	2018	% change 2018-17
Total poultry	172 607	181 818	188 442	3.6
Total breeding and laying fowl	50 798	52 939	53 623	1.3
Hens and pullets laying eggs for eating	38 058	39 510	39 852	0.9
Breeding flock	12 740	13 429	13 771	2.6
Table chickens (broilers)	110 639	117 619	123 946	5.4
Other poultry	11 170	11 260	10 872	-3.4
Ducks	1 993	2 301	2 069	-10.1
Geese	152	160	157	-1.9
Turkeys	4 228	4 149	4 124	-0.6
All other poultry	4 798	4 651	4 522	-2.8

(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	418	-0.9
Goats	104	105	108	3.2
Farmed deer	31	31	34	8.3
Horses	268	258	250	-3.3
Any livestock not recorded elsewhere ^(a)	24	27	26	-4.8
- of which alpacas	12	13	9	-28.3
- of which llamas	2	2	2	7.3

(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	477	0.6
Farmers, partners, directors and spouses	290	294	296	0.9
Full time	139	141	145	2.5
Part time ^(c)	151	153	152	-0.6
Regular employees, salaried managers and casual workers	176	180	181	0.2
Regular employees ^{(a)(b)}	na	na	na	
- Full time	na	na	na	
- Part time ^(c)	na	na	na	
Casual workers ^(b)	na	na	na	

(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.

Revisions

The UK land use and crop area estimates have been revised here to take account of revisions to the English area figures. An explanation of the reasons for the changes is included in the updated English statistical release and in a supporting report which gives more detail. Both documents can be found here: <https://www.gov.uk/government/collections/structure-of-the-agricultural-industry>.

As a result of revisions to the crop areas it was necessary to revise the cereal and oilseed rape production estimates for 2018. As the methodology section states (see page 23), responses to the Cereal and Oilseed Rape Production survey are used to calculate yields for each crop. These yields are applied to the national areas to produce the production estimates. Therefore due to the area changes it was necessary to revise the production estimates. Revised results for 2018 are shown in each table. The original area, yield and production estimates and the scale of the change are shown in grey text in the last two columns of these tables.

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/guidance/structure-of-the-agricultural-industry-survey-notes-and-guidance>

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

- August 2019: Farming Statistics provisional arable crop areas at 1 June 2019 – England.
- September 2019: Farming Statistics final crop areas and cattle, sheep and pig populations at 1 June 2019 – England.
- October 2019: Farming Statistics final land use, livestock populations and agricultural workforce at 1 June 2019 – England.

UK Publications

- October 2019: Farming Statistics provisional crop areas, yields, livestock populations at 1 June 2019 – United Kingdom.
- December 2019: Farming Statistics final crop areas, yields, livestock populations and agricultural workforce at 1 June 2019– 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

The June Agricultural Census is conducted annually by the Scottish Government's Rural and Environmental Science Analytical Services division (RESAS). Data are requested from all holdings who submitted a Single Application Form (SAF) in the previous year, together with some other large businesses that would not be eligible for support payments. A sample of holdings which didn't submit a SAF or who didn't return a form last year were also sent a census form.

Data for the June census is collected from three sources:

Land data were extracted from the Single Application Form (SAF) database for around 22,900 holdings that are claiming under the Basic Payment Scheme (BPS). Holdings that submitted a SAF in 2018 were also sent a cut-down census form (22,000 forms) to collect the additional data on livestock and labour. See section 1.8 for more details on the use of SAF data.

From the remaining holdings that did not complete a SAF in 2018, 12,400 (potentially including holdings that submitted a SAF for the first time in 2018) were sent a full census form covering land, livestock and labour.

All cattle data (including data on cattle breeds) were collected from the Cattle Tracing Scheme administrative source. This means that we effectively have 100 per cent coverage, even for those smaller holdings that were not selected for inclusion in the census.

The following table gives a breakdown for forms returned for each category of holding.

Land-use data was received for holdings covering 88 per cent of the total agricultural area, either from returned full census forms or the SAF (shaded grey).

Cattle data was received for 100 per cent of holdings with cattle, from the CTS.

Other data was received for holdings covering 64 per cent of the total agricultural area, from returned census forms (the final column in the table).

Census type ⁽¹⁾	Total number	Number selected ⁽²⁾	Number of returns ⁽³⁾	Total area	Area of selected ⁽²⁾	Area of returns ⁽³⁾
SAF	22,884	22,351	16,039	4,927,409	4,805,488	3,414,972
full form		350	231		49,710	38,252
part form		22,001	15,808		4,755,778	3,376,720
Non-SAF	28,273	12,369	6,333	676,453	357,376	191,844
full form		10,493	5,289		290,383	149,287
part form		1,876	1044		66,993	42,557
Total	51,157	34,720	22,372	5,603,862	5,162,864	3,606,816

(1) "SAF" refers to holdings where land-use data is available from the Single Application Form dataset. "Non-SAF" refers to holdings where land-use data is only available through the June Agricultural Census form (if at all).

"full form" refers to the long version of the census form covering land use, livestock (except cattle), and labour, designed for those not completing the SAF.

"part form" refers to the short version of the census form covering livestock (except cattle), and labour, designed for those known to be completing the SAF.

(2) The numbers selected are slightly lower than the total number eventually identified due to annual changes in the list of holdings.

(3) The return numbers quoted here relate to the number of survey forms received. For SAF holdings

this masks the fact that we effectively receive 100 per cent response for all land items. Cattle data, from the CTS database, is also effectively 100 per cent complete. Response rates based on these figures therefore relate to other livestock and employment data.

Full results for Scotland were published on 9th October 2018 by the Scottish Government Rural and Environment Science and Analytical Services (RESAS) division and are available at:

<https://www.gov.scot/publications/results-june-2018-scottish-agricultural-census/>

Some of the data have since been amended slightly after that original publication.

Contact details - Saughton House (Q Spur), Broomhouse Drive, Edinburgh, EH11 3XD (telephone: 0300 244 9707, email: agric.stats@scotland.gsi.gov.uk).

Wales

The Welsh population currently stands at around 25,000 active holdings. In 2018 a total of 11,500 survey forms were sent out. Final results were based on a response rate of 40%. Final results for Wales were published by the Welsh Government on 27 November 2018 at: www.gov.wales/statistics

For further details contact Agricultural & Rural Affairs Statistics, Welsh Government, Cathays Park, Cardiff, CF10 3NQ (telephone: Cardiff (0300) 025 5082). E-mail: stats.agric@gov.wales

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 results based on 14,600 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. Final results were published on 29 November 2018 by the Department of Agriculture, Environment and Rural Affairs for Northern Ireland, Dundonald House, Belfast, BT4 3SB (telephone: Belfast (02890) 525450) and are available on the internet at: www.daera-ni.gov.uk/topics/statistics/statistical-bulletins

Methodology: Cereal and Oilseed Rape Production Survey

England

Results are based on 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 results are based on responses from 2,614 farms (65% response rate) across the country (see table 15).

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

English region	Number sampled	Number of responses	Response rate (%)
North East	195	131	67%
North West and Merseyside	259	174	67%
Yorkshire and the Humber	610	408	67%
East Midlands	623	401	64%
West Midlands	360	225	63%
Eastern	812	528	65%
South East and London	427	278	65%
South West	714	469	66%
Total	4000	2614	65%

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

No yield data were collected for Wales. The Welsh production figures have been estimated on a regional basis within Wales using the final regional results of the June 2017 Survey, extrapolated to match the June 2018 final results, along with the yields for the English regions bordering Wales. Final June 2018 results for Wales were published by the Welsh Government in November 2018 at: www.wales.gov.uk/statistics. 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 final 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](http://www.gov.scot/Topics/Statistics/Browse/Agriculture-Fisheries/PubCerealHarvest)

Northern Ireland

Areas are based on final 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 50 holdings; a response rate of 50% which is lower than the response rate of the survey as a whole of 65%.

Of these 45 returns 24 reported some cereal production from their rye crop. In the remaining 21 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.

National Statistics Status

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

The continued designation of these statistics as National Statistics was confirmed in 2014 following a [full assessment](#) by the UK Statistics Authority against the [Code of Practice for Statistics](#).

Since the last review of these statistics in 2014, we have continued to comply with the Code of Practice for Statistics, and have made improvements including:

- Reviewed and amended the validation checks carried out on response data including validation against new administrative data sources to better assure ourselves of the quality of the statistics.
- Enhanced trustworthiness by removing pre-release access